



U.S. Department
of Transportation
**Federal Highway
Administration**

Summary Report

Context Sensitive Solutions Technical Assistance: North Dakota Department of Transportation

April 4 – 6, 2017

October 2017

Notice

This document is disseminated under the sponsorship of the U.S. Department of Transportation (USDOT) in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in this document.

The U.S. Government does not endorse products or manufacturers. Trademarks or manufacturers' names appear in this report only because they are considered essential to the objective of the document.

Quality Assurance Statement

The Federal Highway Administration (FHWA) provides high-quality information to serve Government, industry, and the public in a manner that promotes public understanding. Standards and policies are used to ensure and maximize the quality, objectivity, utility, and integrity of its information. FHWA periodically reviews quality issues and adjusts its programs and processes to ensure continuous quality improvement.

Technical Report Documentation Page

1. Report No. FHWA-HEP-18-007	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle Final Summary Report Context Sensitive Solutions Technical Assistance: North Dakota Department of Transportation		5. Report Date October 2017	
		6. Performing Organization Code	
7. Author(s) Oana Leahu-Aluas, Leigh Lane		8. Performing Organization Report No.	
9. Performing Organization Name and Address The Cadmus Group, Inc. 100 Fifth Avenue, Suite 100 Waltham, MA 02451		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. DTFH61-11-D-00031, order no. 5007	
12. Sponsoring Agency Name and Address U.S. Department of Transportation 1200 New Jersey Ave. SE Washington, D.C.		13. Type of Report and Period Covered Final Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract <p>The Federal Highways Administration (FHWA) sponsors a Technical Assistance (TA) effort to support states in applying Context Sensitive Solutions (CSS) to challenges they face in the transportation sector. Each state participating in the TA effort is invited to identify one issue to tackle using a CSS approach, with FHWA assistance. Participating states can also join a virtual peer exchange for sharing information and lessons learned. Each state and state agency faces unique issues, but the results and key findings of these CSS efforts can offer valuable insight to other states.</p> <p>The North Dakota Department of Transportation (NDDOT) and FHWA North Dakota Division elected to develop a case study featuring a project that incorporated CSS principles as their form of TA. The NDDOT and FHWA selected the U.S. Highway 85 Watford City Bypass project as the project featured in the case study. The case study was developed by conducting interviews with NDDOT staff and other relevant stakeholders impacted by the project, as well as conducting a site visit of the project. The site visit and interviews took place on April 4 – 6, 2017 in Bismarck and Watford City.</p> <p>This report documents the background, purpose, and objectives of the case study. It also highlights the key themes that emerged from the interviews, provides the list of interviewees and schedule of interviews, lists key takeaways from each interview, and includes the interview guide that was developed prior to the site visit. A link to the case study is included as an appendix to the report.</p>			
17. Key Words Watford City, North Dakota Department of Transportation, Context Sensitive Solutions, CSS, Rural, Bypass		18. Distribution Statement No restrictions	
19. Security Classification (of this report) Unclassified	20. Security Classification (of this page) Unclassified	21. No. of Pages 17	22. Price NA

Table of Contents

Background	1
Purpose of the Technical Assistance.....	1
Key Takeaways	1
List of Interviewees.....	2
Interview Schedule	3
Interview Guide.....	4
Interview Summaries	5
Curt Moen, City Administrator, City of Watford City; Rick Jore, City Engineer, City of Watford City; and Mildred Williams, Assistant City Planner, City of Watford City.....	5
Cory Lawson, Environmental Services Section Leader, NDDOT	5
Kevin Brodie, Operations Engineer, FHWA North Dakota Division	6
Mark Schrader, Transportation Engineer, FHWA North Dakota Division and Bob Fode, Director, Office of Project Development, NDDOT.....	6
Bob Christiansen, Cultural Resources Section Leader, NDDOT	7
Stacy Wilz, Right of Way Project Manager, NDDOT and Mike Knox, Right of Way Manager, NDDOT	8
Travis Wieber, Project Manager, KLJ and Jessica Karls, Lead Designer, KLJ.....	8
Sheri Lares, Environmental Protection Specialist/Tribal Liaison, FAA (formerly FHWA North Dakota Division) and Jeani Borchert, Cultural Resource & Tribal Consultation, NDDOT	9
Appendix A: Watford City Bypass Case Study.....	A-1
Appendix B: Full List of Interview Questions	B-1
Project Purpose and Need.....	B-1
Economic Development and Growth Pressures.....	B-1
Stakeholders	B-1
Decision-making Process	B-1
Public Involvement	B-2
Human Environment Considerations	B-2
Natural Environment Considerations	B-2
Cultural Resources.....	B-3
Design Flexibility.....	B-3

Background

The Federal Highways Administration (FHWA) supports States in applying Context Sensitive Solutions (CSS) to challenges they face in the transportation sector. Each State participating in the Technical Assistance (TA) effort was invited to identify one issue to tackle using a CSS approach, with FHWA assistance. FHWA also invited States that have completed a CSS process to join a virtual peer exchange where they can share information and lessons learned. Each State and State agency faces unique issues, but the results and key findings of these CSS efforts can offer valuable insight to other States.

The North Dakota Department of Transportation (NDDOT) elected to develop a case study featuring a project that incorporated CSS principles as their form of TA. The NDDOT and FHWA selected the U.S. Highway 85 Watford City Bypass project as the project featured in the case study. The case study was developed by conducting interviews with NDDOT staff and other relevant stakeholders effected by the project, as well as a site visit of the project. The site visit and interviews took place on April 3 – 6, 2017 in Bismarck and Watford City.

Purpose of the Technical Assistance

The objectives of developing a case study of the U.S. Highway 85 Watford City Bypass project are to:

- Document a positive example of a project incorporating CSS principles in North Dakota.
- Provide a case study that NDDOT staff and other local government agencies embarking on a transportation project can utilize as a training and capacity building tool.
- Help NDDOT to share their successful CSS practices with a national audience through the virtual peer exchange.
- Contribute to FHWA's library of transportation project examples related to successful stakeholder coordination.

Key Takeaways

The interviews that were conducted revealed a set of themes and key highlights, which are summarized below. These topic areas are further described in the case study alongside photos and other visuals to help tell the story of the bypass project.

- A CSS approach can accelerate project delivery.
- NDDOT practices outstanding resource agency coordination and collaboration. Through interagency coordination meetings (ICM), NDDOT has built strong relationships and trust with federal and State agencies. Throughout the bypass project, NDDOT had a long-standing item on the monthly ICM agenda to provide updates on the National Environmental Policy Act (NEPA) process, design, permitting, and commitment compliance during construction. Likewise, NDDOT also collaborates with North Dakota Interagency Review Team (NDIRT). NDDOT holds annual multi-day field trips with NDIRT to review and gather feedback on completed construction projects. This process serves as a valuable accountability tool for NDDOT.
- NDDOT has a well-established and noteworthy process to coordinate with tribes, through the Tribal Consultation Committee (TCC).

- The bypass is supporting improved quality of life for Watford City residents, after the area experienced unprecedented growth. By having the bypass divert heavy truck traffic away from the city, city administrators could focus on providing crucial infrastructure and enhanced quality of life for the growing population. With the volume of traffic reduced, downtown Watford City was more accommodating to light-duty vehicles and pedestrians, both of which contribute to economic activity.
- NDDOT staff place an emphasis on face to face communication, resulting in an improved and expedited review process.
- A collaborative partnership between all units of NDDOT exists, especially between right of way staff and designers. This level of collaboration helped expedite the project timeline, as any issues encountered in the field were quickly incorporated into plans as they were being finalized.
- CSS approach and flexible design concepts used on the bypass project helped achieve the goal of minimizing impacts to the human and natural environment.
- The bypass resulted in dramatic improvements to vehicular safety. Traffic fatalities in McKenzie County, where Watford City is located, dropped significantly after the bypass was built, compared to years prior.
- The project won the Western Association of State Highway and Transportation Officials (WASHTO) America’s Transportation award and was a Top 10 Finalist in the overall America’s Transportation Awards competition.

List of Interviewees

Through coordination with NDDOT and Keith Moore of the FHWA Resource Center, the following staff members were interviewed about the project.

Name	Title	Organization
Jeani Borchert	Cultural Resource & Tribal Consultation	NDDOT
Kevin Brodie	Operations Engineer	FHWA North Dakota Division
Bob Christensen	Cultural Resources Section Leader	NDDOT
Bob Fode	Director, Office of Project Development	NDDOT
Rick Jore	City Engineer	City of Watford City
Jessica Karls	Lead Designer	KLJ
Mike Knox	Right of Way Manager	NDDOT
Sheri Lares	Environmental Protection Specialist/Tribal Liaison	FAA (formerly FHWA North Dakota Division)
Cory Lawson	Environmental Services Section Leader	NDDOT
Curt Moen	City Administrator	City of Watford City
Mark Schrader	Transportation Engineer	FHWA North Dakota Division
Travis Wieber	Project Manager	KLJ
Mildred Williams	Assistant City Planner	City of Watford City
Stacy Wilz	Right of Way Project Manager	NDDOT
Wayne Zacher	Project Manager	NDDOT

Interview Schedule

Interviews were held over the span of three days, as documented below. The first day was also spent touring the project site and photographing the development that is taking place within Watford City.

	<i>Tuesday April 4</i>	<i>Wednesday April 5</i>	<i>Thursday April 6</i>
Location:	Watford City	Bismarck	Bismarck
8:00 AM			
8:30 AM			
9:00 AM			Stacy Wilz & Mike Knox
9:30 AM		Cory Lawson	
10:00 AM	Curt Moen, Rick Jore, & Mildred Williams		
10:30 AM			
11:00 AM		Kevin Brodie	Travis Wieber & Jessica Karls
11:30 AM			
12:00 PM			
12:30 PM			
1:00 PM		Mark Schrader & Bob Fode	
1:30 PM			
2:00 PM			
2:30 PM			
3:00 PM		Wayne Zacher	
3:30 PM			
4:00 PM			
4:30 PM			
5:00 PM			
5:30 PM			
6:00 PM			
6:30 PM			
7:00 PM		Bob Christiansen	
7:30 PM			Sheri Lares & Jeani Borchert
8:00 PM			
8:30 PM			
9:00 PM			

Interview Guide

Prior to the site visit, an interview guide was developed to help facilitate discussions with staff members involved in the project. The questions in the guide were developed after reviewing project documents such as the Environmental Assessment (EA), Finding of No Significant Impact (FONSI), Noise Report, and Traffic Operations Report. These documents, and the initial phone conversations that were held to discuss the project, did not immediately reveal the extent to which CSS principles were incorporated throughout the project. Thus, a large set of questions was developed to gather as much information as possible so that it could later be distilled into a cohesive case study. The questions were broken down by the following categories:

- Project Purpose and Need
- Economic Development and Growth Pressures
- Stakeholders
- Decision-making Process
- Public Involvement
- Human Environment Considerations
- Natural Environment Considerations
- Cultural Resources
- Design Flexibility

Each person interviewed was asked the questions most relevant to their involvement in the project. While the interview questions served as a guide, each interview was allowed to progress as naturally as possible based on where the conversation led. For example, during the initial interview with Watford City officials, they described the massive influx of traffic that inundated their town during the oil boom, as well as the associated safety consequences. Thus, several follow up questions were asked to solicit further details about the context prior to the Watford City bypass being proposed; these questions were not originally included in the interview guide. By the time all of the interviews were completed, all questions in the guide were addressed. The complete list of questions is included in Appendix B.

Although all questions in the interview guide were addressed, an analysis of the responses received revealed the key themes that would convey a compelling story through a case study. These themes are listed in the Key Takeaways section above. Having the wide array of interview questions in the guide prior to conducting the interviews was extremely helpful and suitable in this case since there was limited information about the incorporation of CSS aspects in the project prior to the interviews. By addressing a wide variety of topic areas, the interviews helped filter the most pertinent information to include in a CSS case study. For example, one of the interview questions addressed the pedestrian and bicycling issues in Watford City prior to and after completion of the bypass. When this question was posed to the Project Manager for the bypass project he indicated that pedestrian and bicycle facilities were not considered a priority due to the rural nature of the project. Thus, these issues were not prominently highlighted in the case study other than to document pedestrian-related information revealed through the interview process. However, the interviews revealed that when heavy truck traffic was diverted from downtown Watford City to the Hwy 85 bypass, this helped to facilitate a more welcoming and safer environment for pedestrians throughout the downtown area.

Interview Summaries

Each interview that was conducted provided a different perspective and new insights into the Watford City bypass project. The summaries below capture the main points from each interview.

Curt Moen, City Administrator, City of Watford City; Rick Jore, City Engineer, City of Watford City; and Mildred Williams, Assistant City Planner, City of Watford City

The interview with the Watford City officials focused on the dramatic changes the city experienced because of the oil boom in Western North Dakota, and how the bypass addressed the corresponding increase in traffic.

- Watford City experienced a huge influx of traffic and people when the oil boom hit. Trip times grew significantly and there was insufficient housing for the new residents. The new workers that arrived had to make do by building transient camps or crowding into single family homes and hotels.
- Housing prices and rent skyrocketed, and were comparable to big cities.
- Traffic fatality rates were also disproportionately high in the area at the peak of the boom. After the bypass was constructed, traffic accidents were significantly reduced.
- Community members expressed concerns that a bypass around Watford City would be a detriment to local businesses.
- Prior to the oil boom, Watford City was in decline, with many younger people moving away in search of other opportunities.
- North Dakota had a ten percent wellhead tax, the revenue from which went into a State fund. Some of that money was then redistributed back to the local level.
- Watford City leveraged the additional funds that accompanied the oil development to build infrastructure such as housing, day care centers, sewer lines, a new school, and a new event center.
- The new amenities and redevelopment in the city is anticipated to retain and grow the population in Watford City.
- The bypass was a key piece of the puzzle that allowed for Watford City's redevelopment, as it diverted truck traffic away from downtown, allowing for increased mobility and safety and reduced noise.

Cory Lawson, Environmental Services Section Leader, NDDOT

The interview with Cory Lawson focused on the natural environment considerations of the bypass since he was a wetlands scientist at the time of the project.

- The sunken box culverts that were used on the Watford City bypass project resulted from an agency agreement between the U.S. Army Corps of Engineers (USACE), North Dakota Game and Fish, and NDDOT.
- Interagency discussions occur through the interagency coordination meetings (ICM), which is led by the USACE. Because of the longstanding relationships with partner agencies developed through the ICM, NDDOT has a better sense of what mitigation strategies will be and will not be approved before investing too much time in any particular solution.

- Biweekly project meetings took place throughout the Watford City bypass project that partner agencies and other stakeholders were a part of, since the project timeline was so accelerated and everyone needed to be kept up to date.
- NDDOT conducts a yearly field trip with partner agencies to assess completed projects and get feedback that can be incorporated in future projects. These trips are conducted with a group of agencies known as the North Dakota Interagency Resource Team (NDIRT).
- Permits for oil and gas were being processed so quickly during the oil boom that the North Dakota Industrial Commission, Department of Mineral Resources, Oil and Gas Division were brought in by NDDOT as an agency partner on the Watford City bypass project.

Kevin Brodie, Operations Engineer, FHWA North Dakota Division

The interview with Kevin Brodie focused on the design and funding for the Watford City bypass.

- The Watford City bypass project was entirely State funded, through revenue from oil development.
- FHWA was the lead agency on the project to ensure the environmental review process was followed.
- It was difficult to provide traffic projections for the Watford City area because traffic increased so much faster than initial modeling predicted. Oil and gas development projections were used to determine when peak traffic would occur.
- The typical section used for the bypass was a four-lane facility to accommodate for the heavy truck traffic. An incremental upgrade known as a “Super 2” was used in other areas of the country but was determined to be inadequate for the bypass as it would encourage passing drivers to go at very high speeds to overtake the trucks. A “Super 2” highway design is one in which a passing lane is added to a two-lane highway every few miles.
- A flush median was used for the bypass in order to minimize its environmental footprint. A flush median also provided flexibility for future development since it was unclear where future development would take place. Installing a flush median also helped keep the project timeline on track.

Mark Schrader, Transportation Engineer, FHWA North Dakota Division and Bob Fode, Director, Office of Project Development, NDDOT

The interview with Mark Schrader and Bob Fode focused on lessons learned and best practices used during the Watford City bypass project.

- The Watford City bypass project did not conform with NDDOT’s typical Statewide Transportation Improvement Program (STIP) process. Instead, a huge need emerged once Watford City was overrun with truck traffic, and funding was available for improvements from the oil revenues.
- The close relationships NDDOT has with other agencies through the ICM allowed for project streamlining and schedule expediting.
- Tribal coordination happens through the TCC. TCC meetings occur twice yearly, and NDDOT presents all projects in the STIP.
- NDDOT funded positions at the USACE and U.S. Fish and Wildlife Service. It was very helpful to have those positions when the oil boom hit and infrastructure changes across western North Dakota were necessary.
- One of the keys to success NDDOT identified was not to develop relationships in chaos. In other words, since NDDOT already had strong relationships with partner agencies before the oil boom

hit, it was easier for them to quickly get projects completed. If NDDOT had only started forming relationships once the oil boom hit, it would have been much more difficult to effectively execute projects.

- NDDOT also tried to run parallel processes as much as possible in order to streamline the project timeline.
- In a departure from its usual project management approach, NDDOT had a staff member from the consultant team work in the NDDOT office to work more collaboratively and quickly to resolve issues.

Wayne Zacher, Project Manager, NDDOT

Wayne Zacher was present at and contributed to all interviews other than the one with Watford City officials, so the interview with him focused on items that had not yet been discussed.

- During the time of the oil boom, land was changing hands very quickly, so it was difficult to track down landowners during the right of way acquisition process.
- Watford City business owners were concerned a bypass would reduce their revenues, but an origin-destination study showed that an overwhelming majority of the traffic that drove through Watford City prior to the bypass was not stopping in town. The bypass leaves the downtown streets open to pedestrians so they can frequent businesses.
- NDDOT had a staff member that had retired from the department but came back part time and traveled to meet with local governments in western North Dakota during the oil boom to help them with any questions on permitting or other topics they needed help with.
- During the bi-weekly project meetings for the Watford City bypass, staff members reviewed documents such as the EA and addressed comments in real time to ensure quick revisions.
- The preferred alternatives were determined through a combination of community input and cultural resources and environmental studies.

Bob Christiansen, Cultural Resources Section Leader, NDDOT

The interview with Bob Christiansen focused on the cultural resource considerations of the Watford City bypass project.

- A Class III Cultural Resource Inventory involving an intensive pedestrian survey for an area covering 13,018 acres of land was conducted as a large block study area for this project. Representatives of three Affiliated Tribes and the Turtle Mountain Band of Chippewa Indians accompanied the archaeologists during the survey and contributed to the identification and interpretation efforts. These two reservations are the closest to the project area.
- The large block survey approach was chosen because the Watford City bypass was a new construction project, that at the time, did not have a preferred alignment alternative. Thus, having all the data about the cultural sites from the beginning was part of a comprehensive strategy that did not require staff members to spend resources coming back to the site multiple times.
- The Watford City bypass project was discussed at several of the TCC meetings, from project inception through construction.
- Stone features are valued for preservation in place by tribes in North Dakota. They are primarily tied to oral history, cosmology, ceremony and spirituality. Since NDDOT conducted a large block survey for cultural resources, the department knew where these sites were located early in the

planning process and it was easy to route the new road in such a way as to avoid these stone feature sites.

- The TCC meetings allowed NDDOT and the tribes to focus on what is most important to both parties and search for win-win solutions.
- During the public involvement meetings held for the Watford City bypass project, the consultant, KLJ, brought in large maps and allowed community members to mark which areas to avoid and optimal places for the bypass to be routed.

Stacy Wilz, Right of Way Project Manager, NDDOT and Mike Knox, Right of Way Manager, NDDOT

The interview with Stacy Wilz and Mike Knox focused on the process used to acquire right of way (ROW) during the Watford City bypass project.

- NDDOT's ROW staff gave the consultants leeway to negotiate on land offers in order to expedite the ROW process.
- The major issues NDDOT encountered when acquiring ROW were landowners demanding access points, coming to an agreement on land values, and aesthetic elements such as trees that landowners did not want moved.
- The landowners in the area were constantly being approached about their land by multiple parties, including oil companies.
- The environmental review, design, and ROW were all happening concurrently. ROW staff were coordinating with the project manager, Wayne Zacher, directly from the field to include plan notes indicating which areas to avoid, for example.

Travis Wieber, Project Manager, KLJ and Jessica Karls, Lead Designer, KLJ

The interview with Travis Wieber and Jessica Karls focused on the public involvement process, since KLJ led it, but also covered any other aspects of the project that had not yet been thoroughly discussed.

- KLJ conducted an origin-destination study over the wireless network which collected data from mobile devices to indicate traffic movements in the Watford City area. The study showed that 75% of the traffic coming into Watford City was not stopping. Thus, constructing a bypass around the city would not be a substantial detriment to city businesses. KLJ also developed a visualization projecting how traffic would look once the bypass was constructed, which was illustrated at public meetings.
- Even as the oil boom has faded and associated truck traffic has decreased, the population continues to grow in Watford City and automobile traffic has increased.
- At the first public meeting, KLJ presented community members with a map illustrating general corridors around Watford City, but not specific bypass routes. Community members were invited to mark up the maps with comments and suggested routes.
- A landowner invited KLJ to drive the corridor with him, and they accepted. Personal engagement such as this allowed KLJ to learn of potential challenges early on, and then strategize on how to resolve them or route the bypass in such a way as to avoid them.
- By the second public meeting, preferred alternatives had been determined and community members were invited to provide their comments on them.
- KLJ chartered a plane to take pictures of the area and analyzed them since oil developments were happening so quickly and many portions of the area were not accessible by car.

- After the bypass construction was completed, the impact to traffic in the area was instantaneous.
- The project timeline was very short – 16 months from consultant notice to proceed for the EA to contract bids.
- The Watford City bypass project won an award in the Quality of Life/Community Development category as part of the annual America’s Transportation Awards administered by the American Association of State Highway and Transportation Officials, U.S. Chamber of Commerce, and American Automobile Association.

Sheri Lares, Environmental Protection Specialist/Tribal Liaison, FAA (formerly FHWA North Dakota Division) and Jeani Borchert, Cultural Resource & Tribal Consultation, NDDOT

The interview with Sheri Lares and Jeani Borchert focused on the tribal coordination aspects of the Watford City bypass project.

- The expedited nature of the project development process was in part a result of the close collaboration between NDDOT, tribes, and environmental agencies.
- The efficiency of the review process was a result of all parties working together in “real time” to edit the EA and FONSI documentation.
- The relationship between the FHWA North Dakota Division and NDDOT facilitated timely approvals of the EA and FONSI documentation.
- The TCC process helped to streamline coordination with tribes on specific project issues and concerns.
- An FHWA case study was developed on the TCC and is available online. This case study could prove useful to the Watford City bypass case study.

Appendix A: Watford City Bypass Case Study

The Watford City Bypass case study is accessible at

https://fhwatest.fhwa.dot.gov/planning/css/case_studies/cssta1617_northdakota/appa_watford.cfm

Appendix B: Full List of Interview Questions

Project Purpose and Need

- US 85 is classified as an Interregional System road. Is there a Statewide plan that identifies and describes the Interregional system roads in the State?
- This part of US 85 is part of the Ports to Plains Alliance and included as a high priority corridor by Congress. Was this designation in MAP 21? Is there a report that describes and discusses the Theodore Roosevelt Expressway in North Dakota?
- ND Highway 23 is classified as a State Corridor. Is there a Statewide plan that discusses this corridor? Is there a vision in the plan?
- How was the project identified for funding as part of NDDOT prioritization process? Political priorities? Connectivity metrics? Congestion metrics? Safety metrics?
- What specific safety concerns existed along existing 85?
- How was the project funded?
- Describe the use of the “Wireless Network” origin-destination study and the benefits of using this technology to capture travel patterns. Was this the first time this was used or is this standard operating procedure?

Economic Development and Growth Pressures

- Describe the changes in economic activity related to the oil and gas industries.
- Describe the economic changes and growth pressures in and around Watford City. Contextualize the growth pressures in this area with the rest of the State.
- What are the major quality of life changes resulting from the growth? Both positive and negative. How has increased sales tax from 2006 to 2011 benefited the area?
- What challenges have Watford City and its residents experienced from the rapid growth?
- What concerns did Watford City have about existing business along US 85 that would be bypassed?

Stakeholders

- Who were the key stakeholders which influenced the location and design for the bypass project?
- Was there a difference between the SW and SE Bypass in terms of stakeholder involvement? Please explain.
- What process was used to collaboratively engage the stakeholders as part of the decision-making process?

Decision-making Process

- Does NDDOT use a multi-disciplinary team to guide the project development process? Please explain the team composition including roles and responsibilities.

- Does NDDOT have a formal decision-making process where key decision points are concurred on by environmental resources agencies and other stakeholders with jurisdictional authority?
- What type of process does NDDOT use to define the project's context?
- Was there any innovated project streamlining or schedule expediting techniques employed during the project development process?
- What process was used to narrow down the range of alternatives?

Public Involvement

- Was there a public involvement (PI) plan for the project?
- What were some of the most effective public outreach strategies used for the project?
- How were the tribal communities incorporated in the PI process?
- Were there any concerns about the PI process or lessons learned for future projects?
- Were there any techniques used that were particularly creative or different for this project? Were any visualization tools utilized?
- What were the primary concerns of the general public?
- What were the primary concerns of local elected officials?
- Were there any assessments such as polls or questionnaires of public satisfaction during the project development process?

Human Environment Considerations

- Describe the project's impacts to current land use including induced growth pressures.
- Were there any significant concerns about the impact to farmlands from property owners?
- What types of quality of life issues surfaced during the project development process?
- Describe the pedestrian and bicyclists issues before the project was constructed. Has there been an improvement to cyclist and pedestrians within Watford City since the project was constructed?
- Was noise a concern to property owners? Since noise barriers were not feasible or reasonable did NDDOT offer any other abatement measures?
- Were there any aesthetics enhancements to the project features?
- Is there anything particularly unique to the Watford Bypass related to human environment considerations? Differences between the SE and SW portions of the bypass?

Natural Environment Considerations

- The jurisdictional wetlands impacts were mitigated using sunken box culverts and rip rap. Is this standard operating procedure for NDDOT?
- The Foss Wetland Bank was used to mitigate the natural/non-jurisdictional wetlands. Is this standard operating procedure? When was the Foss wetland bank created? How is it being used today?

- What process was used to develop the mitigation plan?
- Does NDDOT have a memorandum of agreement or programmatic approach with the U.S. Army Corps of Engineers on projects like Watford Bypass?
- Were there any considerations given to providing critter crossings?
- Explain the overhead utility lines accommodations for whooping cranes.
- Is the moratorium for construction between April 15th and June 1st a standard protocol for Cherry Creek?

Cultural Resources

- Describe the process used to identify important cultural resources in the project study area.
- What type of coordination was undertaken with tribal communities?
- Describe the importance of the stone features discovered. What efforts were made to avoid these features?
- In the EA, the yellow and orange routes were eliminated due to cultural findings and the blue route was eliminated due to cultural findings and proposed oil wells. Please explain the nature of these cultural findings and the process used to have these routes eliminated.
- Describe the cultural resource inventory process and the specific involvement from the Three Affiliated Tribes and Turtle Mountain Band of Chippewa Indians (page 40 of EA).

Design Flexibility

- Describe the selection process used for the typical section (four lane divided flush center lane).
- Were there any interesting design considerations used to avoid specific types of impacts?
- Is there control of access?
- Are there any land development standards adjacent to the roadway?
- Explain the conceptual bypass route versus the conceptual truck reliever route and the decision-making process to go with the bypass route.
- Would you say that the project met or exceeded the expectations of designers and stakeholders?