Mankato/North Mankato Area Planning Organization
Policy Board Meeting
Thursday, May 5th, 2016 – 6:00PM
Intergovernmental Center,
Minnesota River Room
10 Civic Center Plaza, Mankato, MN 56001

I. Call to Order

II. Review of Agenda

III. March 17, 2016 Meeting Minutes

IV. New Business
   1. Riverfront Drive Corridor Study Proposal Recommendation
   2. Belgrade Avenue Corridor Study Proposal Recommendation
   3. Intelligent Transportation System (ITS) Architecture Resolution

V. TAC Comments (April 21st MAPO TAC Meeting Minutes Attached Informational)

VI. Policy Board Comments & Other Business
   1. Verbal Update Regarding Intersection Control Evaluation Studies for Pohl Road/Stadium Road, Pohl Road/Balcerzak Drive, & Lor Ray Drive/Howard Drive
   2. SMTP/MnSHIP Phase 2 Outreach (Informational Material)

VII. Adjournment
A Regular meeting of the Mankato/North Mankato Area Planning Organization Policy Board was held on March 17, 2016, at 6:00 p.m. in the Minnesota River Room of the Intergovernmental Center. Present Policy Board members, Dan Rotchadl, Chris Frederick, Ryan Short, Bob Freyberg, Jack Kolars and Vance Stuehrenberg for Mark Piepho. Also present was MAPO Executive Director Paul Vogel, MAPO Transportation Planner Jake Huebsch, also in attendance were members from the Technical Advisory Committee (TAC) that included, Al Forsberg and Jeff Johnson.

Call to Order
Vice Chair Mr. Frederick called the meeting to order at 6:00 p.m.

Motion to Approve Agenda
Mr. Rotchadl motioned to approve the agenda, Mr. Freyberg seconded the motion. The motion carried unanimously.

Motion to Approve February 4th, 2016 Meeting Minutes
Mr. Freyberg moved to approve the February 4th, 2016 Policy Board meeting minutes, Mr. Rotchadl seconded the motion. The motion carried unanimously.

New Business
1. Transportation Improvement Program (TIP)
   Staff presented the 2016-2019 TIP and explained that it was released for a 30 day public comment period from February 5th to March 4th. Staff followed the process outlined in the MAPO’s Public Participation Plan which for distribution of the draft TIP included hosting a public open house. The open house was held on February 25th from 3:00 – 5:00 p.m. No formal comments were received during the public open house nor the 30 day public comment period. The MAPO TAC recommended approval of the 2016-2019 TIP to the MAPO Policy Board at their March 17th meeting. Mr. Rotchadl moved and Mr. Stuehrenberg seconded a motion to approve the resolution adopting the 2016-2019 TIP. With all voting in favor, the resolution was approved.

2. Intersection Control Evaluation Proposal Recommendation
   The MAPO received 6 proposals relating to Intersection Control Evaluations (ICE) RFP that was released on January 12th and closed on February 12th. On February 25th MAPO staff along with 3 members of the MAPO TAC reviewed and ranked the ICE study proposals. Based upon the review and ranking the committee recommended accepting SRF’s Intersection Control Evaluation Proposal. The MAPO TAC recommend that the Policy Board accept the SRF proposal. Mr. Freyberg moved and Mr. Kolars seconded the motion accepting SRF Intersection Control Evaluation Proposal and for MAPO staff to proceed developing a contract with SRF not to exceed their proposal amount. With all voting in favor, the motion was approved. Mr. Frederick requested that in the future and when proposals are received that staff include additional information in the meeting packets relating to the received proposals and the selection process.
3. **Request for Proposal Updates**
   Staff updated the Policy Board on the Riverfront Drive Corridor Study RFP which was released on February 1st and closed on March 1st. The MAPO received 4 proposals and on April 1st the proposals will be reviewed and ranked by MAPO staff and members of the TAC. Additionally, the Belgrade Avenue Corridor Study RFP was released on March 1st and proposals are due by April 1st. The review and ranking of the Belgrade Avenue proposals will take place in the month of April and review and ranking will also be coordinated with North Mankato.

4. **Local Projects Seeking Federal Funds through the Mn/DOT District 7 Area Transportation Partnership**
   Staff Policy Board on local projects that were recommend for funding through the Mn/DOT area Transportation Partnership. These projects included: Blue Earth County, CSAH 12 Extension, City of Mankato, Adams Street Extension, City of Mankato, Riverfront Drive and Sibley Street Intersection Improvement, Blue Earth County Roundabout at County Road 90 & Highway 22, additionally 3 rail crossings with the MAPO were recommended for upgrades.

**TAC Comments**

**Policy Board Comments & Other Business**
Mr. Kolars reminded the Policy Board that Lt. Gov. Tina Smith and Transportation Commissioner Charlie Zelle Friday would be at Greater Mankato Growth on March 18th to discuss transportation and would be hosting a roundtable discussion focused on finding a long-term transportation funding solution.

Next MAPO Policy Board meeting is scheduled for Thursday, May 5th, 2016

**Adjournment**
With no further business, Mr. Freyberg moved to adjourn the meeting, Mr. Rotchadl seconded the motion. With all voting in favor the meeting was adjourned at 6:45 p.m.

Vice Chair, Mr. Frederick
AGENDA RECOMMENDATION

Agenda Heading: Riverfront Drive Corridor Study Proposal Recommendation
No: 4.1

Agenda Item: Riverfront Drive Corridor Study Proposal Recommendation

Recommendation Action(s): Motion to accept the Bolton & Menk Riverfront Drive Corridor Study Proposal and for MAPO staff to develop a contract with Bolton & Menk not to exceed their proposal amount.

Summary: The MAPO received 4 proposals relating to Riverfront Drive Corridor Study RFP that was released on February 1st and closed on March 1st. On April 1st MAPO staff (Jake Huebsch & Paul Vogel) along Mark Anderson (City of Mankato Transit), Ronda Allis (MnDOT) and Landon Bode (City of Mankato Engineering Department) reviewed and ranked the study proposals.

Members based their scoring on the criteria outlined in the RFP which included:

- Specialized expertise, capabilities and technical competence, as demonstrated by the Responder’s expressed project understanding, proposed project approach and methodology, project work plan, and project management techniques. 20%

- Project background and experience, as demonstrated by the Responder’s ability, familiarity and experience with handling similar projects, and the qualifications and related experience of key staff members. 25%

- The Responder’s record of past performance, including quality of work, ability to control costs, and ability to meet schedules. 25%

- The availability of personnel and other specialized resources to perform the work within the specified time limit. 10%

- Total price compared to other proposals. 20%

At the April 21st MAPO TAC meeting, the TAC members recommend that the MAPO Policy Board accept the Bolton & Menk Riverfront Drive proposal.

On the following page, the cost and hours associated with the received proposals as well as the total and average scores based on the review and ranking process.
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| TOTAL                     | 429.53 | 431.8 | 474.79 | 310 |
| AVERAGE                   | 85.91  | 86.36 | 94.96  | 62  |

**Attachments:**
1. Work plan section from the received proposals
Work Plan

Bolton & Menk, Inc. has reviewed the work task descriptions and issues outlined in the Request for Proposal (RFP) and developed an approach based on our knowledge of the corridor and experience with similar studies. MAPO and its partners can be assured that Bolton & Menk will provide outstanding technical deliverables, exceptional leadership in public and stakeholder involvement, and superior project management in a timely and cost-effective manner. The information below directly corresponds with work elements identified in the proposed project schedule at the end of this section and the Cost Breakdown included in Section 3.

Task 1: Project Management
One of the most significant components of the study is the management process. Our proactive and effective project management is critical for successful completion of the study resulting in full partnership support. Our approach is to lead this study process through consistent communication, firm schedules, and established milestones while building consensus along the way. We will schedule all meetings, complete all agendas, maintain meeting records, and offer regular updates on next steps and upcoming study requirements.

Subtask 1.1 Administration
Bolton & Menk will prepare and provide project correspondence, scheduling, invoicing, and budget management necessary for expediting work products and project decision-making. Schedule updates will be provided on a regular basis.

Subtask 1.2 General Coordination
Our team will have ongoing discussions and regularly scheduled weekly check in meetings with MAPO and City staff. In addition, monthly written memos will be provided for review by the MAPO TAC and Policy Board. The purpose will be to understand individual agency perspectives to gain insight relative to key issues or perceived impacts, discuss potential mitigation strategies to minimize negative impacts, and identify considerations that could influence the study’s conclusion.

Subtask 1.3 Quality Control
Bolton & Menk has developed and implemented a comprehensive Quality Assurance and Quality Control (QA/QC) Program that is designed to meet the particular needs of our firm and our clients. Our program systematically and dramatically reduces the potential for issues. Routine product reviews are an integral part of the quality control process, which effectively target conceptual, constructability, environmental impact, public impact, and economic engineering issues.

Deliverables: Regular communications with study partners, schedule updates, monthly invoices and progress reports, QA/QC review, schedule meetings

Key Personnel: Chromy

Client Participation: Process monthly invoices and progress reports, ongoing communication

Task 2: Public and Agency Involvement
Our team will develop a collaborative, consensus-based design founded on the ideas and values of the community. Our public input process will lead residents in forming ideas and solutions for the project, analyzing the alternatives, and developing an informed conclusion at the end of the process. The graphic below outlines the different groups, planned activities, and their role in the overall decision-making process of the study working towards achieving informed consent. Input will come from the community, agencies, and property/business owners.
Subtask 2.1 Develop Public Involvement Plan
Our team will develop a comprehensive public involvement plan building upon what is presented in Section 4. This Plan will outline opportunities and strategies for input and encouragement of stakeholder participation.

Subtask 2.2 Project Management Team (PMT) Meetings
Our team will lead the PMT comprised of a core group of planning and engineering staff from MAPO, City of Mankato, Blue Earth County, and MnDOT. Bolton & Menk will have ongoing discussions and regularly scheduled (monthly) meetings with the PMT. The purpose will be to understand individual agency perspectives to gain insight relative to key issues or perceived impacts, discuss potential mitigation strategies to minimize negative impacts, and identify considerations that could influence the project’s conclusion. These meetings may include other agencies as needed. These meetings will occur as detailed in the schedule at the end of this section.

Subtask 2.3 Public Open House Meetings
In the early stages of the study (prior to the first open house) we will work with the City of Mankato to look for opportunities to incorporate information on the Riverfront Drive Corridor Study into Old Town Master Plan Update meetings. This will offer an additional means to solicit public input on issues, needs, and opportunities. These two projects are naturally interrelated and include many of the same stakeholders. Combining public outreach efforts where possible will help to avoid stakeholder meeting burnout.

Public Open House #1
The first public open house with residents, business owners, and other stakeholders will be held in August 2016 to share the purpose of the study; gather input on the issues, needs, and opportunities within the corridor; and draft corridor vision and goals. Topics will also focus on quality of life elements and how these elements can be integrated into the corridor design. This may include aesthetics, recreational, and non-motorized opportunities. The meeting will be conducted in an informal setting with a brief presentation to encourage participation and provide an opportunity for one-on-one with members of the project team to record input. We can use Audience Polling Equipment to gather input on who is attending the meeting, what their interest is, and gauge support of the project’s need.

Public Open House #2
A second open house will be held in November 2016 to provide a public update on the study’s progress including the range of alternatives under consideration. The message at this open house will focus on how alternatives address the problems that need to be solved and the trade-offs between them. Our goal is to learn what the stakeholders like and do not like and why.

Audience polling may be used to identify the elements of alternatives that could be supported or what portions of the alternatives are causing stakeholders concern. Bolton & Menk has used this tool effectively on similar projects as a means to allow feedback from all attendees and automatically displays on a presentation screen during the open house meeting. This allows all participants to be heard, not just those who may be more outspoken than others, and provides a record of public input beyond comment forms and verbal feedback.

Traffic model simulations and corridor visualizations/ renderings will be used to show various scenarios. These simulation tools will be able to show the public what the improvements can look like and how the community will benefit. Residents will have a greater understanding of the issues and alternatives by seeing the possible solutions in action.
Public Open House #3
The third open house will be held in March 2017 to review the recommended alternative to be carried forward into future project development. Our team will share refinements developed as a result of input received at Open House #2.

This final open house is important to allow a final opportunity for public input during the study and to clearly communicate the study status/outcome. This is important since there may be a gap of time between the study’s conclusion and actual construction of the improvements. Final visualizations of the corridor will be presented for final consensus.

Subtask 2.4 MAPO TAC Meetings
Bolton & Menk will prepare for and attend meetings with the MAPO TAC at key milestones during the study. Assumes 3 in-person meetings with the TAC.

Subtask 2.5 Mankato City Council Updates
Bolton & Menk will prepare for and attend Mankato City Council meetings at key milestones during the study. Assumes 2 in-person presentations to the Mankato City Council.

Subtask 2.6 MAPO Policy Board Meetings
Bolton & Menk will prepare for and attend MAPO Policy Board meetings at key milestones in the study. Assumes 2 in-person presentations to the MAPO Policy Board.

Subtask 2.7 Environmental Agency Coordination
Bolton & Menk will have ongoing communications with environmental resource agencies as needed to move the project forward. This will likely include coordination with MnDOT CRU and/or SHPO as it relates to improvements within the historic district.

Subtask 2.8 Property Owner Coordination Meetings
We will meet with individual and/or small groups of affected property owners to discuss corridor concepts and potential changes to access. These types of meetings are valuable in addressing potential issues head on rather than letting them fester and potentially derail the entire effort. Changing access to a business is usually met with resistance. Our objective is to find access solutions that provide safety benefits to the public roadway while maintaining or improving site access and circulation for the property owner. We have found over and over that spending time to understand how a business operates and what their concerns are is beneficial to our understanding and building trust in developing amenable solutions. Assumes up to 15 meetings.

Subtask 2.9 Public Notices
Our team will develop public notices for all public meetings. This will include a notice to be printed in the Mankato Free Press and informational posters announcing open house events for Mankato Transit agency distribution and for ongoing displays at the Intergovernmental Center. We will develop these notices and informational posters and review them with MAPO and City of Mankato staff to obtain approval prior to distribution.

Subtask 2.10 Study Newsletter
We will prepare and distribute study newsletters prior to each public open house. The newsletter will be posted on the website and mailed to property owners/businesses directly adjacent to the corridor up to 30 days prior to the open house event.

Subtask 2.11 Study Website and Social Media
Our team will frame-up and provide leadership in the maintenance of a study web page on MAPO’s website to serve as a clearing house for all study information. The goal of the website is to provide information so the public can track the study and have a voice in the process. The website will be updated periodically as needed throughout the study process. We will also assist MAPO staff in providing social media updates on study progress and public event notices.
Work Plan

Deliverables: Public involvement plan, meeting leadership, meeting materials, meeting notices/informational posters/newsletters, website development, and updates

Key Personnel: Chromy, Bersaw, Breiter

Client Participation: Attendance and participation at meetings, provide a list of names and addresses for project mailings, maintain the website and perform periodic updates; social media updates

Task 3: Corridor Vision and Goals
Riverfront Drive has been studied many times over the past decade. The identity of the corridor is constantly evolving and changing. The study will define a solid identity and its ultimate usage beyond just being a pass-through corridor, and establish quality of life elements that will provide positive impacts to users.

Subtask 3.1 Purpose and Need
The first step is to understand and define the problems within the corridor. We recommend capturing that in a comprehensive and specific purpose and need document. The purpose and need establishes justification for improvements. Findings will be extracted from the existing conditions study, forecasted conditions, and public input to document the numerous elements showing a clear need for improvements. This information will be used to develop the need component of the purpose and need statement. The purpose and need statement will serve as the foundation for the study, thoroughly explaining why the study is needed, why improvements are needed, and confirm the scale of the proposed improvements.

Subtask 3.2 Develop Preliminary Corridor Vision and Goals
Once we have an approved Purpose and Need document, we will begin drafting corridor vision and goals. The development of the vision will be a process that defines the ultimate setting and function of the corridor and neighboring properties. Components of the vision include:
• Understanding what the area is and what it will become
• Determining the ultimate transportation network to serve the proposed land uses
• Considering multimodal needs to serve all users
• Including context sensitivity in all recommendations

The preliminary Corridor Vision and Goals will be presented to the PMT and then the MAPO TAC for input and revision.

Subtask 3.3 Refine Vision and Goals
With all stakeholder interests in mind, our team will formalize the future Corridor Vision and Goals. We will help project stakeholders translate the goals into action steps that are reflected in project alternatives. As needs are further explored as the study progresses, the Vision and Goals will be refined and documented.

Deliverables: Purpose and Need document, Corridor Vision and Goals document

Key Personnel: Chromy, Bersaw, Nemeth, Tillman, Odens

Client Participation: Active participation

Task 4: Corridor Issues Identification
Understanding the root cause of the issues in the study area will allow the project team to provide recommendations to improve the corridor. A study of current and future issues will be completed for social impacts, land uses and trends, pedestrian network and needs, roadway safety and capacity issues, supporting roadway network, access management, community connectivity, and environmental resources.

Our team will assemble study information that provides a solid corridor understanding that will be incorporated throughout the project area as alternatives are developed. Below is a sampling of these items:
• Project construction history/relevant prior studies/ subarea visions
• Functional classification/role in transportation network
• Future roadway connections/travel patterns
• Accommodations and safety for all transportation modes
• Existing pavement sections and condition
• Existing lane use/access points and control
• Structures inventory
• Lighting/utilities in the corridor
• Study area drainage patterns
• Flood control structures
• Land use changes
• Growth patterns
• Environmental and cultural sensitive areas
• Low income/minority populations
• Community goals and expectations

Subtask 4.1 Demographics
Demographics are an important element in determining how the area is transitioning, population characteristics in the area, and the types of land uses and demands the
corridor may best serve in the future. Our team is familiar with and will reference multiple planning documents to understand expectations of growth, population, employment, and housing in the region.

**Subtask 4.2 Land Use**
Significant land use changes will be added to the issues map. We will continue to reference the latest city planning documents supplemented with discussions of the latest plans with City staff.

**Subtask 4.3 Roadway Function**
According to MnDOT’s functional classification, Riverfront Drive is a Minor Arterial roadway. This study will assess the roadway to ensure it is properly classified or to recommend a change in classification.

**Subtask 4.4 Trails and Pedestrians**
Pedestrian movements along and across portions of the corridor are served by an incomplete trail and sidewalk network with gaps in the overall system. In addition, there are pedestrian and bicycle demands across Riverfront Drive with limited accommodations. We will review the existing and planned trail and sidewalk facilities and connections between neighborhoods, schools, parks, and trail systems.

**Subtask 4.5 Safety**
Our team will evaluate both the number and type of crashes that are occurring in the study area. Both intersections and segments will be evaluated using the most recent five-year crash data. The crash data will be reviewed to understand existing issue areas/intersections and determine what types of mitigation may be necessary today and as capacity is expanded. This includes identifying historic trends and safety conflicts with regard to:
- Bicycle or pedestrian crashes
- Fatal and Type-A injury crashes
- Crosswalk (or roadway crossing) safety
- Safety impacts due to congestion
- Lane use/access issues/sight distance
- Turn lane/traffic control/lighting needs

We understand the City places a high standard of safety on its roadways. We will provide a safety technical memorandum outlining the above findings along with recommendations. There may be low cost recommendations that could be incorporated prior to a larger project. These recommendations will be included with the implementation plan developed at the conclusion of the study.

**Subtask 4.6 Access**
Bolton & Menk will collect access information using the most current aerial imagery available regarding the number, type, and location of all accesses within the study corridor. We will evaluate the corridor in segments and provide recommendations on access management to provide the proper balance between access and mobility while referencing local access management guidelines. There are opportunities for improvement. Some of the recommendations may include combining access to a shared location, connection to a supporting roadway, access closure when adequate access is already provided, or addition of a median to reduce movements. An access management plan will be developed for the corridor and included in the study documentation. This will be helpful as properties develop or redevelop and access needs are being discussed.

**Subtask 4.7 Traffic Data Collection**
As part of the analysis to understand existing conditions and developing forecasts for future year conditions, our team will utilize collected traffic data. The following outlines our data collection plan:
- Repurpose counts collected in 2015 for two MnDOT District 7 preliminary ICE Studies we conducted including the intersections of Riverfront Drive and:
  - TH 169 SB Ramp Terminal
  - Poplar Street (southern intersection)
  - Stoltzman Road
  - Marshall Street
  - Sibley Parkway
  - TH 14 EB Ramp Terminal
  - TH 14 WB Ramp Terminal
- Collect new 13-hour turning movement and pedestrian counts using video detection cameras and manual observations at the following intersections:
  - Woodland Avenue/TH 169 Ramp Terminal
  - Sibley Street
  - TH 169 NB Ramp Terminal
  - Poplar Street (northern intersection)
  - Cherry Street
  - Main Street
  - Plum Street
  - Elm Street
  - Madison Avenue
  - LaFayette Street
  - May Street
Tube counts will be performed at up to ten locations throughout the Riverfront Drive corridor to obtain ADT, vehicle classification, and available gaps in traffic. Our team will complete field review of existing conditions including speed limits, traffic control, turn lane lengths, curve radii, public and private access locations, and other information pertinent to the existing corridor. Traffic signal timings and record drawings will be requested to develop traffic models consistent with existing conditions.

Gap studies will be performed at spot locations to identify whether adequate time is available for pedestrians to cross Riverfront Drive at uncontrolled locations. One of these locations is the crossing of Riverfront Drive at Rock Street that accommodates pedestrians traveling to and from Riverfront Park. A gap study will assist in determining if additional pedestrian crossing measures are needed to increase driver awareness and pedestrian safety. Up to three other key pedestrian crossing locations will also be identified and evaluated.

Subtask 4.8 Traffic Forecasting and Analysis

Our team will utilize data and forecast projections to assess current and projected traffic operations along the study corridor. We will use a combination of existing forecasting data (2045 long range transportation plan), historical data, and known land use changes to determine a 25-year forecast for AM and PM peak hour traffic. Additionally, a school afternoon peak hour may be analyzed in Segment 4 from Sibley to the terminus at Woodland. A Forecasting Processes and Results Memorandum will be developed as a deliverable to summarize the processes and findings.

Traffic operations along the corridor will be analyzed using Trafficware Synchro/Simtraffic 9 models for existing and forecast year 2041. Models provide operations analysis and are able to output visualizations of simulations produced with Simtraffic. The peak hours will be analyzed for 2016 No Build, 2041 No Build, and 2041 Build alternatives consisting of different combinations of traffic control/lane configurations. This analysis may be conducted by corridor segment if recommended changes are significantly different in one versus another or if one segment has more alternatives compared to the rest. The preferred alternative(s) will also be analyzed with existing volumes to provide an idea of opening year operations.

Measures of effectiveness from the modeling include intersection and corridor delay, level of service, travel times, queue lengths, and volume to capacity ratios. These will be used to understand the current and future needs of the corridor and also provide a baseline for alternative analysis of build options. The analysis will include evaluation of the key intersections identified earlier.

A Future Conditions and Recommendations Technical Memorandum will be developed as a deliverable to summarize the processes and document the results of the future conditions evaluation.

Subtask 4.9 Environmental Constraints

The information received from the agencies will be incorporated into an environmental screening supplemented with research conducted by our team. This screening will be performed to identify sensitive areas by considering all NEPA social, economic, and environmental categories. This corridor study does not include completing an environmental document. However, the study will be completed so it can be incorporated into a future environmental document as needed.

Subtask 4.10 Stormwater Evaluation

Our team will conduct an evaluation of existing stormwater conditions to gain a base understanding of what exists today, including critical issues.

Subtask 4.11 Existing Conditions Memorandum

The existing conditions study will be packaged in a memorandum documenting the work that was completed in Task 4.

Deliverables: Existing Conditions Memorandum, Forecasting Process and Results Memorandum, Future Conditions and Recommendations Memorandum, Trafficware Synchro/Simtraffic 9 models, Turning movement and ADT volumes
Task 5: Roadway Concepts and Recommendations

The first stage of the alternative development process is to identify constraints, sensitive areas, and unmet needs. Transportation system improvements will be developed that minimize impacts while recognizing cost, arterial performance, and connectivity goals for the region.

The evaluation of alternatives will pull everything that has been documented through the study, including comments from the public, agencies, vision, purpose and need, and engineering studies. This evaluation will be prepared so that it can be utilized in future environmental documentation. The alternatives will be narrowed to one build alternative with the aid of an evaluation matrix. The matrix provides an objective means to measure and evaluate these alternatives in order to identify the alternative that best meets the purpose and need of the project. The matrix also serves as a record of alternatives considered and reasons for dismissal. Ultimately, the recommended alternative remaining will be refined and presented in a layout.

5.1 Alternatives Development
A range of alternatives will be considered through the study corridor. Careful planning will detail improvements to the at-grade intersections providing a balance of safety, mobility, and capacity.

5.2 Typical Sections
Typical sections will be prepared that correspond with the alternative layouts.

5.3 Alternatives Screening
An initial alternative screening will occur. It is likely some alternatives will not meet the project’s purpose and need. An initial screening will be performed to eliminate those alternatives from further consideration and documented.

5.4 Planning Level Layouts
The alternatives will be further developed in planning level layouts demonstrating a general footprint, operations, and capacity. These planning level layouts will display access conditions, property impacts, circulation, and cross sections. The alternatives will also highlight proposed pedestrian, bicycle, and recreational improvements. Below are the elements that will be considered and developed in the layouts:

- Alternative Roadway Designs (including supporting roadway network and intersection treatments)
- Corridor Enhancements
- Right-of-Way
- Trail and Sidewalk Alternatives
- Landscaping/Streetscaping/Node/Gateway Treatments
- Drainage Alternatives

5.5 Evaluation Matrix
A custom evaluation matrix will be used for evaluation of the alternatives to determine which alternatives best meet the purpose and need of the project. A recommended alternative will be selected that meets the purpose and need, satisfies the project’s vision, and is sustainable.

5.6 Recommended Alternative Refinement
Upon the selection of a recommended alternative, our team will further refine this alternative. This will include development of cross sections, refinement of cost estimates, and refinement of the design. A planning level layout will be prepared of the recommended alternative.

5.7 Alternative Development Documentation
The development, evaluation, and selection of the preferred alternative will be documented in a technical memorandum. This evaluation will be prepared so it can be utilized in future environmental documentation.

Deliverables: Alternatives, typical sections, evaluation matrix, refined alternatives, alternatives development document

Key Personnel: Chromy, Bersaw, Tillman

Client Participation: Active participation in the alternative development, screening, evaluation and recommendations

Task 6: Multimodal Concepts and Recommendations
The analysis completed in Task 4.4 will be further studied to identify recommended improvements. Our team will identify areas where there are deficiencies in the system that need to be addressed, which may include crossing issues or gaps in the system.
6.1 Multimodal Alternatives Development
Alternatives will be developed that address the deficiencies identified in Task 4.4. It is expected the continuity of the trail/sidewalk network within and adjacent to the corridor, crossings of Riverfront Drive, and connections to transit will be the focal point of this exercise. The recommendations will identify improvements to address missing links or critical connections that would enhance the system as well as pedestrian and bicycle safety. ADA compliance needs will also be detailed along the corridor.

6.2 Multimodal Recommendations Technical Memorandum
We will prepare a technical memorandum documenting the multimodal study, needs, alternatives costs, and next steps. The documentation will also detail implementation of the improvements with recommended timing and lead agency for each project.

Deliverables: Alternatives, ultimodal recommendations technical memorandum

Key Personnel: Nemeth, Bersaw, Tillman

Client Participation: Active participation in the alternative development and recommendations

Task 7: Landscaping and Streetscaping Concepts and Recommendations
7.1 Landscape/Streetscape Concepts
Through PMT discussions, our team will engage City representatives to understand the desired levels of visual enhancements. This will set boundaries as appropriate for an arterial roadway and discuss opportunities within the corridor. At this brainstorming session a draft vision will be prepared.

Our team will then develop streetscape alternatives for the corridor. This will identify critical segments and help determine priority levels throughout the study area. There are a variety of commitment levels possible for the Riverfront Drive streetscape. To help categorize the possible levels of treatment, we have broken down the treatments into three levels.

Level 1: This is the lowest level of treatment we would recommend for the corridor. This level involves surface treatments, ADA pedestrian ramps, and crosswalks.

Level 2: This streetscape treatment is the intermediate level of treatment. This level would include all the amenities identified in Level 1 plus consider items such as trails, pedestrian lighting, trash receptacles, benches, and additional trees.

Level 3: This streetscape treatment level is the highest treatment recommended. Level 3 includes all features in both Levels 1 and 2 plus considers additional pedestrian bump-outs, additional planting beds, hanging baskets, banners, bollards, signage, and artwork.

The preferred streetscape approach will be applied to the corridor. It is likely treatment levels will differ among segments of the corridor. Graphics depicting these improvements will be developed. Our team will document the landscape/streetscape efforts into a streetscape concept/ layout for the corridor.

Deliverables: Streetscape concept and graphics

Key Personnel: Chromy, Odens, Bersaw

Client Participation: Active participation and leadership in the streetscape enhancements development, evaluation, and recommendations

Task 8: Costs
Planning level cost estimates will be prepared throughout the study process as it aids in the evaluation and selection of alternatives. Estimates will be refined as the alternatives are to provide project partners with estimates that can be used for planning and programming purposes.

8.1 Roadway Alternatives Cost Estimate
Cost estimates will be developed for the roadway alternatives developed in Task 5.

8.2 Multimodal Alternatives Cost Estimate
Planning level estimates will be prepared that correlate with the recommended multimodal improvements in Task 6.

8.3 Streetscape/Landscape Cost Estimate
Planning level estimates will be prepared that correlate with the recommended streetscape/landscape improvements in Task 7.
Deliverables: Cost estimates of the roadway alternatives, multimodal alternatives, and the streetscape/landscape alternatives

Key Personnel: Chromy, Tillman, Nemeth, Odens

Client Participation: Review of cost estimates

Task 9: Implementation
We will develop a fiscally-responsible implementation plan that prioritizes transportation improvement recommendations in the study area according to a realistic timeline. We understand the need to divide the project into manageable segments and components that have independent utility. The plan will document the needs, triggers, timing, and potential funding sources for each project.

The corridor vision and recommendations will seek to identify smaller projects with independent utility. Ideally, the projects will achieve multiple purposes being eligible for a range of funding. Recommendations will:
• Preserve the current investment in the infrastructure
• Preserve the regional function of the roadway, yet plan improvements at a maintainable and fundable scale
• Seek to improve safety
• Prioritize the vision so project partners can strategically work towards implementing improvements on segments that provide the highest benefit
• Identify spot safety improvements that could be completed with pavement preservation projects

Deliverables: Implementation Plan

Key Personnel: Chromy, Bersaw, Tillman, Nemeth

Client Participation: Assistance on the prioritization and lead agency definition

Task 10: Report
Our team will deliver a comprehensive study report to project partners that will not only serve as documentation of the study, but as a valuable resource to be referenced as the corridor grows and evolves. The study report will contain the research, findings, and recommendations that were completed in this study. The appendices will contain all technical memorandums.

Deliverables: Study Report

Key Personnel: Bersaw

Client Participation: Review draft document
### Work Plan

#### Riverfront Drive Corridor Study

**Proposed Project Schedule**

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**Technical Input**

- Existing and No-Build Traffic Analysis (including forecast, safety, and performance analysis)
- Pedestrian and Bicycle Analysis
- Environmental Review (Screening/Agency Coordination)

**Purpose and Need**

- Define the Problem
- Establish Corridor Vision & Goals
- Develop and Evaluate Alternatives
- Provide Recommendations

**Evaluation Criteria**

- Corridor Vision and Goals
- Alternatives Evaluation
- Future Traffic Analysis (including forecast, safety, and performance analysis)
- Corridor Visualizations

**Website**

- Agency Coordination - (Environmental Resources)

**Property/Business Owner Coordination**

- Development of Conceptual Alternatives and Cost Estimates (roadway, trails, drainage, streetscaping, landscaping, etc)
- Refine Recommended Alternative/Cost
- Draft Study Report/Implementation Plan
- Final Study Report

Submitted by Bolton & Menk, Inc.
MANKATO/NORTH MANKATO AREA PLANNING ORGANIZATION (MAPO)
Professional Services Proposal for Riverfront Drive Corridor Study

PROPOSAL FOR:
Paul Vogel
Executive Director
MAPO
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Mankato, MN 56001

FROM:
Will Kratt, PE
Associate Principal + Civil/Transportation Engineer
ISG
115 East Hickory Street, Suite 300
Mankato, MN 56001
507.387.6651
will.kratt@is-grp.com
Work Plan

2
STEP 2
PUBLIC ENGAGEMENT + VISIONING

APPROACH TO COMMUNITY ENGAGEMENT

Our approach to community engagement for the Mankato Riverfront Corridor Study will focus on the communities along the corridor and the various stakeholders impacted by decisions along the corridor. The overarching goal of the study will shape a vision and recommendations for multi-modal safety that respects the character of each segment of the corridor. A vital community engagement will be a paramount component of this project. Our team will solicit information about the sights, the sounds, and the feel of the corridor as well as the sense of place, stakeholder neighborhoods, communities, Cities, and the region (MAPO) envision.

We anticipate the goals of the community engagement process will involve reaching a broad range of participants, defining a vision (or multiple visions) for the corridor, and finding the best ways to achieve the vision through planning and design recommendations that will ultimately have community support and buy-in.

Guiding Principals

Our public involvement strategies will adhere to the following guiding principles:

- **Harness existing relationships**: Community engagement efforts will focus on harnessing existing relationships and reaching out to groups and organizations that may already meet or organize events. For example, local businesses may want to host events or discussions. Coffee shops may have surveys out on their bulletin boards. We can reach out to students to participate and help organize engagement events. By leveraging existing and creating new partnerships with community groups, we can obtain a variety of already captive audiences from which to solicit input.

- **Make engagement convenient and meaningful**: Instead of inviting people to another meeting, we can bring the meeting to the people. Rather than involved technical presentations, make information easy-to-understand, and establish meaningful ways of soliciting feedback.

- **Make engagement welcoming**: Our team will tailor engagement strategies to involve people with different interests, needs, and time constraints. This may involve engagement strategies with targeted invitations which may include activities specifically for children or people who identify as a member of a certain neighborhood.

- **Be transparent, nimble, and responsive**: Building trust, adjusting strategies, and communicating in a timely and clear manner are key to successful community engagement and building the support of stakeholders.

Analyze and Disseminate Input

Throughout the community outreach process, our team will gather and analyze public and stakeholder input. Analysis of feedback will be a key component of this public engagement process and will include summary notes from all engagement activities. Building upon summary notes from all engagement activities, we will develop a report that categorizes common themes into an easy-to-understand document. We will work with the City and the project team to identify the best ways to disseminate the results of the engagement process and include them as a part of this task.
COMMUNITY ENGAGEMENT PLAN STRATEGIES + PROCESS

Together with the City of Mankato and MAPO, we will discuss specific ideas and goals for identification of stakeholders to engage, issues to anticipate, and relationships to establish and strengthen. We also understand the importance of staying on-point – if there are issues or constraints in the corridor, we need to manage expectations, which will be reflected in the information presented and questions asked.

General phases with proposed engagement goals follow along with tactical strategies that may be implemented:

- Phase 1: Visioning and Issue Identification
- Phase 2: Responding to solutions
- Phase 3: Recommendations

Part of a strong community engagement plan is flexibility in engagement strategies, partners, stakeholders, and goals once the process has begun. We anticipate knowledge, understanding, and issues to arise and evolve as the process continues. As such, our team is prepared to react, respond, and adjust as the process unfolds. We are nimble, and aim to help the entire team expect the unexpected and prepare to respond appropriately.

VISION AND ISSUE IDENTIFICATION

The community engagement process will begin by building a common vision for the corridor, taking into account the unique character and context of each segment. Understanding that the goals and priorities will likely differ between segments of the corridor, community engagement strategies will be tailored to each focus area. Community engagement strategies will also be customized based on the people being engaged.

For example, in corridor segments with nearby and adjacent schools, one of the target audiences for engagement may be students, parents, and school faculty and staff. Using a variety of strategies, we will seek to provide multiple opportunities for participation. Rather than one catch-all meeting scheduled in the evening, one option would be setting up a table during parent-teacher conferences to provide information and survey parents. Student participation would also be solicited by offering them the opportunity to vote on issues and ideas by placing a sticker next to issues important to them. This strategy also provides cross-sectional engagement of both youth and adult stakeholders with one effort.
During the visioning and issue-identification phase of the project, we would work with the project team to refine information needs and translate questions into easy, fun, and meaningful activities. We also recommend identifying groups of stakeholders to participate in a focus group or interviews. For example, we could attend a Mankato West High School student council meeting or a health class to engage students in a facilitated discussion about their impressions of the southern part of the corridor.

Phase 1 will include a summary report of engagement results which will begin to form the development of alternatives and solutions geared toward each segment of the corridor. This report should be made available to the public so that it is clear what the key themes were and how they may be addressed.

**MENU OF ENGAGEMENT STRATEGIES**

Our team will work with MAPO to select the strategies to include in the Community Engagement Plan. The following is a menu of engagement strategies that may be used for visioning and issue identification:

**Meeting-In-A-Box**

Our team will develop “meeting-in-a-box” toolkits to both engage project partners and as a means for these partners to engage specific stakeholders. Each meeting-in-a-box will contain easy-to-replicate activities, instructions, and project information cards. This is an easy way to broaden the reach and enable project partners to conduct engagement in their local communities.

**Youth-Centered Engagement**

A perennial challenge of public engagement is reaching out to and gaining a deeper understanding what young people think about planning decisions that impact both their everyday and future experiences. Our team has developed engagement activities for a range of ages, from short activities with blocks, play-dough, and crayons to more collaborative youth engagement opportunities like working with Girl or Boy Scout troops on visioning for streets.

**Meet with Existing Groups**

One way to effectively engage with community groups is to ask to attend an existing meeting. People do not have to go out of their way to attend an additional meeting, and the information is brought to them. Another advantage of this format is that people will likely already feel at ease enough to speak up about issues and ideas.

**Focus Groups with Key Stakeholders**

Focus groups are a great way for community members to discuss topics and themes more in-depth. This is also a very effective way of engaging people who may not typically come to a traditional public workshop but who are interested in public projects such as older residents of a group home, parents, immigrant communities, or teens.

Focus groups can be an effective way to help people feel comfortable sharing their ideas, issues, and questions because focus groups are usually relatively small in size, and intentionally structured around a common identity or, more frequently, a group that already gathers for one reason or another.

**Walking Workshops**

One of the best ways to engage people and generate feedback about an environment is by going on a walk to experience and discuss some of the challenges and needs in the area. Our team is experienced in tailoring walking workshops in a way that solicits pertinent feedback on the environment in a variety of contexts. Feedback from walks allow us to identify needs and challenges that can be addressed in a corridor study.

Walking workshops can be tailored to physical contexts as well as to different groups of participants. For example, a walking workshop near Mankato West High School could be an opportunity.

**Workshops with a Twist**

A spin-off idea on a typical “walking workshop” is to co-host an event with a local business or organization and invite community members to enjoy food, beverages, or music in conjunction with the project topic. For example, the Coffee Hag located on Riverfront Drive could host project team members for “Conversations and Coffee”, Tandem Bagels might be interested in hosting “Bagels and Banter”. These events could be open invitations or targeted to particular stakeholders.
DEVELOPMENT OF ALTERNATIVES

Based upon data collected during steps 1 and 2, various alternatives within the various land use districts along the corridor will be developed to respond to the concerns of stakeholders. It is anticipated that alternative concepts will address intersection alignments, traffic calming and control options, overall safety, gateway impressions, and multi-modal opportunities. Alternative solution concepts will be reviewed and presented to solicit feedback. This step will also provide opportunities for continued public engagement.

CONTINUED COMMUNITY ENGAGEMENT

We anticipate time devoted to analysis of the community engagement results, both quantitative (from surveys, sticker voting, etc.) and qualitative (focus groups, informal discussions, etc.). The results of the community engagement and issue identification will assist with development of solutions for the corridor.

The project team will generate a number of alternatives, which would then, in turn, need to be reviewed by the community. At this stage of the process, we like to think of this message:

1. You spoke (share the results of the community engagement)
2. We listened (present alternatives and how input influenced the ideas)
3. How did we do? (ask for feedback on the alternatives)

For this phase, we can engage the stakeholders that were engaged in steps 1 and 2. The activities will likely be shorter, and more reactionary focused than about idea-generation; however, our team will again be armed with a number of strategies to engage each target audience, and our will work with MAPO to select the strategies to include in the Community Engagement Plan.

Tactile Models

This strategy can be used if design decisions are still being discussed. Using to-scale blocks, roadway pieces, and movable features, people can better visualize changes to the built environment. This can aid in communicating physical constraints and modeling creative solutions. This is also helpful when engaging children or people that have difficulty or reluctance with writing or speaking.

Pop-Up Workshops

Similar to the “meeting-in-a-box” approach, pop-up workshops are highly interactive and are great for tabling at places where people are already gathering. For example, at farmers markets, festivals, sports events, school events or at times when people are typically out and about. Materials could be display boards with cross-section images for people to vote on with sticker dots, small surveys, a tactile model, or coloring activity.

Surveys

Surveys can be relatively quick, easy, and widely distributed and work well when there are multiple choice questions accompanied by visuals for the alternatives. The could be developed as paper surveys as well as online.

Presentation + Handouts

This strategy is helpful for revisiting groups that have already been engaged in steps 1 and 2. For instance, if the project team engaged members of a citizen’s advisory board during their meeting initially, a follow-up presentation and discussion would work well to re-engage these same stakeholders, and it could be easily replicated for various groups.
Work Plan

OPPORTUNITY THEMES = ALTERNATIVE SOLUTIONS

HIGHWAY 14 + RIVERFRONT DRIVE INTERSECTION

OLD TOWN MANKATO

DOWNTOWN MANKATO + CITY CENTER

SIBLEY PARKWAY
RECOMMENDATIONS + PRELIMINARY COSTS

As alternatives are identified and further refined, preliminary costs will be assigned to each, providing MAPO with the information needed to make educated comparisons and future decisions regarding improvements. This information will be publicized to inform community members of recommendations and provide them an opportunity to make comments and identify priorities. Potential strategies for re-engaging stakeholders and soliciting input include:

Online information

A web-based project page would be developed to provide easily accessible summaries of the community engagement process and results as well as information about how the project team arrived at recommendations. A dedicated area to submit questions and comments would also be available.

Presentation-In-A-Box

It is important to follow up with stakeholder groups who have already been involved in the community engagement. This helps to build trust and buy-in with stakeholders by demonstrating how input was used to develop recommendations. A “presentation-in-a-box” kit would be developed complete with a brief presentation, talking points, and easy-to-replicate handouts and/or comment cards. This allows the project team to be flexible with who attends meetings to provide information and collect input.
STEP 5
IMPLEMENTATION PLAN + CAPSTONE REPORT

FINAL REPORT + IMPLEMENTATION PLAN

A final report which contains a strategic implementation plan will be produced and provided to MAPO as a capstone to the entire process. The report will summarize the overall process, summaries of input provided by various stakeholders, and outline the alternatives derived from our analysis and stakeholder input.

The implementation plan will include final recommendations for preferred alternatives, an analysis of priorities and proposed timelines, and corresponding estimates of probable costs. To closeout the planning phase, our team will provide a presentation of the capstone report to MAPO and answer questions of the Board and Technical Advisory Council.

PILOT TO PERMANENT

ISG and TDG see the value in taking a very broad look at the entire Riverfront Drive corridor. We will review transportation, land use, and parking both individually and as a cohesive, interconnected system. In addition, multi-modal opportunities for the corridor will be explored and reviewed with the public.

In an effort to consider the cost of any future improvements, a program termed Pilot to Permanent can provide landscaping, signage, pavement markings and other low cost modifications to help determine feasibility before implementing a larger, more costly construction project. Some examples of typical Pilot to Permanent program recommendations include:

- Increase planters and improve streetscape plantings
- Update furnishings and other movable features
- Add semi-permanent parklets
- Promote outdoor cafes and gathering spaces
- Increase programming and events

ISG AND TDG WILL PROVIDE EFFECTIVE TOOLS TO ASSIST IN MULTI-MODAL TRANSPORTATION PLANNING + DESIGN.
TRANSPORTATION + PUBLIC ENGAGEMENT TEAM

With over 40 years of firm experience nationwide, ISG’s Transportation market expertise is backed by a group of responsive, creative, and resourceful civil engineers, planners, designers, and construction professionals. These experts work as a transportation specialty team dedicated to providing sophisticated strategies and comprehensive, cost-effective solutions. Will Kratt PE, will serve as the overall project manager and be the primary point of contact making the Riverfront Corridor Study project his top priority. Additional staff from ISG and TDG will serve key roles in supporting the successful execution of the project. All staff assigned to the MAPO project are prepared to dedicate the time and resources required for timely completion of the planning study.

MAPO INVOLVEMENT

The ISG/TDG team is excited to begin this endeavor with MAPO. MAPO’s active involvement in the corridor study process is critical to its success. Our team will look towards MAPO to assist with bringing members of the planning organization to the table and work with us to engage them in the process. We ask MAPO to use its relationships with the City, MnDOT, the public, the media, and other stakeholders to keep the project advancing through the process in a positive manner. Strong guidance and leadership from MAPO will ensure that the study does not get bogged down in processes that are not part of the targeted goals.
We have developed a work program that meets all requirements outlined in the Request for Proposals (RFP). Our approach to the Riverfront Drive Corridor Study includes completing all tasks as prescribed by the RFP; however, for presentation purposes, we have consolidated or slightly altered the sequencing of these tasks in our Work Plan. Key elements of our study approach include the following:

- The SRF Team will utilize a public participation program that maximizes citizen and stakeholder involvement and maintains good communication with the TAC. We will also undertake early consultation with key environmental review and resource agencies.

- We will collaborate closely with the MAPO Project Manager during the early data collection and analysis study phases to assure maximum efficiency. In addition, we will work with MAPO to develop the necessary future corridor-level traffic projections.

- Our multimodal corridor conceptual alternatives and preliminary design layouts will address roadway sections, right of way needs, utility conflicts/relocations, corridor geometrics, intersection control evaluation, access management, bikeway and pedestrian connectivity needs, aesthetics, preliminary cost estimates, as well as any special issues that arise.

- Our alternative impact analysis will be prepared at both a technical level for the TAC review and summarized into an easily understood format to facilitate citizens, property owners, major stakeholders and the general public's review and comments. Our recommendations for the corridor will be well documented and an implementation (staging and funding program) will be provided with meaningful information.

- Finally, we will provide all report deliverables in accordance with the study schedule. We will prepare the Corridor Report in a manner that will allow each jurisdiction (MAPO and Mankato) to use the study recommendations to advance corridor priorities through the project development process (e.g., preliminary design and environmental clearance) so that critical needs can be addressed as soon as funding becomes available.
TASK 1.0 - PROJECT MANAGEMENT AND AGENCY COORDINATION

The SRF team is dedicated to providing quality products that meet the expectations of our clients. We will work with the MAPO Project Manager and the stakeholders on the TAC to ensure the final project deliverables fulfill expectations. Furthermore, SRF’s Quality Assurance/Quality Control program will ensure that the final products meet all the requirements in the RFP and are of the highest quality.

1.1 Project Administration

SRF will manage the study in accordance with all provisions in the RFP. We will work closely with the MAPO Project Manager to coordinate efforts regarding tasks and meetings, review budgets and billings, monitor task milestones and the project schedule, and consult on monthly progress reports. We will use several forms of communication, including telephone, e-mail, and face-to-face meetings.

Our intent is to conduct weekly status meetings with the MAPO project manager or other staff as necessary. This helps to ensure we are on the same page with one another and in constant contact regarding how the study is progressing or what recently occurred.
1.2 Agency Coordination

SRF will coordinate with the MAPO governing bodies on an ongoing basis through periodic meetings with the MAPO Policy Board, MAPO TAC, and City of Mankato Council. We will meet with the MAPO Policy Board and City of Mankato Council on two occasions each to provide study updates and share information. The SRF Team will meet with the TAC on four occasions at key points in the study process; the TAC will play a critical role in reviewing and discussing key assumptions and technical information, and in the development of multimodal alternatives, including the selection of the locally preferred alternative for the Riverfront Drive Corridor.

We understand the MAPO staff will be responsible for coordinating with TAC members and scheduling meetings. SRF will be responsible for conducting a portion of the meetings, preparing meeting agendas and informational handouts, and summaries of each meeting.

Provided below is a brief summary of each TAC meeting, its purpose, timeframe and result:

- **TAC Meeting #1 – Convene a Kick-off Meeting:** At the first TAC meeting, the project scope and schedule will be refined as needed, specific study processes/strategies agreed upon, and a QA/QC program customized. Additionally key constraints, opportunities and issues will be identified, and the first open house and small group meeting process will be discussed.

- **TAC Meeting #2 – Review Existing Conditions and Provide Input on Purpose and Need, and Alternative Development:** We will meet with the TAC after the issue identification phase of the study is completed and prior to beginning the alternative development process. Based on the results of the existing and future conditions analysis and Small Group Meetings/Public Involvement Meeting (PIM #1), as summarized by the Issues Identification/Needs Assessment technical memo, we will present a draft Purpose and Need Statement for TAC review. We will also work with the TAC to develop a range of alternatives to address safety, access, capacity, aesthetics and special issues along the Riverfront Drive corridor.

- **TAC Meeting #3 – Review Draft Alternatives:** This Committee meeting will be held to review preliminary corridor layouts, to discuss the conceptual multimodal corridor alternatives and to fine-tune alignment options prior to their presentation to the Small Group Meetings. We will incorporate TAC comments and prepare presentation layouts, graphics and information sheets to be presented at the Small Group Meetings.

- **TAC Meeting #4 – Select a Locally Preferred Alternative for Riverfront Drive:** We will meet with the TAC to discuss the results of the external resource agencies’ comments, present the quantitative impact assessment and the evaluation matrix results, solicit comments from the Committee and facilitate the Committee’s selection of a Locally Preferred Alternative for the corridor. As
part of this meeting, the financial plan and implementation schedule for key short-range and full build-out improvements will also be discussed.

1.3 Quality Assurance/Quality Control
Throughout the study process and prior to publishing any final products, all documents will be reviewed in accordance with the approved study’s QA/QC Plan to ensure that the requirements of the Scope of Work have been addressed, that the documents effectively communicate key components as desired by the MAPO and the TAC, and that the products are of the highest quality.

TASK 2.0 - PUBLIC INVOLVEMENT PLAN
Public involvement is a cornerstone of our study approach. Our philosophy is that the process must be collaborative – not just informative. Further, it must be meaningful for participants and effective for the TAC. Therefore, the participation of agencies, businesses, neighborhoods, and other stakeholders must begin early in the study process to allow sufficient time for discussion and resolution of issues. This approach lends credibility to the final study recommendations and ensures that the full range of concerns, issues and opportunities are considered and support for study findings and recommendations is generated.

We understand the importance of working closely with stakeholders and developing a cooperative study spirit. Our public involvement approach has been well tested through numerous corridor studies.

The SRF team will actively involve participants in identifying issues, defining corridor needs, reviewing the project’s Purpose and Need Statement, developing alternative solutions and management strategies, and reviewing study recommendations.

Our public involvement plan is multifaceted and includes participation opportunities for key stakeholders and the general public. Landowners, major community interests, and businesses will be involved through two sets of small group meetings held at key points in the study process. The public will be involved during two open-house Public Involvement Meetings (PIMs).

Throughout the study process and upon study adoption, we will compile a summary of the public involvement program and document participation levels, comments received, and responses provided.
Methods and Work Plan

Specific elements of our public involvement plan are described in greater detail below:

2.1 **Small Group Meetings**
We will work with the MAPO and the TAC to develop a roster of adjacent landowners and business operators. These stakeholders will be invited to provide input on study issues at key milestones. We will hold four small group meetings, in two sets of meetings (two groups per set = four small group meetings). The size of the groups will be based on geographic location and an effort will be made to group stakeholders based on similar project improvements or impacts. As a result of small group meetings, greater understanding will be achieved between stakeholders and the TAC; this understanding is crucial in preparing alternatives that are supported by public officials.

It is anticipated that issues along the corridor are based on the environment the stakeholders operate a business, live, work, or play; therefore, our approach in turn will be context based to address the myriad of issues that may be discussed and need to be addressed as part of these meeting discussions. We pride ourselves on being able to facilitate meaningful, productive meetings in this type of setting and have the tools necessary to complete this task with an outcome that will serve the study well.

We propose to convene two sets of small group meetings (two small group meetings per set) during the study process. These are described in greater detail below:

- **Small Group Meeting #1 – Identify Issues and Opportunities:** Small group members will be presented with background on the study’s purpose, information on existing conditions, and requested to provide information on corridor concerns, issues, constraints and opportunities. This input will be considered by the TAC.

- **Small Group Meeting #2 – Review Draft Corridor Alternatives:** At a follow-up meeting in the study process, small group members will be presented with the proposed project’s Purpose and Need Statement, and preliminary corridor alternatives. We will ask for comments, which will be conveyed to the TAC.

In both instances, the MAPO staff will be responsible for scheduling the meetings and securing meeting space, distributing meeting notices, and serving as meeting moderators. The SRF Team will be responsible for preparing agendas and information packets, and providing meeting materials. The small group meetings will be held at a time that is mutually convenient for the group participants and the MAPO staff.

2.2 **Open House Public Involvement Meetings (PIM)**
SRF will organize, prepare for, and facilitate public involvement meetings, convened in an open-house format. These meetings will be used to present study information and seek public comment at key study milestones. As part of these meetings,
SRF prepares high quality presentation materials that clearly and simply articulate technical information to the general public.
SRF staff will respond to project specific questions and issues from attendees. In addition, we will present existing and future conditions data, technical analyses results, colored layouts, typical sections, and conceptual layouts, etc. SRF will provide sign-in sheets, and prepare and provide handouts describing specific project information. All written comments from the public will be collected and addressed by the TAC, and documented in the Study Report. We understand the MAPO staff will be responsible for securing meeting rooms, scheduling and advertising the meetings (“boxed-ads” in the Free Press), notifying the general public of the meetings, and serving as moderators.

SRF anticipates holding two open house public meetings (as prescribed) to address the following:

- **Public Involvement Meeting (PIM #1) – Consider Existing Conditions and Seek Input on Issues and Opportunities:** Our team will conduct an open-house style public meeting with a short presentation during the meeting. Graphics will be displayed documenting project issues, existing traffic volumes, future traffic projections and the project schedule. A sign-in sheet will be provided, as well as comment sheets that can be filled out and left at the meeting or mailed in. Citizen input on issues, constraints, and opportunities will be summarized and considered by the TAC before developing the study’s purpose and need, and conceptual alternatives. Interactive activities will be included as part of this meeting to engage the stakeholders that attend and solicit input/feedback. These activities may take the form of interactive polling/questionnaires, participatory games (roadway/streetscape puzzles), and/or voting exercises.

- **Public Input Meeting (PIM #2) – Present the Draft Corridor Study Report and Compile Input:** SRF will convene and conduct the second (and final) open-house public meeting to present the alternatives to the public and gather the opinions and concerns of all parties. Graphics will be displayed explaining the findings of the draft Report, including: project issues, purpose and need, future traffic projections, future traffic operations, alternatives considered, the locally preferred alternative for the corridor, and remaining project schedule. A sign-in sheet will be provided, as well as comment sheets that can be filled out and left at the meeting or mailed in. A summary of pertinent citizen comments will be prepared for consideration by the TAC prior to their final recommendation and documentation.

### 2.3 Summation of Public Participation

SRF will be responsible for responding to all comments received during the study process and will prepare a Summation of Public Participation Appendix, including copies of all the public notices, meeting minutes, sign in sheets and public comments received.

### 2.4 Communication Methods and Capabilities

SRF will design and produce a wide array of boards and handouts for public
meetings and presentations. Each product is developed to communicate important study information, issues, concerns, findings and recommendations in an easy-to-understand format.

As part of the public involvement process, SRF will use our extensive graphics, GIS and traffic simulation capabilities to present complex land use and transportation analyses and communicate potential alternatives in a manner understandable to both technical and citizen stakeholders. Products may include aerial photo overlays, charts, graphs, maps, and PowerPoint presentations.

2.5 Newsletters
Newsletters can be an effective tool to educate, inform, and solicit feedback. Four newsletters will be prepared by SRF, with the MAPO distributing the materials to recipients within approximately one-quarter mile of the Riverfront Drive corridor.

2.6 Project Website
SRF will be responsible for preparing materials and providing guidance to the MAPO staff for a project webpage on their website. The MAPO staff will post the updates — we currently anticipate five updates will be made throughout the project. Relevant project information will be posted to the website after TAC approval for public viewing. The updates are expected to coincide with the study’s key milestone dates, such as newsletter releases and public/agency involvement meetings.

2.7 Mechanisms to Achieve Public Involvement Plan Objectives
The SRF Team offers a stakeholder and public involvement approach that will surpass the MAPO’s expectations. Our approach provides many ways to inform/educate the public, obtain feedback from the key stakeholders and agencies, present information so it can be easily understood, utilize innovative techniques and visualizations, engage undeserved populations, and document outcomes with an innovative touch that is clearly identifiable.

The table on the following page documents how our overall public involvement program will meet the MAPO’s objectives.
Methods and Work Plan

MANKATO / NORTH MANKATO AREA PLANNING ORGANIZATION (MAPO)

RIVERFRONT DRIVE CORRIDOR STUDY

3.1 Data Collection

Our team will collect available data from the City of Mankato, MnDOT and the MAPO. The data will be used to develop a base map depicting all the existing conditions, and will be used to begin the preliminary design layouts. As a minimum the following will be collected:

- Digital base maps and parcel data
- Digital aerial color photos
- Zoning, land use, comprehensive and growth plans
- Most current AADT data
- Crash data for the most recent three-year period for which data is available
- Mankato Complete Streets Plan
- Transit route data
- Traffic signal timing data
- Roadway construction history
- Floodplain elevations and contour maps
- Parking utilization
- Right of way, typical section data
- Utilities, lighting information

SRF is already familiar with much of the study area background data based on our recent work in the area. This will allow us efficiently develop a base map for this study area.
3.1.1 Peak Hour Traffic Count Data
As shown on the Issues Maps, there are eighteen key intersections in the study area that will need to be investigated. The study area has a mix of signalized and non-signalized intersections. Peak hour counts will be conducted at the key intersections, where current data is not available, from 6:30 a.m. to 8:30 a.m. and from 4:30 p.m. to 6:30 p.m., during the traditional morning and evening rush hours. The counts will be conducted during the mid-week (Tuesday, Wednesday, and Thursday) when schools are in session. Locations that are highly dependent on school activity will be counted during the afternoon school dismissal time periods as well (e.g., West High School on the south end of the corridor – Riverfront Drive/Stolzman Road and Riverfront Drive and Poplar Street).

Due to the timing of this study, spring counts should be possible prior to school being dismissed for the summer. We will closely monitor school activities and determine whether or not it is appropriate to conduct the counts. If they cannot be counted this spring, counts will continue next fall once schools are back in session. This might slightly alter our proposed schedule but will not affect our project completion date. Pedestrian/bicycle counts will also be conducted during the same time period.

3.2 Evaluate and Document Existing & Future Conditions
SRF will develop a series of display graphics and base maps that can be used at the second TAC, first set of Small Group Meetings, and used for displays at the first Public Input Meeting. At a minimum, the displays will show the existing functional class of Riverfront Drive and the adjacent roadway system; existing and forecast traffic volumes; geometrics; roadway, signalized and major unsignalized intersection LOS; access inventory; bicycle and pedestrian accommodations; crash data; existing right-of–way limits; and major utilities.

3.2.1 Existing Access Control Inventory
SRF will inventory the existing access conditions along the corridor and on all cross streets (within 150 feet of the intersection) and compare this spacing to the preferred city/MnDOT, MAPO access guidelines. We will record the type of access (e.g., full, three-quarters, restricted, etc.), location, size, and land use that is served.
This process will include documenting the number of conflict points associated with each access, the type (residential, commercial, etc.) of such non-compliant access, the level of difficulty in modifying such access, and safety issues. This data will be used to develop access management alternatives for the corridor.

3.2.2 Crash Analysis
Corridor safety will be evaluated by a review of the number and severity of crashes occurring at the all the major intersections and roadway segments. The average and critical crash rate will be calculated and compared to rates for similar urban intersections. Locations with higher than expected rates will be reviewed to determine if there are any physical or design issues that may be leading to the higher rates. For locations that include a pedestrian or bicycle crash, a detailed review of the incident will be conducted to determine if there are design improvements that should be considered.
3.2.3 Pedestrian and Bicycle Review

In addition to the TAC, Small Group and Public Meetings, the SRF Team will meet with MAPO and City officials to review existing pedestrian and bicycle issues. We will identify the locations of the highest pedestrian and bicycle activity and where connections/gaps could be improved along the corridor and in the immediate vicinity.

The City of Mankato and MAPO have documented the extensive local and regional trail networks in the area. The SRF Team will review mapping of existing and planned, City and County trails within and adjacent to the corridor study area (i.e., Minnesota River Trail, Red Jacket Trail, etc.). We will identify gaps in the existing trail system and evaluate the system to see how well it provides non-motorized transportation modes that are convenient and safe relative to the Riverfront Drive corridor. Issues that will be considered when identifying gaps will include pedestrian and bicycle destinations, such as local retail areas, existing community and regional parks (i.e., Tourtelotte Park, Riverfront Park, Sibley Park, etc.), schools, and adjacent regional trail networks. Analysis of existing and proposed traffic volumes will also play into the definition of gaps. The SRF Team will develop a base map that depicts existing and planned trails and describes the opportunities and constraints along the corridor.

The SRF Team will continue to refine the base map, conduct additional research, and review existing plans and guidelines that are pertinent to understanding the feasibility of a Complete Streets project along Riverfront Drive. National, state, and local standards will be reviewed to identify an array of “rules” and “tools” to support the development of the alternatives. These rules and tools may include minimum lane widths, intersection improvement strategies, character and streetscape guidelines, and national best practices.

3.2.4 Existing Traffic Operations Analysis

A modeling analysis will be conducted using the Synchro/SimTraffic software for the corridor. This modeling analysis will assist in the determination of roadway capacity needs and issues (lane assignments, traffic control opportunities, multimodal conditions, etc.). This analysis will be conducted during the highest peak hours. Since there are unsignalized intersections in the study area, additional analysis may be required using Highway Capacity Manual methods to determine the operational characteristics of the overall corridor.
3.2.5 Future Traffic Forecasts
The MAPO 2045 Long Range Transportation Plan (LRTP) provides the basis for future traffic projection on all functionally classed roadways in the metro area. These projections will be used as the starting point for the future traffic operational analysis. For this study, we will work with the MAPO and City of Mankato to develop an augmented historic growth rate for the Riverfront Drive corridor based on development of future land use projections using existing plans, including the City Center Renaissance Family of Plans, City Land Use Plan, and the Old Town Master Plan. It is understood that the Old Town Master Plan is currently underway by the City of Mankato and will run concurrently with this corridor study planning process. The growth rate will be applied to the existing AADT and turning movement data to develop an augmented set of future forecast traffic volumes to be used for this analysis. We will compare the resultant growth rate to the MAPO current transportation plan forecast and provide a technical memo for review by the stakeholders. It will be important to receive concurrence from the stakeholders prior to moving forward to the next steps.

3.2.6 Forecast Traffic Operations Analysis
The Synchro/SimTraffic model will be rerun using the forecast traffic volumes. This analysis will identify future intersection and/or roadway segment capacity issues that should be considered during the development of alternatives. This will help set the stage for consideration of potential roadway realignments (i.e., possibly realigning the intersection at Riverfront Drive/Madison Avenue/3rd Avenue) and impacts on regional and county roadway systems that connect into Riverfront Drive and to connecting and parallel local streets.

3.2.7 Issues Identification/Needs Assessment
SRF will develop a Technical Memorandum with associated graphics depicting the data collected and analyzed. The memorandum will provide a list of issues that have been identified based on the traffic operations analysis at existing key intersections, crash analysis, existing access control inventory, peak hour turning movement’s capacities, and pedestrian/bicycle review. This information will be presented to the TAC and at the first set of Small Group and Public Input Meetings. SRF will work with the TAC to finalize the list of issues based on input received from the TAC and the public prior to the development of alternatives.
TASK 4.0 - PROJECT PURPOSE AND NEED

Preparing a Purpose and Need Statement (PNS) is an essential step to defining the project and providing guidance for further analysis. Defining the scope and depth of the issues and the reasons for a project provides a focus to guide stakeholders, officials, and the public in sorting out various alternatives and helping select a locally preferred alternative for detailed analysis in future environmental documentation.

SRF has been very successful documenting purpose and need in a manner that satisfies FHWA and MnDOT requirements. As a result of our extensive experience and professional relationships with agency staff, we understand what reviewers expect and can prepare this critical document in a manner acceptable to them.

4.1 Purpose and Need Statement

SRF will prepare a compelling and clearly articulated draft Purpose and Need Statement (PNS), supported by sound analysis for review/comment early in the study process. The Purpose and Need Statement will take into consideration the information gathered by the Issue Identification/Need Assessment process and build on federal purpose and need guidelines, including:

- Project history/status
- System linkage
- System deficiencies
- Capacity needs
- Transportation, social and economic demands
- Modal interrelationships
- Safety

It will be extremely important to build local consensus amongst the various stakeholder groups, business land-owners, intermodal interests, each of which will likely view the project from a different perspective. The draft Purpose and Need Statement will be reviewed and discussed by the TAC and revised based on feedback.

With feedback from the public and key interested groups, SRF will present the revised draft Purpose and Need Statement to the TAC for consideration and approval.

Preparing a Purpose and Need Statement (PNS) is an essential step to defining the project and providing guidance for further analysis.

4.2 Purpose and Need Technical Memorandum

SRF will prepare a Technical Memorandum that documents the Purpose and Need Statement by referencing all key needs and data sets. This Purpose and Need information will ultimately be utilized in future environmental documentation for Riverfront Drive improvements.
5.1 Alternative Development

As described earlier, the Riverfront Drive corridor has four distinct segments with contextual settings, each with unique and sometimes interrelated issues. Furthermore, our Team understands that land use and transportation are critically linked and form the framework of the built environment. The relationship between building form, land use, streetscape, and mobility defines the quality of a place. The land use and transportation context changes as you travel along the corridor.

Our experience has taught us that walkable places are healthy places. This comes in the form of social capital, quality of life, and economic development. In short, we believe that walkable streets are critical to the overall sense of place in a community, and we follow that belief in all facets of our planning process. SRF will develop up to two multimodal alternatives for each segment of the corridor to ensure the respective context is taken into account, while guaranteeing continuity and cohesion are achieved.

The alternatives will strive to meet, to the greatest extent possible, the MnDOT and MAPO access management guidelines, apply complete street principles, and calm traffic as much as practical. We will identify alternative roadway reconfiguration scenarios that not only provide more intuitive continuity within the corridor, but also balance the needs of active transportation users, creating a more sustainable environment for economic development. The multimodal corridor alternatives will include the following:

- Roadway and intersection capacity improvements based on the forecast traffic volumes
- Roadway/pedestrian/bicycle accessibility and continuity improvements
- Improved geometrics (roadway and intersections)
- Intersection control strategies/coordination plans
- Access management plan
- Pedestrian and bicycle safety and continuity improvements (all pedestrian improvement will meet all ADA/PROWAG requirements)
- Feasibility of construction within existing right-of-way and right-of-way needed for all alternatives considered
- Traffic operations assessment
- Landscape/streetscape/lighting improvements
Today’s planners and engineers have the opportunity to develop concepts that are basically “preliminary designs” that quickly provide “what if” scenarios that integrate multiple disciplines into a 3D environment, and that combine with traditional drafting, GIS, and other methods. SRF has these capabilities and proposes to use a Mankato subset Smart City model in conjunction with the data-driven BIM design tool Infraworks. Infraworks integrates with GIS and Microstation, as well as Sketchup, aerial imagery, and other roadway and drainage tool-sets (if available).

The graphic presented below demonstrates how we can rapidly create geo spatially correct design iterations using the cross sections and profiles being developed for the Riverfront Drive corridor. In a matter of days, a number of city blocks can be modeled in the context of the corridor with related utilities (if available), and ready for plan sheet development or further planning-level review.

This typical street section for 8th Street in the City of Minneapolis was built to scale in local coordinate system using Infraworks data-driven 3D style templates.

As a Minor Arterial, Riverfront Drive is a vital route for the City of Mankato; it serves as a gateway and key throughway in downtown. Land use along the corridor changes across the four segments. There is an opportunity to heighten the entry points of the corridor and identity or mark commercial nodes along the corridor by highlighting gateway treatments where appropriate. The gateways may incorporate such features as monuments, ornamental plantings, lighting, and special paving. The roadway landscaping should be reflective of and responsive to the rich, natural resources of the area. The landscape should provide an aesthetically pleasing, comfortable, and safe environment for pedestrians, bicyclists, and drivers. The landscape/streetscape design should create a unified feel to the corridor, yet still be responsive to the adjacent land uses.
SRF’s urban design/landscape architecture staff will review the existing and future corridor needs and constraints in order to develop two landscaping and streetscaping alternatives to accompany the multimodal concept alternatives, which will present potential enhancements to the corridor aesthetics.

5.2 Alternative Analysis

The corridor alternatives developed will be analyzed to determine if they require modification as a result of forecast traffic volumes, traffic operations, traffic patterns, access management improvements, or cost. More specifically, extra effort will be made to strike more of a balance between all transportation modes, while enabling economic revitalization of the corridor through better connectivity and walkability. The inclusion of adequate pedestrian and bicycle facilities in the study area such as safe sidewalks, curb ramps, high visibility crosswalks, pedestrian signals and phasing, bike lanes or routes, and good street lighting will be reviewed and necessary improvements recommended for incorporation into the corridor alternatives - especially focused in the City Center area and at intersections considered in the Safe Routes to School Plan for Independent School District #77.

5.2.1 Traffic Operations Analysis

The purpose of this analysis is to evaluate corridor operations for the future forecasts (25 years) and to develop specific intersection geometrics to be incorporated into the corridor alternatives. Intersection operations will be evaluated using Synchro/SimTraffic to determine the Level of Service (LOS) at key intersections for each alternative. This model will be a useful tool to illustrate the changes in corridor operations between existing conditions and the proposed alternatives.

5.2.2 Access Management Analysis

This analysis will examine changes that need to be made to existing intersections and driveways along and adjacent to the corridor. We will consider anticipated trip diversions resulting from proposed access modifications. SRF will qualitatively assess the level of impacts and circuitousness of future routes due to turning movement restrictions/deletions (i.e., no impact, slight impact, or significant impact), and review on-site options to mitigate these impacts.
5.2.3 Planning Level Cost Estimates
SRF will provide a preliminary planning level-cost estimate for each alternative using generalized cost per mile data for similar improvements (including contingencies for drainage, landscaping, lighting, traffic control, etc.). Estimated right of way costs will also be determined using a generalized cost per acre.

TASK 6.0 – EARLY AGENCY COORDINATION
Upon completion of the alternative development phase of the study, SRF will contact key local, state, and federal review and resource agencies, in accordance with State protocol. The responses will be shared with the TAC and alternatives will be revised if necessary. Furthermore, the input will be utilized during the evaluation and analysis of impacts in Task 7.

6.1 Early Coordination Letter
SRF will prepare Early Coordination Letters for various local, state and federal review and resource agencies. At a minimum the agencies with interest, information or regulatory authority will be consulted on the following:

- Natural resources (land use, tree, wetlands, wildlife habitat, water quality, soils)
- Environmental justice and disruption of neighborhoods
- Displacement or disruption of structures, business, dwelling
- Historical or archeological impacts
- Parkland (6f and 4f) impacts

The coordination letters will provide a brief summary of the draft PNS, conceptual alternatives, and direct agency staff to the project website or to staff, if they desire more information. The list of contacts and responses will be reviewed by the TAC, and will be included in the Final Report as documentation of study partners’ early efforts to identify potential environmental, social, economic issues that will need to be addressed in the future project implementation phases.

TASK 7.0 – IMPACT EVALUATION
Our efforts under this task will assist the TAC to accomplish four objectives: preparation of evaluation criteria, an assessment of impacts for each alternative, a ranking of alternatives for the corridor, and presentation of the ranking’s rationale in an evaluation matrix. These activities will assist the TAC in the selection of a Locally Preferred Alternative during Task 8.

7.1 Evaluation Criteria
SRF will work with the TAC to establish pertinent evaluation criteria that relate to key transportation performance, environmental, Purpose and Need, and established locational determining factors. Possible criteria (and sources of data/information, if not directly generated by corridor analysis) may include:
Transportation Performance Measures:

- MAPO system goals/objectives (MAPO 2045 LRTP)
- Traffic operations (delays, LOS)
- Safety
- Access and local circulation
- Preliminary cost
- Right of way
- Parking loss/replacement
- Bicycle/pedestrian accommodations

Environmental Measures (based on responses to Early Coordination Letters):

- Wetlands (Section 404, DNR Public Waters and Wetland Conservation Act)
- Floodplains (FEMA)
- Cultural resources (historic, archeological)
- Public and agency input
- Parks (4f, 6f)
- Environmental Justice (MAPO 2045 LRTP—minority/ low income concentrations, Mankato Community Development Department)
- Environmental constraints, impacts or enhancement opportunities
- Endangered/threatened species
- Disbursement, relocations, disruptions

Purpose and Need Measures:

- To be determined during study

In the process of the planning-level evaluation, SRF will also highlight issues that will require additional analysis in future implementation phases.

7.2 Impact Assessment

SRF will assess important natural resource, economic and social impacts associated with the corridor alternatives using criteria selected by the TAC. In all cases, our measurement of impacts will be quantified to the extent appropriate at a screening level.

7.3 Impact Evaluation Matrix

SRF will compile the impact assessment results utilizing our innovative evaluation methodology. The results of the evaluation process will be presented in a matrix format. SRF’s evaluation system documents the impact assessment criteria, tests and ranks the relative merits of each alignment alternative, compares alternatives to each other and the no-build option and documents the rationale for the locally preferred alternative decision. The evaluation process, the evaluation matrix, and the draft ranking of alternatives will be presented to the TAC for comment and refinement.
The evaluation matrix will be organized in a manner such that stakeholders will be able to easily discern the relationship between performance goals, the federal purpose and need factors and the measurable criteria used to evaluate the alternatives. Also, by employing the FHWA transportation purpose and need factors during the evaluation process, those alternatives rejected will not have to be reevaluated again during future environmental documentation (if any), which will save time and money.

Our measurement of impacts will involve a grading by magnitude of impact. For some evaluation criteria, quantifiable data will be available and included in the TAC’s draft matrix, so that they can view specific results from the technical analyses. After TAC discussion, the specific data will be generalized into a “good, fair or poor” format or a similar scale for public review. While each of the alternatives will have different trade-offs with respect to the evaluation criteria, the matrix format will help stakeholders review the analyses and provide meaningful comments. If, due to the complexity of the project, the matrix becomes too large or alternative impact trade-offs are unclear for the TAC, SRF will prepare a Critical Characteristics Chart summarizing the most important alternative ratings by transportation, social, environmental and cost categories. Similarly, for the public review, SRF will further summarize findings by an Advantage/Disadvantage Chart which through color coding and format will help the public quickly understand the relative benefits/constraints of each alternative.

The presentation of this analysis into simplified graphics will allow citizens to quickly digest the relative merits of each alternative, so that they can offer constructive comments, and cite their preferences orally.

**TASK 8.0 – LOCALLY PREFERRED ALTERNATIVE SELECTION**

Assuming no significant modifications are requested, SRF will use the data assembled and the evaluation matrix to recommend the locally preferred alternatives by contextual segment. If necessary SRF will also assist the TAC reach a consensus on the locally preferred alternative that should advance. If on the other hand, the selected alternative is a combination of preliminary alternatives, SRF will revise layouts and the evaluation matrix to reflect TAC modifications, as desired.

**8.1 Project Cost Refinement and Financial Plan**

SRF will prepare revised or more refined cost estimates for the locally preferred alternatives and a financial plan. Additionally, the SRF Team will prepare conceptual renderings (typical section of streetscaping features at up to four locations), including preliminary cost estimates for the preferred alternative.
TASK 9.0 – PROJECT IMPLEMENTATION

SRF staff has an excellent understanding of the various funding resources available, and has a proven track record in assembling financial packages and securing the funds needed to construct large complex transportation projects. SRF, working with the TAC, will prepare a financing plan for the Riverfront Drive corridor.

9.1 Preliminary Implementation Schedule and Financing Strategies

Upon selection of the Locally Preferred Alternative, the SRF Team in concert with the TAC, will prepare a prioritized schedule of needed improvements and their cost, both short and long term. SRF will then prepare a customized funding strategy for each corridor. These strategies will include:

- A list of potential funding sources and an assessment of each funding source’s applicability and probability.
- A recommended corridor funding package which documents the participation rates anticipated by participating jurisdictions, if any.
- An action plan describing specific activities that should be taken and when to advance each project.

TASK 10.0 - STUDY REPORT PREPARATION

The draft and final reports will document the study process, analysis, findings, recommendations, and public involvement efforts. Specific elements that will be incorporated into the draft and final reports include:

- An executive summary (can be used as a stand-alone document, if necessary)
- Public Involvement Plan
- Existing Conditions/Needs Assessment
- Purpose and Need Statement
- Alternative Development Analysis
- Early Agency Coordination Processes
- Impact Evaluation
- Locally Preferred Alternative Selection
- Project Implementation

SRF will distribute the draft report electronically and seek TAC comments. We will then revise the draft, as needed based on feedback, and provide 10 hardbound copies and one electronic copy of the final report to the MAPO for distribution. We will also provide 10 hardbound copies of the executive summary and one electronic copy of all study material. Our team will work with the MAPO to post the electronic version of the document to the project website.
# Schedule & Critical Path Timeline

**Tasks**

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**Public Involvement Program**

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**Deliverables**

- **TM1** - Issues Identification/Needs Assessment Technical Memorandum
- **TM2** - Purpose and Need Technical Memorandum
- **TM3** - Alternative Development and Analysis Technical Memorandum
- **TM4** - Impact Evaluation Technical Memorandum
- Draft Study Report Document
- Final Study Report Document
A Proposal for the
Riverfront Drive Corridor Study
for the Mankato/North Mankato Area Planning Organization (MAPO)
March 1, 2016
Project Approach

Task 1.0  Project Management

Task 1.1 Weekly Updates
Weekly telephone updates with MAPO staff, miscellaneous communications with other staff and required entities, billing preparation, invoicing, progress reports and other non-technical work will occur.

Task 1.2 QA/QC
Quality assurance/quality control checks on study analysis and deliverables will be performed by Tony, the Project Manager.

Task 1.0 Deliverables
Weekly telephone updates with MAPO staff and other miscellaneous communication, project management administration and quality assurance/quality control.

Task 1.0 Optional Deliverable
A project kick-off meeting could be held to confirm project scope, schedule, issues, preferred communication methods and other project logistics.

Task 2.0 Public Involvement Plan

Tasks 2.1 and 2.2 MAPO Technical Advisory Committee (TAC) Meetings and City of Mankato Staff Meetings
WSB staff will prepare for and personally attend three staff level meetings with both the MAPO TAC and City of Mankato staff.

Tasks 2.3 and 2.4 City Council Meetings and MAPO Policy Board Meetings
WSB staff will prepare for and attend two meetings for both the Mankato City Council and MAPO Policy Board. These meetings will be strategically scheduled at the midpoint of the study process to provide an update on analysis and public input, and at the end of the study process to summarize study analysis, public input and final recommendations.

Task 2.5 Public Meetings
WSB staff will prepare for and attend two open house style meetings during the study process. The first meeting will be held at the beginning of the process to gather opinions and collect input from the public on general or specific corridor issues. The second meeting will be held to present design alternatives and to solicit opinions and input on these alternatives. These meetings will include poster boards illustrating key analysis, maps, tables and other exhibits, as well as a summary PowerPoint that can be presented and made available to the public.

Task 2.0 Optional Tasks
The WSB team could conduct a third public open-house style meeting to present final study recommendations and the preferred design layout along the corridor.

As an optional task, WSB is prepared to offer a fourth MAPO TAC meeting and fourth City of Mankato staff meeting. This fourth meeting could be used to discuss, in-person, the draft Study report and any final revisions.
Task 2.6 Monthly Technical Memos Updates to MPO TAC and Policy Board

Our team will prepare 11 memo-style project updates for the MAPO TAC and MAPO Policy Board to summarize the overall study status and analysis and upcoming key meetings and milestones in the process. These memos will also serve as an opportunity to reach out and collect guidance from the MAPO throughout the process.

Task 2.7 Website, Facebook and Online Surveys

WSB staff will prepare materials for posting and regular updates on the MAPO and City websites and Facebook pages. Additionally, two online surveys will be prepared and conducted by WSB in conjunction with the scheduled open houses under Task 2.5. The first survey will gather input on corridor needs and priorities and the second survey will gather input on the proposed design alternatives.

Task 2.8 Traditionally Underserved Population Outreach

The WSB team will reach out to low income, minority and other traditionally underserved populations during the study process. This will include a variety of outreach efforts ranging from gathering input and providing study information at transit stations, bus shelters, the library, social service offices, places of worship, grocery stores or other community gathering locations. As part of Task 3.0 Data Collection and Base Mapping, We will document the locations of these underserved populations through an Environmental Justice census and mapping analysis.

Task 2.0 Optional Task

As an optional task, the WSB team could conduct the following focus group meetings:

- Joint focus group meeting with neighborhood associations (Tourtellotte Park, Lincoln Park and Washington Park)
- Joint focus group meeting with Mankato Area Schools (Mankato West High School and Roosevelt and Franklin Elementary Schools)
- Joint focus group meeting with freight providers (CHS Oilseed Processing, ADM Soybean Processing, Ardent Mills Flour Mill, etc.)

Appendix B outlines an example of a similar corridor study which our team coordinated with MnDOT and the county to communicate and solicit input from the public.

Task 2.0 Deliverables

Three MAPO TAC meetings, three City of Mankato staff meetings, two MAPO Policy Board meetings, two Mankato City Council meetings, two open house meetings, 12 MPO TAC/Policy Board study memo updates, website and Facebook content, two online surveys and traditionally underserved population outreach.

Task 2.0 Optional Deliverables

Three focus group meetings, a fourth MAPO TAC and City of Mankato meeting and a third open house style meeting.
Task 3.0 Data Collection & Base Mapping

Task 3.1 Review ICE Reports

Review existing ICE reports, modeling and source data for Riverfront/Hwy 14, Riverfront/Hwys 169 and 60, Stolzman/Riverfront and Poplar/Riverfront. It is understood that traffic simulation models and associated background data and analysis from these ICE studies will be made available to the selected consultant.

Task 3.2 Collect Intersection Counts

This task will include manual counts at all signalized intersections that do not have up-to-date existing count information (up to ten intersections). The task will also include am and pm peaks and truck counts.

Note: Due to the recent neighborhood concerns related to truck traffic along May Street and Thompson Ravine Road, the May Street/Riverside Drive intersection could potentially be targeted as one of the intersections to conduct manual counts as well as truck traffic counts.

Task 3.3 Review Local Comprehensive, Transportation and Land Use Plans and Other Studies

As part of this task, WSB will review the MAPO 2045 Transportation Plan, City of Mankato Comprehensive Plan, Old Town Master Plan (currently in process), City Center Renaissance Plans, Blue Earth County plans, MnDOT plans, Capital Improvement Programs (CIPs), City Center Renaissance Plan.
Transportation Improvement Programs (TIPs), State Transportation Improvement Programs (STIPs) and other relevant information related to transportation and land use, population projections, planned or programmed transportation improvements, etc.

**Task 3.4 Review Demographic Data**

This will include historic, existing and projected data for population, households and employment.

**Task 3.5 Collect Social and Environmental Data**

WSB will coordinate with SHPO, DNR and OES to identify any environmental concerns within the corridor. Utilize PCA website to identify potentially contaminated sites. Conduct an Environmental Justice Analysis of low income and minority population concentrations in the vicinity of the corridor.

**Task 3.6 Map Social and Environmental Data**

Our team will map existing GIS data at the state, regional and local levels to reflect social and environmental concerns to avoid in the corridor.

**Task 3.7 Crash Analysis**

For segments and intersections not recently analyzed as part of an ICE Study, WSB will use the MnDOT CMAT system to obtain 2013-2015 crash data. WSB will analyze the crash data to develop segment and intersection crash and severity rates, identify areas above district and statewide averages, highlight types of crashes, etc. (up to ten intersections assumed).

It is understood that MAPO staff will assist the chosen consultant in identifying and gathering the data and documents listed below, per the RFP:

- Adopted community plans and studies, land use information, zoning studies/plans and regulations
- Adopted Long Range Transportation Plans and associated data
- ICE reports
- Traffic counts, accident data, HPMS data, signal warrants, aerial photos, major street network classifications, sign inventories, traffic signal data, GIS/CADD property and ROW maps, funding data, etc.

- Limited and dated data including: signalized and unsignalized intersection capacity analysis (LOS), travel speeds, turning movements, roadway widths, right of way widths, number of lanes, sidewalk inventories, ADA ramp locations, transit ridership, transit maps and route information
- U.S. Bureau of Census data
- City building permits, County permits, utility records, etc.
- Socioeconomic data and projections compiled by the MAPO staff and the Minnesota Department of Employment and Economic Development (DEED)
- GIS data layers, as available from the City, County and State

**Task 3.0 Deliverables** Review of existing studies and plans, map of social/environmental data, crash analysis and map of crash data.
**Task 4.0 Existing Conditions Analysis**

**Task 4.1 Existing Roadway Characteristics Memo**

A memo will be prepared summarizing existing roadway design elements and characteristics including roadway project history, functional classification, existing geometry, existing typical sections, existing pavement conditions and land use.

**Task 4.2 Existing Traffic Characteristics Memo**

Our team will create a memo summarizing existing traffic data and conditions including operations and safety.

**Task 4.3 Existing Social and Environmental Characteristics Memo**

WSB staff will prepare a memo summarizing existing social and environmental characteristics.

**Task 4.0 Deliverables**

Existing conditions characteristics memo, existing traffic conditions memo and existing social and environmental characteristics memo.

**Task 4.0 Deliverables**

Existing conditions characteristics memo, existing traffic conditions memo and existing social and environmental characteristics memo.

**Task 5.0 Forecasted Conditions Analysis**

**Task 5.1 Land Use Analysis Technical Memo**

A memo will be prepared that summarizes analysis and assumptions used to develop future land use projections for the corridor based on existing plans, including the City Center Renaissance Family of Plans, the City Land Use Plan, and the Old Town Master Plan.

**Task 5.2 Traffic Forecasts Technical Memo**

WSB will prepare a memo summarizing existing traffic and 2045 forecasted traffic along the corridor. Resources to be used in developing these forecasts include existing traffic counts, as well as 2020, 2030 and 2045 travel demand forecasts from the MAPO 2045 Transportation Plan and forecasted corridor land use developed in Task 5.1. A comparison of 2045 forecasts to existing corridor segment existing lane capacities will be made and Level of Service (LOS) grades will be assigned for the 2045 forecast year.

**Task 5.3 Traffic Operations Technical Memo**

A memo will be prepared that summarizes existing and 2045 forecasted intersection operations and crash conditions. Traffic operations analysis will be performed at all key intersections, except those recently studied as part of an ICE study. Existing and forecasted 2045 intersection LOS grades will be measured, and impacts on parallel roadways will also be evaluated.

**Task 5.0 Deliverables**

Technical memorandums for land use analysis, traffic forecasts, and traffic operations analysis.

**Task 5.0 Optional Deliverable**

An origin-destination trip analysis could also be performed to obtain a better understanding of alternative trip routes within the Riverfront Drive travel shed and where people are coming from and going to. This analysis will be helpful in analyzing impacts to Riverfront Drive’s parallel routes and developing Riverfront Drive travel demand forecasts.
Task 6.0 Purpose & Need Statement

Task 6.1 Purpose and Need/Issues Technical Memo

The traffic operations and traffic forecasts technical memorandums will be used to identify forecasted 2045 intersection and corridor segment capacity and operational deficiencies. These memorandums will be the basis for development of a technically sound transportation purpose and need statement for the project.

Task 6.0 Deliverable
Purpose and need statement.

Task 7.0 Alternatives Development, Evaluation & Screening

Task 7.1 Alternatives Development and Evaluation

The conceptual alternatives development and evaluation will focus on developing and evaluating four to six typical cross section design alternatives and intersection design/intersection control alternatives within each of the following four corridor settings described in the RFP:

- Highway 14 to Madison Avenue
- Madison Avenue to Veterans Memorial Bridge (Old Town)
- Veterans Memorial Bridge to Sibley Parkway (Downtown)
- Sibley Parkway to Woodland Avenue

The purpose of the concept alternatives development and evaluation process will be to identify a typical design cross-section design and specific intersection designs/intersection controls that best address 2045 intersection operation needs for each specific intersection and corridor segment. Other factors such as multimodal needs, parking needs, streetscaping needs, etc. will also be developed and evaluated as part of the typical design cross-section alternatives. This design concept analysis will be customized for each intersection and segment along the corridor, but will also consider overall corridor issues and logical locations where design transitions should occur.

An evaluation matrix will be prepared that will consider overarching corridor goals such as reducing speed and accommodating trucks, the matrix will also consider specific goals related to on-street parking or other issues that may be unique or important to a specific corridor segment or intersection. Design concepts will be specifically evaluated for each corridor segment based on their relative ability to address a variety of criteria such as:

- Overall corridor purpose and need
- 2045 intersection operations needs
- 2045 corridor traffic forecasts
- Access management needs
- Speed reduction needs
- Bicycle, pedestrian and transit needs
- Streetscaping needs
- On-street parking needs
- Right of way impacts
- Social, economic and environmental impacts
- Planning level cost estimates

A technical memorandum will be prepared to summarize alternatives developed and evaluated, criteria used in the screening process and preferred design recommendations made.
**Task 7.2 Multimodal and Streetscaping Analysis**

Multimodal and streetscaping needs will be evaluated along the corridor as a whole and within each of the four corridor segments. This analysis will include evaluation of existing multimodal and streetscaping conditions and associated future needs. Specific items that will be evaluated include traffic calming/speed reduction treatments, bicycle facilities, enhanced sidewalks and pedestrian crossing facilities, Safe Routes to School concerns, transit facilities, on-street parking and streetscaping opportunities.

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The City’s Urban Design Guidelines will be referred to ensure that proposed multimodal and streetscaping improvements identified in the typical cross-sections and intersection designs fit into the City’s overall vision for Old Town, Downtown and other commercial districts along the corridor. This analysis will help to inform the development of typical cross section alternatives and intersection design/intersection control alternatives considered under Task 7.1.

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**Task 7.0 Deliverables**

Four to six typical section alternatives for each corridor segment, intersection design concepts and intersection control alternatives for each intersection, multimodal and streetscaping needs analysis and recommendations, an alternatives evaluation matrix, and preferred typical design cross-sections and intersection design concepts for the various corridor segments and intersections. The deliverable will also include a technical memorandum summarizing the concept alternatives development, evaluation and screening process.
Task 8.0 Preferred Preliminary Design Layout

Task 8.1 Preferred Preliminary Design Layout

Based upon the preferred typical cross-sections and intersection designs arrived at during the Alternatives Development and Evaluation in Tasks 7.1 and 7.2, a preferred preliminary design layout will be developed for each of the four corridor segments and each corridor intersection. This will include a preliminary design layout for a potential realignment of the Madison Avenue and 3rd Avenue intersection. The preferred preliminary design layout will be developed at a reasonable level of detail including but not limited to; number and width of lanes; vertical and horizontal alignments to determine right of way widths and slope easements; intersection configuration including turn lanes and traffic control, drainage, major water, sewer and utility relocations; bicycle, pedestrian and transit (if applicable) facilities. This task will include a project description and up to two revisions.

Task 8.0 Deliverables

Preferred preliminary design layout for the entire corridor and associated cost estimate and project description, three rendered enlargement plan sheet drawings at various locations along the corridor, and an evaluation matrix and technical memorandum.

Task 8.0 Optional Deliverable

Three rendered enlargement plan sheet drawings will be prepared at strategic locations along the corridor to reflect the typical cross-sections associated with the preferred preliminary design layout. Rendered drawings will illustrate roadway lanes, on-street parking, bicycle/pedestrian, transit, landscaping, lighting, and other features.

The WSB landscape architecture team of Robert Slipka and Samantha McKinney will lead development of these renderings. Robert is a licensed landscape architect in the State of Minnesota and Samantha has extensive landscape architecture experience producing rendered drawings of preliminary design layouts. WSB has found that renderings of preliminary design cross-sections can be particularly helpful in communicating to elected officials and the general public design details that can sometimes be confusing or difficult to interpret in normal engineer-style preliminary design layouts. Robert and Samantha can create these renderings in a way that allow the viewer to better feel and understand the experience of a driver, pedestrian and bicyclist for the recommended design. An example of Robert and Samantha’s rendering work on a similar urban type corridor can be found in Appendix C.
**Task 9.0 Implementation Plan & Cost Estimates**

**Task 9.1 Implementation Plan and Cost Estimates**

A technical memorandum will be prepared summarizing an implementation plan for the preferred preliminary design layout. Construction and right of way costs will be summarized and packaged into project phases, including potential federal, state and local funding sources and short and long range elements.

**Task 9.0 Deliverables**

Implementation plan and cost estimates.

**Task 10.0 Report Preparation**

**Task 10.1 Draft/Final Corridor Study Report**

A draft and final Corridor Study Report will be prepared. The City, MAPO, Blue Earth County and MnDOT management will have an opportunity to review the draft report. One round of edits on the draft report are assumed. All technical memorandum text, maps, tables, exhibits, and relevant appendices will be assembled into a final report format, along with public input, study recommendations and next steps. We will provide a hard copy of the report, along with electronic versions in both Adobe PDF and Microsoft Word.

**Task 10.1 Deliverables**

Draft and final Corridor Study Report.
AGENDA RECOMMENDATION

Agenda Heading: Belgrade Avenue Corridor Study Proposal Recommendation
No: 4.2

Agenda Item: Belgrade Avenue Corridor Study Proposal Recommendation

Recommendation Action(s): Motion to recommend to the MAPO Policy Board that the
MAPO accept the Bolton & Menk Belgrade Avenue Corridor Study Proposal.

Summary: The MAPO received 4 proposals relating to Belgrade Avenue Corridor Study
RFP that was released on March 1st and closed on April 1st. On April 15th MAPO staff
(Jake Huebsch) along Michael Fischer (City of North Mankato Community
Development), Seth Greenwood (Nicollet County Engineer), Sam Parker (Region 9
Development Commission) and Brad Swanson (City of North Mankato Public Works)
reviewed and ranked the study proposals.

Members based their scoring on the criteria outlined in the RFP which included:

Specialized expertise, capabilities and technical competence, as demonstrated by the Responder’s expressed project understanding, proposed project approach and methodology, project work plan, and project management techniques. 25%

Project background and experience, as demonstrated by the Responder’s ability, familiarity and experience with handling similar projects, and the qualifications and related experience of key staff members. 25%

The Responder’s record of past performance, including quality of work, ability to control costs, and ability to meet schedules. 25%

The availability of personnel and other specialized resources to perform the work within the specified time limit. 10%

Total price compared to other proposals. 15%

On the following page, the cost and hours associated with the received proposals as well as the total and average scores based on the review and ranking process.

At the April 21st MAPO TAC meeting, the TAC members recommend that the MAPO
Policy Board accept the Bolton & Menk Belgrade Avenue proposal.
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**Attachments:**
1. Work plan section from the received proposals
Proposal for
Mankato/North Mankato Area Planning Organization
Belgrade Avenue Corridor Study

April 1, 2016

Submitted by:
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Work Plan

Bolton & Menk, Inc. has reviewed the work task descriptions and issues outlined in the Request for Proposal (RFP) and developed an approach based on our knowledge of the corridor and experience with similar studies. MAPO and its partners can be assured that Bolton & Menk will provide outstanding technical deliverables, exceptional leadership in public and stakeholder involvement, and superior project management in a timely and cost-effective manner. The information below directly corresponds with work elements identified in the proposed project schedule at the end of this section and the Cost Breakdown included in Section 3.

Task 1: Project Management
One of the most significant components of the study is the management process. Our proactive and effective project management is critical for successful completion of the study resulting in full partnership support. Our approach is to lead this study process through consistent communication, firm schedules, and established milestones, while building consensus along the way. We will schedule all meetings, complete all agendas, maintain meeting records, and offer regular updates on next steps and upcoming study requirements.

Subtask 1.1 Administration
Bolton & Menk will prepare and provide project correspondence, scheduling, invoicing, and budget management necessary for expediting work products and project decision-making. Schedule updates will be provided on a regular basis.

Subtask 1.2 General Coordination
Our team will have ongoing discussions and regularly scheduled weekly check in meetings with MAPO and City staff. In addition, monthly written memos will be provided for review by the MAPO TAC and Policy Board. The purpose will be to understand individual agency perspectives to gain insight relative to key issues or perceived impacts, discuss potential mitigation strategies to minimize negative impacts, and identify considerations that could influence the study’s conclusion.

Subtask 1.3 Quality Control
Bolton & Menk has developed and implemented a comprehensive Quality Assurance and Quality Control (QA/QC) Program that is designed to meet the particular needs of our firm and our clients. Our program systematically and dramatically reduces the potential for issues. Routine product reviews are an integral part of the quality control process, which effectively target conceptual, constructability, environmental impact, public impact, and economic engineering issues.

Deliverables: Regular communications with study partners, schedule updates, monthly invoices and progress reports, QA/QC review, schedule meetings

Key Personnel: Bersaw

Client Participation: Process monthly invoices and progress reports, ongoing communication

Task 2: Public and Agency Involvement
Our team will develop a collaborative, consensus-based design founded on the ideas and values of the community. Our public input process will lead residents in forming ideas and solutions for the project, analyzing the alternatives, and developing an informed conclusion at the end of the process. The graphic below outlines the different groups, planned activities, and their role in the overall decision-making process of the study, working towards achieving informed consent. Input will come from the community, agencies, and property/business owners.
Work Plan

Subtask 2.1 Develop Public Involvement Plan
Our team will develop a comprehensive public involvement plan building upon what is presented in Section 4. This Plan will outline opportunities and strategies for input and encouragement of stakeholder participation.

Subtask 2.2 Project Management Team (PMT) Meetings
Our team will lead the PMT comprised of a core group of planning and engineering staff from MAPO, City of North Mankato, and MnDOT (as needed). Bolton & Menk will have ongoing discussions and regularly scheduled meetings with the PMT. The purpose will be to understand individual agency perspectives to gain insight relative to key issues or perceived impacts, discuss potential mitigation strategies to minimize negative impacts, and identify considerations that could influence the project’s conclusion. These meetings may include other agencies as needed and will occur as detailed in the schedule at the end of this section.

Subtask 2.3 Steering Committee Meetings
We understand a Steering Committee of interested businesses and citizens is being formed to guide the Downtown Redevelopment Plan. Recognizing the interrelatedness of the land use and transportation studies, we propose meeting with the Downtown Redevelopment Plan’s Steering Committee three times during the corridor study. The purpose of these meetings will be to share ideas, issues, and concerns; gather business and public input on corridor concepts; and develop the streetscape vision. The Steering Committee will provide direct input to the PMT. As shown on the schedule, the first Steering Committee meeting will be used to gather input on the issues, needs, and opportunities in the corridor and to discuss existing conditions findings. The last two meetings of the Steering Committee will be held prior to each of the public open houses to gather their input on corridor concepts, evaluation, and streetscape options.

Subtask 2.4 Public Open House Meetings

Public Open House #1
The first open house with residents, business owners, and other stakeholders will be held in November 2016 to share the purpose of the study; Steering Committee input on issues, needs, and opportunities; existing conditions findings; and the range of corridor concepts under consideration. The message at this open house will focus on how concepts address the problems that need to be solved and the trade-offs between them. Our goal is to learn what stakeholders like and do not like, and why.

This meeting will be conducted in an informal setting with a brief presentation to encourage participation and provide an opportunity for one-on-one with members of the project team to record input.

Traffic model simulations and corridor visuals/ renderings will be used to show various scenarios. These simulation tools will be able to show the public what the improvements can look like and how the community will benefit. Residents will have a greater understanding of the issues and alternatives by seeing the possible solutions in action.

Public Open House #2
The second open house will be held in February 2017 to review the recommended alternative to be carried forward into future project development. Our team will share refinements developed as a result of input received at Open House #1 and Steering Committee input.
This open house is important to allow a final opportunity for public input during the study and to clearly communicate the study status/outcome. This is important since there may be a gap of time between the study’s conclusion and actual construction of the improvements. Final visuals of the corridor will be presented for consensus.

Subtask 2.5 Online GIS Survey/Mapping Tool
Bolton & Menk has created an online survey/mapping tool using GIS, similar to the Community Remarks application that the City Center Partnership is currently using. We will use this to gather additional public input on issues, needs, and potential corridor improvement ideas. This tool will be used throughout the corridor study process with heavy emphasis during the early phases of the project. The tool will be made available on the MAPO study webpage and the City of North Mankato website if desired.

Subtask 2.6 MAPO TAC Meetings
Bolton & Menk will prepare for and attend meetings with the MAPO TAC at key milestones during the study. Assumes three in-person meetings with the TAC.

Subtask 2.7 North Mankato City Council Updates
Bolton & Menk will prepare for and attend North Mankato City Council meetings at key milestones during the study. Assumes two in-person presentations to the North Mankato City Council.

Subtask 2.8 MAPO Policy Board Meetings
Bolton & Menk will prepare for and attend MAPO Policy Board meetings at key milestones during the study. Assumes two in-person presentations to the MAPO Policy Board.

Subtask 2.9 Agency Coordination
Bolton & Menk will have ongoing communications with environmental resource agencies and/or utility companies as needed to move the project forward.

Subtask 2.10 Property Owner Coordination Meetings
We will meet with individuals and/or small groups of affected property owners to discuss corridor concepts and potential changes to access. These types of meetings are valuable in addressing potential issues head on rather than letting them fester and potentially derail the entire effort. Changing access to a business is sometimes met with resistance. Our objective is to find access solutions that provide safety benefits to the public roadway while maintaining or improving site access and circulation for the property owner. We have found that spending time to understand how a business operates and what their concerns are is beneficial to our understanding and building trust in developing amenable solutions. Assumes up to six meetings.

Subtask 2.11 Public Notices
Our team will develop public notices for all public meetings. This will include a notice to be printed in the Mankato Free Press and informational posters announcing open house events for Mankato Transit agency distribution and for ongoing displays at North Mankato City Hall. We will develop these notices and informational posters and review them with MAPO and City of North Mankato staff to obtain approval prior to distribution. We will also develop press releases for media outlets such as KEYC, KTOE, Radio Mankato, Alpha Media, and the Mankato Times.

Subtask 2.12 Study Newsletter
We will prepare and distribute study newsletters prior to each public open house. The newsletter will be posted on the website and mailed to property owners/businesses directly adjacent to the corridor up to 30 days prior to the open house event.

Subtask 2.13 Study Website and Social Media
Our team will frame-up and provide leadership in the maintenance of a study web page on MAPO’s website to serve as a clearing house for all study information. The goal of the website is to provide information so the public can track the study and have a voice in the process. The website will be updated periodically throughout the study process.
We will also assist MAPO staff in providing social media updates on study progress and public event notices.

**Deliverables:** Public involvement plan, meeting leadership, meeting materials, meeting notices/informational posters/newsletters, press releases, online GIS survey/map tool, website development, updates

**Key Personnel:** Bersaw, Lassonde

**Client Participation:** Attendance and participation at meetings, provide a list of names and addresses for project mailings, maintain the website and perform periodic updates, social media updates

**Task 3: Corridor Issues Identification**
Understanding the root cause of issues in the study area will allow our project team to provide recommendations to improve the corridor. A study will be completed for land uses and trends (working closely with the City’s Downtown Redevelopment Plan efforts), pedestrian network and needs, roadway safety and capacity issues, roadway function, supporting roadway network, access management, parking needs, and environmental resources.

**Subtask 3.1 Land Use**
We will review existing and proposed land use changes and work closely with the City of North Mankato as they progress with their Downtown Redevelopment Plan that our firm is协助的。显著的土地使用变化将被添加到问题地图中。我们将继续参考最新的城市规划文档，与城市工作人员讨论。

**Subtask 3.2 Roadway Function**
According to MnDOT’s functional classification, Belgrade Avenue is a minor arterial roadway. This study will assess the roadway to ensure it is properly classified or recommend a change in classification.

**Subtask 3.3 Trails and Pedestrians**
Pedestrian movements along and across portions of the corridor are served by sidewalks on both sides of the roadway with connections to the greater sidewalk/trail network in the community. There are pedestrian and demands across Belgrade Avenue, particularly in the 200 Block, with limited accommodations. We will review the existing and planned trail and sidewalk facilities and connections between neighborhoods, schools, parks, and trail systems.

**Subtask 3.4 Access**
Bolton & Menk will collect access information using current aerial imagery regarding the number, type, and location of all accesses on Belgrade Avenue, with particular focus on the segment between TH 169 and Range Street and compare to local access guidelines.

**Subtask 3.5 Parking**
Our team will complete an inventory of parking along and near Belgrade Avenue, with particular emphasis on the 200 Block. The inventory will document available on-street and off-street parking spaces. We understand an assessment of parking resources was completed for the Downtown Planning Study approved by the City in 2012. However, through shifts in development, the addition of on-street bicycle paths, and the creation of new public parking, that assessment is not relevant today.

We will work closely with the City to understand efforts and avoid duplication. Although the parking inventory data is useful, we know from experience that understanding what businesses need is most important. Therefore, the inventory will be used as a discussion piece with businesses and property owners to better understand what they currently use, where issues exist, and to identify potential opportunities for modifications to address their needs.
Subtask 3.6 Environmental Constraints
We will conduct an environmental screening to identify sensitive areas by considering social, economic, and environmental categories using publicly available GIS data and agency outreach as necessary. This corridor study does not include completing an environmental document. However, the environmental screening will be completed so it can be incorporated into a future environmental document as needed.

Subtask 3.7 Traffic Data Collection
As part of the analysis to understand existing conditions and develop forecasts for future year conditions, our team will utilize collected traffic data. 13-hour traffic and pedestrian counts will be collected using video detection cameras and manual observations at the following intersections:

- Belgrade Avenue & Highway 169 NB Ramp Terminal
- Belgrade Avenue & Highway 169 SB Ramp Terminal
- Belgrade Avenue & Range Street
- Belgrade Avenue & Center Street
- Belgrade Avenue & Sherman Street
- Belgrade Avenue & Lake Street
- Belgrade Avenue & Lee Boulevard
- Lee Boulevard & Lookout Drive

Tube counts will be performed at up to four locations throughout the Belgrade Avenue corridor to obtain ADT, vehicle classification, and available gaps in traffic. Our team will complete a field review of existing conditions including speed limits, traffic control, turn lane lengths, curve radii, public and private access locations, and other information pertinent to the existing corridor. Traffic signal timings and record drawings will be requested to develop traffic models consistent with existing conditions.

Gap studies will be performed at spot locations to identify whether adequate time is available for pedestrians to cross Belgrade Avenue at uncontrolled locations. Similarly, gaps will be analyzed at spot locations to determine if adequate gaps are available for vehicles entering and exiting private and minor public accesses.

Subtask 3.8 Safety Analysis
Bolton & Menk will complete a safety analysis of the existing corridor using crash data from MnCMAT and any pertinent local records. The safety analysis will review existing crashes from the previous five years and determine if there are any patterns relating to the number, type, presence of pedestrians or bicyclists, or severity of the crashes. Intersection and segment crash, severity, and critical rates will be utilized to quantify trends.

Subtask 3.9 Traffic Forecasting and Analysis
Bolton & Menk will provide 25-year traffic forecasts along the Belgrade Avenue corridor using a combination of current volumes, 2045 forecasted traffic volumes (from MAPO Long Range Transportation Plan), historical data, and planned future land uses identified by the City of North Mankato. Bolton & Menk will analyze existing and future traffic mobility along the corridor. Our team will model AM and PM peak traffic hours for the no-build scenario as well as any build/concept alternatives.

Synchro/SimTraffic will be used to evaluate the mobility of existing and future traffic for the no build and build alternatives proposed along the corridor. Mobility measures include delay, level of service, and queuing at the primary intersections throughout the corridor. Future trips generated from planned growth centers at identified intersections along the corridor will be distributed throughout the study area network to understand the future needs of the corridor. This includes an evaluation of study area traffic circulation with the additional trips developed within the corridor.

Warrant analyses will be completed at the primary intersections using existing and forecasted traffic volumes to determine if and when different traffic control measures may be needed at each location.

Subtask 3.10 Existing Conditions Memorandum
The existing conditions study will be packaged in a memorandum documenting the work that was completed in Subtasks 3.1-3.9.
Subtask 3.11 Traffic Analysis Report
Bolton & Menk will complete a traffic analysis report documenting the safety, access, traffic forecasting, and operations analysis. The report will include all calculations and supporting documentation from the traffic analysis.

Subtask 3.12 ICE Reports
The analysis completed in Subtasks 3.7-3.9 relative to the intersections of Belgrade Avenue/Highway 169 SB Ramp Terminal and Belgrade Avenue/Lee Boulevard will be packaged as separate Intersection Control Evaluation (ICE) Reports.

Deliverables: Parking inventory, environmental screening, turning movement and ADT volumes, vehicle classification, Existing Conditions Memorandum, traffic analysis report, ICE Reports, Trafficware Synchro/Simtraffic 9 models

Key Personnel: Bersaw, Bongard, Nemeth, Lassonde

Client Participation: GIS information, traffic signal timings and record drawings, crash reports, basemapping, demographic information

Task 4: Corridor Concepts
Subtask 4.1 Concept Development
Our team will develop a range of alternatives for improvements along Belgrade Avenue between TH 169 and Range Street. We will look beyond improvements to the roadway itself and thoroughly understand the City’s redevelopment plans, existing and projected needs of the surrounding local roadway system, and the multimodal transportation network.

Preliminary design concepts will be developed for the segment of Belgrade Avenue between Range Street and Lee Boulevard if the traffic study reveals improvements are necessary to accommodate redevelopment plans and future traffic volumes. This includes the Belgrade Avenue/Lee Boulevard intersection as well as the intersections with Range Street, Cross Street, Center Street, and Sherman Street where redevelopment is also anticipated.

Bolton & Menk will develop viable concepts (plan view only) to solve both existing and future issues and balance safety and mobility with economic development goals. The concepts will be developed knowing the corridor will continue to serve increasing demands as the community grows and redevelops.

The concepts will be developed into planning level layouts demonstrating a general footprint, operations, and capacity. These planning level layouts will display access conditions, property impacts, circulation, and cross sections. The alternatives will also highlight proposed pedestrian, bicycle, and recreational improvements. Below are the elements that will be considered and developed in the layouts:

- Alternative roadway designs (including supporting roadway network and intersection treatments)
- Corridor enhancements
- Right-of-way
- Trail and sidewalk alternatives
- Pedestrian crossing and ADA enhancements
- Landscaping/streetscaping/node/gateway treatments

Subtask 4.2 Typical Sections
Bolton & Menk will develop typical sections that correspond with the concepts.
Work Plan

Subtask 4.3 Cost Estimation
Bolton & Menk will develop planning level cost estimates that will aid in the evaluation.

Subtask 4.4 Concept Evaluation
Bolton & Menk will develop criteria for evaluating the concepts including safety, mobility, cost, access, pedestrian accommodations, environmental impacts, and compatibility with economic development goals. Our team will perform the evaluation of each concept using an evaluation matrix and provide recommendations.

Subtask 4.5 Recommended Concept
Upon the selection of a recommended concept, our team will further refine the concept and develop a layout. This will include the refinement of the design, refinement of cost estimates, and preparation of a planning level layout of the recommended concept.

Deliverables: Preliminary and final concepts, typical sections, cost estimates, evaluation matrix, recommended concept layouts

Key Personnel: Bersaw, Bongard, Nemeth, Lassonde

Client Participation: Active participation in the alternative development, screening, evaluation, recommendations

Task 5: Access Blueprint
Subtask 5.1 Access Blueprint
Using the access inventory developed in Task 3.4, we will evaluate the corridor in segments and provide recommendations on access management to provide the proper balance between access and mobility while referencing the local access management guidelines. There are opportunities for improvement. Some of the recommendations may include combining access to a shared location, construction or expansion of a supporting roadway, access closure when adequate access is already provided, or addition of a median to reduce movements. An access blueprint will be developed for the corridor and included in the study documentation. This will be helpful as properties develop or redevelop and access needs are being discussed.

Deliverables: Belgrade Avenue Access Blueprint

Key Personnel: Bersaw, Bongard, Lassonde

Client Participation: Review Access Blueprint

Task 6: Implementation Plan
It will be important for the City and its partners to have a common plan for moving identified improvements forward and in seeking funding.

Subtask 6.1 Implementation Plan
Bolton & Menk will develop an implementation plan that prioritizes transportation improvement recommendations useful to the project partners. We will provide a list of prioritized transportation improvement recommendations, estimated costs, and agency responsibilities, as well as identify potential funding sources.

Deliverable: Implementation plan table

Key Personnel: Bersaw, Bongard, Lassonde

Client Participation: Assistance on the prioritization and lead agency definition

Task 7: Report
Subtask 7.1 Report
Our team will deliver a comprehensive study report to project partners that will not only serve as documentation of the study, but as a valuable resource to be referenced as the corridor grows and evolves. The study report will contain the research, findings, and recommendations that were completed in this study including: existing conditions, traffic analysis, issues, alternative development and evaluation, and public/agency involvement.

Deliverables: Study report

Key Personnel: Bersaw, Lassonde

Client Participation: Review draft document
MANKATO/NORTH MANKATO AREA PLANNING ORGANIZATION (MAPO)
Professional Services Proposal for Belgrade Avenue Corridor Study

PROPOSAL FOR:
Paul Vogel
Executive Director
MAPO
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FROM:
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STEP 1
PROJECT KICK-OFF + INFORMATION GATHERING

Gathering of available information will kick-off the Belgrade Avenue corridor study. Past studies, planning and legal documents, and current City ordinances and policies will be valuable to developing the necessary background needed to determine a purpose and need for the study, as well as any key areas where attention should be focused. The purpose and need will correspond to goals for the process. An analysis of the existing transportation facilities will be conducted utilizing community engagement, document review, and physical observations. North Mankato’s recent Comprehensive Plan will provide the broad overview for the future of the corridor as it stands today.

Stakeholders will be engaged with interesting and even entertaining methods to gather input and ideas. By reaching out and listening to the comments provided, ISG will begin to formulate various conceptual alternatives for the corridor. We understand that accommodating all modes of transportation along the corridor to encourage its use by pedestrians, bicyclists, transit users, and automobiles will be vital to the vision of this project.

Previous traffic studies will provide fundamental information for key intersections along the corridor. This data will be analyzed to test the feasibility of alternative concepts. Review of crash statistics will be used to further develop the alternative concepts at critical areas in need of multi-modal safety improvements. Since there are distinct segments that comprise the corridor, each segment may contain unique items of cultural or social importance which will be identified through community engagement and reflected in the alternatives.
Project Work Plan

2
STEP 2
PUBLIC ENGAGEMENT + VISIONING

APPROACH TO COMMUNITY ENGAGEMENT

ISG’s approach to community engagement for the Belgrade Avenue Corridor Study will focus on the unique segments along the corridor and the various stakeholders impacted by related decisions. The overarching goal of the study will shape a vision and recommendations for multi-modal safety that respects the character of each segment of the corridor. Community Engagement will be a paramount component of this project. Our team will solicit information about the sights, the sounds, and the feel of the corridor. We will seek to gather input relating to the sense of place, stakeholder neighborhoods, communities, Cities, and the region.

The community engagement process will involve reaching a broad range of participants, defining a vision (or multiple visions) for the corridor, and finding the best ways to achieve the vision through planning and design recommendations. The goal will be to build community support and buy-in for the options developed.

Guiding Principals

Our public involvement strategies will adhere to the following guiding principles:

- **Harness existing relationships**: Community engagement efforts will focus on harnessing existing relationships and reaching out to groups and organizations that may already meet, such as Business on Belgrade. Local businesses may want to host events or discussions or promote surveys. We will reach out to local students to participate and help plan engagement events. Taking advantage of existing organizations and creating new partnerships with community groups, can tap into a variety of already captive audiences for feedback.

- **Make engagement convenient and meaningful**: Instead of inviting people to another meeting, we can bring the meeting to the people. Rather than promote involved technical presentations, we will make information easy-to-understand and establish meaningful ways of soliciting feedback.

- **Make engagement welcoming**: Our team will tailor engagement strategies to involve people with different interests, needs, and time constraints. This may involve engagement strategies with targeted invitations which may include activities specifically for children or people who identify as a member of a certain neighborhood.

- **Be transparent, nimble, and responsive**: Building trust, adjusting strategies, and communicating in a timely and clear manner are key to successful community engagement and building the support of stakeholders.

Analyze and Disseminate Input

As we reach out to the community, ISG will gather and analyze public and stakeholder input. Key to the process will be analysis of feedback resulting from the public engagement process. Using summary notes from the different engagement activities, ISG will develop a report categorizing common themes into an easy-to-understand document. Working with the City of North Mankato, ISG will help determine the best ways to distribute the results of the public engagement process and to further engage the public and stakeholders in the corridor study.
COMMUNITY ENGAGEMENT PLAN STRATEGIES + PROCESS

In an effort to document the general goals and ideas for the study, ISG will engage the City of North Mankato and MAPO in developing key engagement plans. Identifying the necessary stakeholders to be engaged, issues to anticipate, and relationships to establish and strengthen will set the course for the work to be completed. If there are constraints or concerns raised about the corridor, ISG will develop questions and information to maintain focus on the issues.

General phases with proposed engagement goals will follow along with tactical strategies that may be implemented:

1. Phase 1: Visioning and Issue Identification
2. Phase 2: Responding to Solutions
3. Phase 3: Recommendations

A adaptable and responsive approach is beneficial to the success of the process. Flexibility in strategies for obtaining public input in addition to feedback from partners, and stakeholders, are featured in a strong community engagement plan. ISG anticipates ideas, opinions, and issues may arise during the process, and our team is prepared to respond and adjust as the process unfolds.

VISION + ISSUE IDENTIFICATION

To build a common vision for the corridor which defines the unique character of the different segments of Belgrade Avenue, the initial task to accomplish is the establishment of community engagement efforts. Goals and priorities will likely differ between segments of the corridor so strategies will be specifically tailored to each focus area. Methods for community engagement will be customized based on the groups of people being engaged.

If schools are near the corridor, a target audience for engagement may be students, parents, faculty, and staff of that facility. We will seek to provide multiple opportunities for participation using a variety of strategies. Rather than hosting one large, open meeting scheduled in the evening, an alternative would be to set up a table at parent-teacher conferences to provide information and survey parents. Student participation can be solicited by offering them the opportunity to vote on issues and ideas by placing a sticker next to issues important to them. This strategy provides cross-sectional engagement of both youth and adult stakeholders with one effort.

Working with the study stakeholders during this phase, ISG will determine information required and integrate questions into easy, fun, and meaningful activities. Groups of stakeholders can be invited to participate in a focus group or interview session. For example, a Business on Belgrade meeting could be arranged to engage business owners in a facilitated discussion about their impressions of the corridor.

A summary report to address each segment of the corridor will incorporate alternatives and solutions based upon the engagement results gathered from the public and stakeholders. This report will be made available to the community and will highlight key themes raised during the process and how these may be addressed in the future.
Project Work Plan

MENU OF ENGAGEMENT STRATEGIES

ISG will seek the input of MAPO staff in the development and selection of strategies to be included in the Community Engagement Plan. The engagement strategies that follow may be used to identify key issues and develop the vision for the corridor:

Meeting-In-A-Box

Our team will develop “meeting-in-a-box” toolkits to engage project partners and provide a means for these partners to engage specific stakeholders. Each toolkit will contain easy-to-replicate activities, instructions, and project information cards. This is an easy way to broaden the reach and enable project partners to conduct engagement in their local communities.

Youth-Centered Engagement

Gathering input and developing an understanding of the way that young people perceive issues and participate in public processes is an on-going challenge. Feedback from youth regarding planning decisions that impact their everyday and future experiences will be vital. Our team has developed engagement activities for a range of ages, from short activities with blocks, play-dough, and crayons to more collaborative youth engagement opportunities like working with Girl or Boy Scout troops on visioning for streets.

Meet with Existing Groups

One way to effectively engage with community groups is to ask to attend an existing meeting. People do not have to go out of their way to attend an additional meeting, and the information is brought to them. Another advantage of this format is that people will likely already feel at ease enough to speak up about issues and ideas.

Focus Groups with Key Stakeholders

Focus groups are a great way for community members to discuss topics and themes more in-depth. This is also a very effective way of engaging people who may not typically come to a traditional public workshop but who are impacted by and interested in public projects such as older residents of a group home, parents, immigrant communities, or teens. They can be an effective method to help people feel comfortable sharing their ideas, issues, and questions because focus groups are usually relatively small in size, and intentionally structured around a common identity or more frequently, a group that already gathers for one reason or another.

Walking Workshops

One of the best ways to engage people and generate feedback about an environment is by going on a walk to experience and discuss some of the challenges and needs in the area. Our team is experienced in tailoring walking workshops in a way that solicits pertinent feedback on the environment in a variety of contexts. Feedback from walks allow us to identify needs and challenges that can be addressed in a corridor study. Walking workshops can be tailored to physical contexts as well as to different groups of participants.

Workshops with a Twist

A spin-off idea on a typical “walking workshop” is to co-host an event with a local business or organization and invite community members to enjoy food, beverages, or music in conjunction with the project topic. For example, the Circle Inn located on Belgrade Avenue could host project team members for “Circling the Conversation”, The NaKato might be interested in hosting “Breakfast and Banter”. These events could be open invitations or targeted to particular stakeholders.
DEVELOPMENT OF ALTERNATIVES

Data generated in Steps 1 and 2 will begin to illustrate the vision that is developing during the engagement activities. ISG will reference this information to prepare conceptual design alternatives that respond to the ideas and concerns raised by participants and stakeholders. These concepts are anticipated to address intersection alignments, traffic calming and control options, overall safety, gateway impressions, and multi-modal transportation opportunities. Feedback will be sought from MAPO and other stakeholders based upon the alternatives submitted for review. Additional opportunities for continued public engagement will be provided throughout this review as well.

CONTINUED COMMUNITY ENGAGEMENT

There will be a large amount of data generated throughout the study and ISG is prepared to devote the necessary time required for thoughtful analysis of the community engagement output. This will include quantitative summaries (from surveys, sticker voting, etc.) and qualitative summaries (focus groups, informal discussions, etc.). Solutions for the challenges facing the corridor will utilize the results of the community engagement process as well as issues identified through this information gathering.

Several alternatives will be generated by ISG for review by the community. The message will be:

1. You spoke (We will share the results of the community engagement process.)
2. We listened (We will present the designed alternatives and how public input influenced the ideas.)
3. How did we do? (We will ask for feedback on the alternatives presented.)

Stakeholders that were involved in Steps 1 and 2 will be re-engaged. This time, the goal will be to generate a more reactionary response than the idea generating responses of the earlier phases. ISG will again utilize a number of strategies to engage each target audience, and we will work with MAPO to select the strategies to include in the Community Engagement Plan.

1. Tactile Models
   If design decisions are still being discussed, this method can be used. Using aids like blocks, roadway pieces, and movable features can help the public visualize proposed changes to the corridor. This also provides support in communicating physical constraints and modeling creative solutions. Models are also helpful when engaging children or people that have difficulty or reluctance with writing or speaking.

2. Pop-Up Workshops
   Pop-up workshops are highly interactive and useful at places where people are already gathering. For example, at farmers markets, festivals, sports events, school events, or at times when people are typically out and about. Similar to the “meeting-in-a-box” approach, materials could be display boards with cross-section images for people to vote on with sticker dots, small surveys, a tactile model, or a coloring activity.

3. Surveys
   There are several survey styles that can be used, including paper or online methods. Many times surveys are quick, easy, and widely distributed. They work well when there are multiple choice questions accompanied by visuals for the alternatives.

4. Presentation + Handouts
   This strategy is helpful for revisiting groups that have already been engaged in Steps 1 and 2. For instance, if the project team engaged members of a citizen’s advisory board during their meeting initially, a follow-up presentation and discussion would work well to re-engage these same stakeholders, and it could be easily replicated for various groups.
STEP 4
DEVELOPING RECOMMENDATIONS, PRELIMINARY COSTS, + RE-ENGAGING STAKEHOLDERS

RECOMMENDATIONS + PRELIMINARY COSTS

Utilizing the design alternatives that are developed and updated through the first steps, ISG will prepare preliminary opinions of probable cost to provide MAPO with vital information needed to develop and identify priorities for the corridor. Community members will be given access to the recommendations in order to generate further comments and suggestions. To re-engage the public with this preliminary information these methods may be employed:

Online information
Community members can easily access summaries of the public engagement process and outcomes, as well as recommended improvements through a custom, web-based project page. The site will feature a dedicated section encouraging submission of questions and comments.

Presentation-In-A-Box
Re-engaging the various groups that have previously participated in the process is important. This helps to build trust and improve buy-in with stakeholders by demonstrating how input was used to develop recommendations. A “presentation-in-a-box” kit would be developed complete with a brief presentation, talking points, and easy-to-replicate handouts and/or comment cards. This allows the project team to be flexible with who attends meetings to provide information and collect input.
Belgrade Avenue Corridor Study

Mankato/North Mankato Area Planning Organization (MAPO)

Prepared by: Kimley-Horn

April 2016
WORK PLAN AND COST OF SERVICES

TASKS TO BE ACCOMPLISHED

TASK 1: DATA ACQUISITION
Key Staff: Laabs, Dammel, Potter, Arnold, Kondziolka, Huggins

Gathering Existing Data
Kimley-Horn will work with city, county, MnDOT, and MAPO staff to gather existing data along the corridor. This will include adopted community plans/studies; land use information; zoning plans/studies and regulations; adopted LRTP; traffic volume data including average daily traffic (ADT) counts and intersection turning movement counts; U.S. Bureau of Census data; city and county building permits and utility records; socioeconomic data and projections compiled by MAPO and DEED; anticipated future lane use from the city; and available GIS data from the city, county, and state.

Traffic Count Data
Where current traffic count data is not available, Kimley-Horn will collect ADT and peak period turning movement counts along the corridor. This work plan assumes that new traffic count data will be collected at three locations for ADT counts and six intersections for turning movement counts.

Kick-Off Meeting
Kimley-Horn will attend a kick-off meeting with staff from the City of North Mankato and members of MAPO to discuss the goals and objectives of the project.

Public Meeting No. 1
Kimley-Horn will hold the first of two public meetings with the general public. As part of this meeting, the public will be provided the opportunity to learn about the project and share their existing concerns and their vision for the future of the Belgrade Avenue corridor. We assume the vision and goals for the project will be established as part of a Downtown Development Study (by others).

TASK 2: PLANNING ANALYSIS

2A. Existing Conditions Analysis
Key Staff: Arnold, Kondziolka, Huggins, Potter

Field Review
Kimley-Horn staff will walk the corridor to observe and document the current conditions of the corridor. As part of the field review, we will document roadway cross sections, intersection geometry and control, current operations of critical intersections, pedestrian facilities, presence of bicycle lanes, and on-street parking.

Safety Review
Kimley-Horn will evaluate the safety of the Belgrade Corridor based on crash data provided by MnDOT, Blue Earth and Nicollet Counties, and the City of North Mankato. The evaluation will include reviewing the crash reports to assess factors such as time of day, weather, and other contributing factors that affect the safety of the corridor for the past 5-year period. As part of the review, crash and severity rates will be calculated for the corridor and each individual intersection and compared with
the Minnesota average crash rates for similar facilities to statistically measure roadway and intersection safety.

Access Review
As part of the access review, Kimley-Horn will inventory and map the existing access locations along Belgrade Avenue in terms of type of access and land uses it serves. The inventory will include documenting the number of conflict points associated with each access, safety concerns, and spacing with other access points.

Parking Review
Using information derived from the public meetings and during our field visit, we will note if there are any on-street parking issues or opportunities along the Belgrade corridor.

Traffic Operations Analysis
Current traffic operations of the study corridor will be revised. An analysis of existing conditions will be performed for vehicle operations along the study corridor.

Additionally, an analysis will be performed for vehicle operations at all public street intersections along the corridor. The analysis will look at detailed intersection, queueing, delay, and LOS for all individual traffic movements. Our team will analyze the corridor for the weekday peak periods, which are anticipated to be weekday AM and PM peak hours. Kimley-Horn will summarize the existing conditions operations into a memorandum that will be distributed to the project team. The memorandum will provide generalized short-term improvements that could improve the corridor with minimal cost in mind.

Multimodal LOS
LOS for other modes of transportation (namely pedestrians and bicycles) will be reviewed along the corridor with a focus on the downtown district, where the largest concentration of multimodal transportation occurs. The analysis will be performed using the methodology outlined in the Highway Capacity Manual (HCM) and in coordination with the findings and recommendations of the MAPO LRTP, city comprehensive plan, and other studies.

2B. Future Conditions Analysis
Key Staff: Arnold, Kondziolka, Potter, Smalkoski

Future conditions of the Belgrade corridor will be reviewed for a 25-year horizon which will coincide with the horizon year of the MAPO LRTP.

Volume Forecast
Kimley-Horn will use historic traffic data, future land use information, socioeconomic data, and potential redevelopment to calculate a growth rate that will be applied to existing traffic volumes to forecast future 2040 traffic conditions along the study corridor. Kimley-Horn will work alongside the Downtown Redevelopment Study project team to ensure the growth assumptions along the corridor are consistent.

Access Review
Working alongside the Downtown Redevelopment Study project team, Kimley-Horn will review opportunities for shared access through the use of cross access and backage roadways. Access will
be reviewed independently in the three zones: the downtown district, transitioning district, and the residential district. The largest concentration of businesses and driveways is contained within the downtown district.

**Future Parking Needs**
Kimley-Horn will work alongside the Downtown Redevelopment Study project team to determine future parking needs, particularly for the downtown area.

**Vehicle Capacity Analysis**
Kimley-Horn will review roadway capacity along the corridor based on the 25-year forecasted traffic volumes. The analysis will be performed to determine if the existing cross section provides inadequate vehicle capacity and recommendations to increase roadway capacity will be identified.

An intersection capacity evaluation (ICE) will be performed consistent with MnDOT’s methodology for the intersections of Belgrade Avenue and Highway 169 (southbound ramps) and Belgrade Avenue and Lee Boulevard based on the 25-year forecasted traffic volumes. ICE is a process that identifies the best intersection control through a comprehensive analysis and documentation of the technical (safety and operational), economic, and political issues of viable alternatives.

An analysis will be performed for vehicle operations at all other public street intersections along the corridor for the 25-year horizon. The analysis will look at detailed intersection, queueing, delay, and LOS for all individual traffic movements. Potential alternative intersection traffic control will be reviewed at the other public street intersections.

**Multimodal LOS**
Consistent with current conditions, a multimodal LOS will be performed along the study corridor, with a focus on the downtown district. The results of the analysis will help in making appropriate changes to the corridor to improve the safety of all modes of transportation.

**2C. Alternatives Analysis**
*Key Staff: Laabs, Dammel, Potter, Arnold, Kondziolka, Coyle, Huggins*

**Development of Alternatives**
Based on the Downtown Development Study, review of future conditions and roadway and intersection alternatives will be developed that will improve the safety and welfare of the Belgrade Avenue corridor. Up to three alternatives will be developed to address roadway cross sections, intersection control, changes to parking, and pedestrian/bicycle accommodations. As part of this task, plan exhibits will be developed showing the different components of each alternative. Typical sections will be developed in AutoCAD. Alternatives will not address streetscape, landscape, or visual quality.

A matrix demonstrating the relative opportunities and challenges for each alternative will be compiled for comparative evaluation purposes.

**Cost Analysis**
A planning-level opinion of probable construction cost (OPCC) will be developed for each alternative developed using high level assumptions.
Right-of-Way Needs
The proposed roadway alternatives will be reviewed against existing right-of-way to determine how much additional right-of-way would be needed to implement each alternative. Right-of-way evaluation will be estimated from plan and from site visit. The project budget does not permit developing a three dimensional roadway model to determine right-of-way needs.

Environmental and Social Impacts (Screening Level)
To understand any environmental or social constraints that may affect the development or evaluation of alternatives, a high-level environmental screening will be performed. This will include a windshield survey and aerial photography and agency database review of the area including and surrounding the corridor and documentation of any existing conditions or regulations that may affect study outcomes. These issues may include, but are not limited to, vegetation, wildlife, watershed requirements, historic resources, water resources, and identification of environmental justice populations.

Public Meeting No. 2
The alternatives will be presented to the public as part of the second public meeting. This will provide the opportunity for the public to provide input on the proposed alternatives.

2D. Recommendations
Key Staff: Laabs, Arnold, Coyle, Smalkoski, Kondziolka

Implementation Plan
Based on discussions at meetings with city, county, MnDOT, MAPO staff, and the public, recommendations will be made for the multimodal alternatives identified as a part of Task 2C including the number and width of lanes, horizontal alignments, preliminary determination of right-of-way widths and easements, intersection configurations including turn lanes and traffic control, drainage, and bicycle/pedestrian facilities. A concept plan will be provided that shows the recommendations of the corridor.

The plan will identify any further studies that are needed including the level of environmental review. Phasing of the proposed improvements will be developed and identify “triggers” that may require an improvement to move up in priority within the program. This activity will help identify any potential funding sources to complete the recommended improvements.

Final Report Document
The analysis, alternatives, and recommendations will be summarized into a final report.

TASK 3. PUBLIC INVOLVEMENT
Key Staff: Laabs, Dammel, Coyle

The public involvement plan is discussed in detail starting on page 12.
WORK SCHEDULE
## Mankato Area Planning Organization (MAPO)

Belgrade Avenue Corridor Study

### Classification & Rates

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<tr>
<th>Job Classification</th>
<th>Principal In Charge</th>
<th>Project Manager</th>
<th>Senior Engineer (Roadway)</th>
<th>Engineer (Traffic)</th>
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<th>Analyst (Environmental / PFP)</th>
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### Estimated Hours

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   - Principal In Charge: 4
   - Project Manager: 4
   - Senior Engineer (Roadway): 4
   - Engineer (Traffic): 4
   - Engineer (Roadway): 0
   - Analyst (Environmental / PFP): 2
   - Analyst (Traffic): 2
   - Analyst (Data/GIS): 8
   - Graphics: 0
   - Total Hours: 6

   - Get data from City, County, State, MAPO: 2
   - Kick Off Meeting: 2

2. **TASK 2: PLANNING ANALYSIS**
   - Principal In Charge: 8
   - Project Manager: 20
   - Senior Engineer (Roadway): 14
   - Engineer (Traffic): 58
   - Engineer (Roadway): 30
   - Analyst (Environmental / PFP): 12
   - Analyst (Traffic): 144
   - Analyst (Data/GIS): 28
   - Graphics: 22
   - Total Hours: 6

   - Task 2-A: Existing Conditions
     - Field Review: 22
     - Safety Review: 6
     - Access Review: 4
     - Parking Review: 4
     - Traffic Operations Analysis: 4
     - Multi-Modal Analysis: 8

   - Task 2-B: Future Conditions
     - Volume Forecast: 56
     - Access Review: 0
     - Future Parking Needs: 0
     - Vehicle Capacity Analysis: 0
     - Multi-Modal Analysis: 0
   - Total Hours: 6

### Estimated Hours Breakdown

- Principal In Charge
- Project Manager
- Senior Engineer (Roadway)
- Engineer (Traffic)
- Engineer (Roadway)
- Analyst (Environmental / PFP)
- Analyst (Traffic)
- Analyst (Data/GIS)
- Graphics
## Mankato Area Planning Organization (MAPO)

### Belgrade Avenue Corridor Study

### Classification & Rates

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### Total Hours

| Task | 560 |
A Proposal to Provide Professional Engineering Services for the

Belgrade Avenue Corridor Study

for the Mankato/North Mankato Area Planning Organization (MAPO)
and the City of North Mankato

April 1, 2016
Proposed Work Plan

Task 1.0 Project Management

Task 1.1: Communication and administration

This task will involve regular weekly telephone updates to the MAPO staff, as well as communication with other agency staff. Preparation of monthly invoices and progress reports, and other miscellaneous work of a non-technical nature will also be conducted under this task.

Task 1.2: Quality control

This task will involve conducting regular quality assurance/quality control reviews on study analysis and deliverables to ensure that these materials are of a high quality and consistent with the defined scope of work.

Task 1.0 Deliverables: Weekly telephone updates with MAPO staff and other miscellaneous communication, project management administration and quality assurance/quality control.

Task 1.0 Optional Deliverable: A project kickoff meeting will be held to confirm project scope, schedule, issues, preferred communication methods and other project logistics.

Task 2.0 Agency and Public Involvement Plan

Tasks 2.1 and 2.2: MAPO Technical Advisory Committee (TAC) meetings/
City of North Mankato staff meetings (assumes two meetings each)

In addition to the project kickoff meeting included in Task 1.0, WSB staff will prepare for and attend two staff-level meetings with both the MAPO TAC and City of North Mankato staff.

As an optional task, WSB is prepared to offer a third MAPO TAC meeting and third City of North Mankato staff meeting. This third meeting could be used to discuss the preferred preliminary design layout.

Tasks 2.3 and 2.4: City of North Mankato City Council meetings/MAPO Policy Board meetings
(assumes two meetings each)

WSB staff will prepare for and personally attend two meetings of the North Mankato City Council and MAPO Policy Board. These meetings will be strategically scheduled during the study process to provide an update on analysis and public input and also at the end of the study process to summarize study analysis, public input and final recommendations.

Task 2.5: Public meetings (assumes two meetings)

WSB staff will prepare for and attend two open house meetings during the study process. The first meeting will be held at the beginning of the process to gather opinions and concerns from the public regarding
A Proposal to Provide Professional Engineering Services for the Belgrade Avenue Corridor Study for the Mankato/North Mankato Area Planning Organization (MAPO) and the City of North Mankato

existing and forecasted conditions and preliminary typical section alternatives. The second meeting will be held to present typical section alternatives analysis and a preliminary preferred design alternative. These meetings will include poster boards illustrating key analysis, maps, tables and other exhibits, as well as a summary PowerPoint that can be presented and made available to the public.

As an optional task, the WSB team could conduct a third public open house style meeting to present final study recommendations and a final preferred design layout.

**Task 2.6: Monthly technical memorandum updates to MPO TAC and Policy Board (assumes 11 memoranda)**

WSB staff will prepare 11 memorandum-style project updates for the MAPO TAC and MAPO Policy Board to summarize the overall study status, study analysis and upcoming key meetings and milestones in the process. These memorandums will also serve as an opportunity to reach out and collect guidance from the MAPO throughout the process.

**Task 2.7: Website, Facebook and online surveys**

WSB staff will prepare materials for posting and regular updates on the MAPO and City websites and Facebook pages. Additionally, two online surveys will be prepared and conducted by WSB in conjunction with the scheduled open houses under Task 2.5. The first survey will gather input on corridor needs and priorities and the second survey will gather input on the proposed design alternatives.

**Task 2.8: Traditionally underserved population outreach**

The WSB team will reach out to low income, minority and other traditionally underserved populations during the study process. This will include a variety of outreach efforts ranging from gathering input and providing study information at transit stations, bus shelters, the library, social service offices, places of worship, grocery stores or other community gathering locations. As part of Task 3, WSB staff will document the locations of these underserved populations through an environmental justice census and mapping analysis.

As an optional task, the WSB team will also conduct the following focus group meetings:

- Neighborhood residents
- Business residents

Appendix B outlines examples of materials and processes WSB has used in the past for similar corridor studies to communicate and solicit input from the public.

**Task 2.0 Deliverables:** Two MAPO TAC meetings, two City of North Mankato staff meetings, two MAPO Policy Board meetings, two North Mankato City Council meetings, two open house meetings, 11 MPO TAC/Policy Board study memo updates, website and Facebook content, two online surveys and traditionally underserved population outreach.

**Task 2.0 Optional Deliverables:** Two focus group meetings, a third MAPO TAC and City of North Mankato meeting and a third open-house style meeting.
Task 3.0 Data Collection and Base Mapping

Task 3.1.1: Prepare Intersection Control Evaluation (ICE) reports

WSB will prepare ICE reports for the Belgrade Avenue/TH 169 southbound ramp intersection and the Belgrade Avenue/Lee Boulevard intersection.

Task 3.1.2: Collect intersection counts

This task includes manual counts at up to six intersections, as well as AM and PM peaks and truck counts (includes ICE intersections).

Task 3.1.3: Review local comprehensive, transportation and land use plans and other studies

This task includes review of local plans with relevant information related to transportation and land use, population projections, planned transportation improvements, Capital Improvement Programs (CIPs), Transportation Improvement Programs (TIPs), State Transportation Improvement Programs (STIPs), etc.

Task 3.1.4: Review demographic data

This task includes historic, existing and projected data for population, households and employment.

Task 3.1.5: Collect social/environmental data

This task includes coordinating with SHPO, DNR and OES to identify any environmental concerns within the corridor. We will utilize PCA website to identify potentially contaminated sites, as well as conduct an environmental justice analysis of low income and minority population concentrations in the vicinity of the corridor.

Task 3.2.1: Map social and environmental data

We will map existing GIS data at the state, regional and local levels to reflect social and environmental concerns to avoid in the corridor.

Task 3.2.2: Crash analysis

For up to six intersections, we will develop intersection crash and severity rates, identify areas above district and statewide averages, highlight types of crashes, etc. (includes ICE intersections).
Task 3.0 Deliverables: Review of existing studies and plans, map of social/environmental data, crash analysis and map of crash data.

Task 4.0 Existing Conditions Analysis

Task 4.1: Existing roadway characteristics memorandum

This memorandum will summarize existing roadway design elements and characteristics including roadway project history, functional classification, existing geometry, existing typical sections, existing pavement conditions and land use.

Task 4.2: Existing traffic characteristics memorandum

This memorandum will summarize existing traffic data and conditions, including operations and safety.

Task 4.3: Existing social and environmental characteristics memorandum

This memorandum will summarize existing social/environmental characteristics.

Task 4.0 Deliverables: Existing conditions characteristics memorandum, existing traffic conditions memorandum and existing social and environmental characteristics memorandum.
Task 5.0 Forecasted Conditions Analysis

Task 5.1: Land use analysis technical memorandum

A memorandum will be prepared that summarizes analysis and assumptions used to develop future land use projections for the corridor based on existing plans.

Task 5.2: Traffic forecasts technical memorandum

A memorandum will be prepared summarizing existing traffic and 2045 forecasted traffic along the corridor. Resources used in developing these forecasts include existing traffic counts, as well as 2020, 2030 and 2045 travel demand forecasts from the MAPO 2045 Transportation Plan and forecasted corridor land use developed in Task 5.1. A comparison of 2045 forecasts to existing corridor segment existing lane capacities will be made and Level of Service (LOS) grades will be assigned for the 2045 forecast year.

Task 5.3: Traffic operations technical memorandum

A memorandum will be prepared that summarizes existing and 2045 forecasted intersection operations and crash conditions. Traffic operations analyses will be performed at six key intersections (includes ICE intersections of TH 169 and Lee Boulevard). Existing and forecasted 2045 intersection LOS grades will be measured and impacts on parallel roadways will also be evaluated.

Task 5.0 Deliverables: Land use analysis technical memorandum, traffic forecasts technical memorandum and traffic operations analysis technical memorandum.

Task 5.0 Optional Deliverable: An origin-destination trip analysis will also be performed to obtain a better understanding of alternative trip routes within the Belgrade Avenue travel shed and where people are coming from and going to. This analysis will be helpful in analyzing impacts to Belgrade Avenue parallel routes and developing Belgrade Avenue travel demand forecasts.

Task 6.0 Alternatives Development, Evaluation & Screening

Task 6.1: Alternatives development and evaluation

The conceptual alternatives development and evaluation will focus on developing and evaluating four to six typical cross section design alternatives and intersection design/intersection control alternatives.

The purpose of the concept alternatives development and evaluation process will be to identify typical design cross-sections and specific intersection designs/intersection controls that best address identified traffic operation and other needs.
Preferred typical sections could vary in different parts of the corridor depending on land use and redevelopment plans, traffic operation needs, multimodal needs, available right of way, parking needs and a variety of other factors. An evaluation matrix will be prepared that will consider overarching corridor goals, as well as more customized goals that may be desired for certain segments of the corridor, such as residential and business district areas.

A technical memorandum will be prepared to summarize the typical section alternatives developed and evaluated, criteria used in the screening process and preferred design recommendations.

**Task 6.0 Deliverables**: Four to six typical section alternatives; intersection design concepts and intersection control alternatives for each intersection, an alternatives evaluation matrix, preferred typical design cross-sections and intersection design concepts, and a technical memorandum summarizing the concept alternatives development, evaluation and screening process.

---

**Task 7.0 Preferred Preliminary Design Layout**

**Task 7.1: Preferred preliminary design layout**

Based upon the preferred typical cross-sections and intersection designs arrived at during the alternatives development and evaluation in Task 6.1, a preferred preliminary design layout will be developed for the entire corridor. The preferred preliminary design layout will be developed at a reasonable level of detail including but not limited to: number and width of lanes; vertical and horizontal alignments to determine right of way widths and slope easements; intersection configuration including turn lanes and traffic control; drainage, major water and sewer and utility relocations; and bicycle, pedestrian and transit facilities. This includes a project description and up to two revisions.

**Task 7.0 Deliverables**: Preferred preliminary design layout for the entire corridor and associated cost estimate and project description.

**Task 7.0 Optional Deliverable**: Three rendered enlargement plan sheet drawings will be prepared at strategic locations along the corridor to reflect the typical cross-sections associated with the preferred preliminary design layout. Rendered drawings will illustrate roadway lanes, on-street parking, bicycle/pedestrian, transit, landscaping, lighting, and other features.

The WSB landscape architecture team of Robert Slipka and Samantha McKinney will lead development of these renderings. Robert is a licensed landscape architect in the State of Minnesota and Samantha also has extensive landscape architecture experience producing rendered drawings of preliminary design layouts. WSB has found that renderings of preliminary design cross-sections can be particularly helpful in communicating to elected officials and the general public design details that can sometimes be confusing or difficult to interpret in normal engineer-style preliminary design layouts. Robert and Samantha can create these renderings in a way that allow the viewer to better feel and understand the experience of a driver, pedestrian and bicyclist for the recommended design. An example of Robert and Samantha’s rendering work on a similar urban type corridor can be found in Appendix C.
Task 8.0 Implementation Plan & Cost Estimates

Task 8.1: Implementation plan and cost estimates

A technical memorandum will be prepared summarizing an implementation plan for the preferred preliminary design layout. Construction and right of way costs will be summarized and packaged into project phases, including potential federal, state and local funding sources and short- and long-range elements.

Task 8.0 Deliverables: Implementation plan and cost estimates.

Task 9.0: Report Preparation

Task 9.1: Draft/final corridor study report

A draft and final corridor study report will be prepared. The City of North Mankato, MAPO, and MnDOT management will have an opportunity to review the draft report. One round of edits are assumed. All technical memorandum text, maps, tables, exhibits, and relevant appendices will be assembled into a final report format, along with public input, study recommendations and next steps. The report will be provided in Adobe PDF, Microsoft Word and hard copy.

Task 9.0 Deliverables: Draft and final corridor study report.
## Proposed Schedule

### TASK 1.0: Project Management

<table>
<thead>
<tr>
<th>Ongoing Task</th>
<th>Task 1.1: Weekly Project Coordination and Communication</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1.2: Quality Assurance/Quality Control</td>
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<tr>
<td>Optional Task</td>
<td>Project Kick-Off Meeting</td>
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</tbody>
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### TASK 2.0: Public Involvement Plan

<table>
<thead>
<tr>
<th>Ongoing Task</th>
<th>Task 2.1: MAPO Technical Advisory Meetings (Assumes two meetings, third meeting optional)</th>
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<tbody>
<tr>
<td></td>
<td>Task 2.2: City of North Mankato Staff Meetings (Assumes two meetings, third meeting optional)</td>
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<tr>
<td></td>
<td>Task 2.3: City of North Mankato City Council Meetings (Assumes two meetings)</td>
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<td></td>
<td>Task 2.4: MAPO Policy Board Meetings (Assumes two meetings)</td>
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<td></td>
<td>Task 2.5: Public Meetings (Assumes two meetings, third meeting optional)</td>
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<td></td>
<td>Task 2.6: Monthly Technical Memo Updates to MPO TAC and Policy Board</td>
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<td>Task 2.7: Regular City/MAPO Website &amp; Facebook Updates</td>
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<tr>
<td>Optional Task</td>
<td>Task 2.8: Traditionally Underserved Population Outreach</td>
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### TASK 3.0: Data Collection & Base Mapping

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<tr>
<th>Ongoing Task</th>
<th>Task 3.0: Data Collection &amp; Base Mapping</th>
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### TASK 4.0: Existing Conditions Analysis

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### TASK 5.0: Forecasted Conditions Analysis

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### TASK 6.0: Alternatives Development, Evaluation & Screening

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<th>Ongoing Task</th>
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### TASK 7.0: Preferred Preliminary Design Layout

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<th>Ongoing Task</th>
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### TASK 8.0: Implementation Plan & Cost Estimates

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<th>Ongoing Task</th>
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### TASK 9.0: Corridor Study Report Preparation

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### Schedule and Budget Detail

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<tr>
<th>Legend</th>
<th>2016</th>
<th>2017</th>
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**Project Management/Quality Control**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Public/Agency Involvement**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Deliverable**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Optional Task**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Public Open House Meeting**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Elected Official Meeting**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Preferred Preliminary Design Layout**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Implementation Plan/ Cost Estimates**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Prepare Draft Corridor Study Report**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Draft Corridor Study Report Review By City of North Mankato, MAPO and MnDOT**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May

**Final Corridor Study Report**
- May
- June
- July
- Aug.
- Sept.
- Oct.
- Nov.
- Dec.
- Jan.
- Feb.
- March
- April
- May
AGENDA RECOMMENDATION

Agenda Heading: Intelligent Transportation Systems (ITS) Architecture
Resolution No: 4.3

**Agenda Item**: Intelligent Transportation Systems (ITS) Architecture Resolution

**Recommendation Action(s)**: Motion to Approve the Attached Resolution

**Summary**: The US Department of Transportation has adopted a national intelligent transportation systems (ITS) architecture which specifies the proper relationships, such as information exchanges, among the components of all ITS projects implemented (in whole or in part) with federal funds. The use of the Minnesota Statewide Regional ITS Architecture provides a positive move to fully meet planning requirements. Additionally, the implementation of the Minnesota Statewide Regional ITS Architecture supports FHWA's planning initiative. The purpose of the Rule/Policy is to foster integration of the deployment of regional ITS systems. Regional ITS architectures help guide the integration of ITS components. During the development of a regional ITS architecture, agencies that own and operate transportation systems must together consider current and future needs to ensure that today’s processes and projects are compatible with future ITS projects.

To fulfill one of the requirements for 23 CFR 940, MnDOT needs to have every MPO approve the attached resolution that adopts the Minnesota Statewide Regional ITS Architecture.

Jim McCarthy from FHWA presented to the MAPO TAC on ITS and the MnDOT structure for Intelligent Transportation Systems.

At the April 21st MAPO TAC meeting, the TAC members recommend that the MAPO Policy Board accept the Bolton & Menk Riverfront Drive proposal.

**Attachments:**
1) ITS Memo
2) ITS Resolution
3) Intelligent Transportation Systems (ITS) Architecture Presentation
Date: May 14, 2015

Subject: Implementation of 23 CFR 940 Regulations – ITS Architecture and Systems Engineering for ITS Projects

From: James McCarthy, PE, PTOE, Traffic Operations Engineer
St. Paul, Minnesota

To: Sue Mulvihill – Deputy Commissioner & Chief Engineer
Nancy Daubenberger – Engineering Services Division Director
Mitch Rasmussen – State Aid Division Director
Tim Henkel – Modal Planning & Program Management Division Director
Michael Barnes – Operations Division Director
District Traffic Engineers
District State Aid Engineers

This memo informs you of a change to the oversight and management of Intelligent Transportation Systems (ITS) projects or projects with an ITS component and supports the new FHWA/MnDOT Stewardship Agreement.

Implementation

In order to fulfill the requirements of 23 CFR 940, MnDOT needs to complete the following tasks in the next 12 months. This action will meet the intent of 23 CFR Section 940.1-940.11 and complete the implementation which was required in 2005.

1. Implement new HPDP (Highway Project Development Process) Procedure – ITS Systems Engineering Requirement (Enclosed)
2. Implement new SALT (State Aid for Local Transportation) requirement to follow HPDP Procedure – ITS Systems Engineering Requirement.
3. Adoption of Minnesota Statewide Regional ITS Architecture by all MPOs in Minnesota.

The implementation of this Rule/Policy will fulfill the requirement for all ITS projects or projects with an ITS component funded in whole or in part from the Highway Trust Fund. Any ITS Projects or projects with an ITS component authorized after June 30, 2016, shall fully comply with 23 CFR 940 and be properly documented.
Background

*Intelligent Transportation Systems (ITS) means electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.*

The FHWA Division Office has been working with the MnDOT Office of Traffic, Safety and Technology (OTST) to improve the implementation of 23 CFR 940 in Minnesota. The Transportation Equity Act for the 21st Century includes this requirement for a 2005 implementation. We ask for your full support in the completion of this implementation to be in conformance with the National and Regional ITS Architecture, along with the appropriate ITS standards.

Particular project implementation and system integration issues will be resolved with the consistent use of systems engineering. Three examples are provided to help explain why systems engineering is needed for successful technology deployment.

1. The integration of Blue Line LRT (Light Rail Transit) operations with Hiawatha Avenue signal operations – the system design flaws were fully documented in a post construction expert review of this project’s design. This project lacked good systems engineering.
2. Minneapolis TMC/Signal System – the use of systems engineering on this project significantly reduced communication costs and integration with other city agencies versus the original project concept that was developed prior to the systems engineering process.
3. Central Avenue BRT (Bus Rapid Transit) – Because systems engineering was not completed on this project the initial BRT application is unique in its deployment and is not expandable or reproducible on other corridors.

The current management of ITS projects does not provide documentation of compliance with the Systems Engineering regulation; and more importantly is allowing some projects to move forward without proper consideration of interoperability and future expansion needs.

The staff of the OTST Office have been diligent and aggressive in improving the use of the ITS Architecture tools to better bring the planning of ITS projects into conformance with the regulation in a thoughtful and productive manner. Through this effort, the OTST staff has created a model practice for use of ITS Architecture to plan and prioritize ITS projects. The OTST staff has also appropriately addressed the systems engineering requirements in 23 CFR 940 and related these requirements to the new ITS Design Manual procedures.

With the implementation of these improved tools and guidance we would consider MnDOT and all its sub-recipients in conformance with the National and Regional ITS Architecture along with the Systems Engineering requirements.
The use of the 2014 Minnesota Statewide Regional ITS Architecture, provides a positive move to fully meet SAFETEA-LU planning requirement 23 CFR 450.306(7), “Promote efficient system management and operation”. Additionally, the implementation of the Minnesota Statewide Regional ITS Architecture supports FHWA’s Planning for Operations Initiative. The purpose of the Rule/Policy is to foster integration of the deployment of regional ITS systems. Regional ITS architectures help guide the integration of ITS components. During the development of a regional ITS architecture, agencies that own and operate transportation systems must together consider current and future needs to ensure that today’s processes and projects are compatible with future ITS projects.

23 CFR 940 Policy Requirements

The key elements of the regulation are presented here for your reference. The complete regulation is attached.

940.5 Policy -- ITS projects shall conform to the National ITS Architecture and standards in accordance with the requirements contained in this part. Conformance with the National ITS Architecture is interpreted to mean the use of the National ITS Architecture to develop a regional ITS architecture, and the subsequent adherence of all ITS projects to that regional ITS architecture. Development of the regional ITS architecture should be consistent with the transportation planning process for Statewide and Metropolitan Transportation Planning.

940.7. a. Applicability -- All ITS projects that are funded in whole or in part with the highway trust fund, including those on the National Highway System (NHS) and on non-NHS facilities, are subject to these provisions.

940.11.a Project Implementation -- All ITS projects funded with highway trust funds shall be based on a systems engineering analysis. The analysis should be on a scale commensurate with the project scope.

Questions

For more information on the technical contents of this memorandum, please contact Rashmi Brewer at Rashmi.Brewer@state.mn.us.

Attachments:

- 23 CFR 940
- HPDP Guidance

JPM/jpm
cc: 1 MnDOT – Sue Groth
1 MnDOT – Ray Starr
1 MnDOT – Cory Johnson
1 MnDOT – Rashmi Brewer
1 FHWA – Dave Scott
1 eDocs – add number when saved.
§ 940.1 Purpose.

This regulation provides policies and procedures for implementing section 5206(e) of the Transportation Equity Act for the 21st Century (TEA-21), Public Law 105-178, 112 Stat. 457, pertaining to conformance with the National Intelligent Transportation Systems Architecture and Standards.

§ 940.3 Definitions.

Intelligent Transportation System (ITS) means electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

ITS project means any project that in whole or in part funds the acquisition of technologies or systems of technologies that provide or significantly contribute to the provision of one or more ITS user services as defined in the National ITS Architecture.

Major ITS project means any ITS project that implements part of a regional ITS initiative that is multi-jurisdictional, multi-modal, or otherwise affects regional integration of ITS systems.

National ITS Architecture (also “national architecture”) means a common framework for ITS interoperability. The National ITS Architecture comprises the logical architecture and physical architecture which satisfy a defined set of user services. The National ITS Architecture is maintained by the United States Department of Transportation (DOT) and is available on the DOT web site at http://www.its.dot.gov.

Project level ITS architecture is a framework that identifies the institutional agreement and technical integration necessary to interface a major ITS project with other ITS projects and systems.

Region is the geographical area that identifies the boundaries of the regional ITS architecture and is
defined by and based on the needs of the participating agencies and other stakeholders. In metropolitan areas, a region should be no less than the boundaries of the metropolitan planning area.

Regional ITS architecture means a regional framework for ensuring institutional agreement and technical integration for the implementation of ITS projects or groups of projects.

Systems engineering is a structured process for arriving at a final design of a system. The final design is selected from a number of alternatives that would accomplish the same objectives and considers the total life-cycle of the project including not only the technical merits of potential solutions but also the costs and relative value of alternatives.

§ 940.5 Policy.

ITS projects shall conform to the National ITS Architecture and standards in accordance with the requirements contained in this part. Conformance with the National ITS Architecture is interpreted to mean the use of the National ITS Architecture to develop a regional ITS architecture, and the subsequent adherence of all ITS projects to that regional ITS architecture. Development of the regional ITS architecture should be consistent with the transportation planning process for Statewide and Metropolitan Transportation Planning.

§ 940.7 Applicability.

(a) All ITS projects that are funded in whole or in part with the highway trust fund, including those on the National Highway System (NHS) and on non-NHS facilities, are subject to these provisions.

(b) The Secretary may authorize exceptions for:

(1) Projects designed to achieve specific research objectives outlined in the National ITS Program Plan under section 5205 of the TEA-21, or the Surface Transportation Research and Development Strategic Plan developed under 23 U.S.C. 508; or

(2) The upgrade or expansion of an ITS system in existence on the date of enactment of the TEA-21, if the Secretary determines that the upgrade or expansion:

(i) Would not adversely affect the goals or purposes of Subtitle C (Intelligent Transportation Systems Act of 1998) of the TEA-21;

(ii) Is carried out before the end of the useful life of such system; and

(iii) Is cost-effective as compared to alternatives that would meet the conformity requirement of this
rule.

(c) These provisions do not apply to funds used for operations and maintenance of an ITS system in existence on June 9, 1998.

§ 940.9 Regional ITS architecture.

(a) A regional ITS architecture shall be developed to guide the development of ITS projects and programs and be consistent with ITS strategies and projects contained in applicable transportation plans. The National ITS Architecture shall be used as a resource in the development of the regional ITS architecture. The regional ITS architecture shall be on a scale commensurate with the scope of ITS investment in the region. Provision should be made to include participation from the following agencies, as appropriate, in the development of the regional ITS architecture: highway agencies; public safety agencies (e.g., police, fire, emergency/medical); transit operators; Federal lands agencies; State motor carrier agencies; and other operating agencies necessary to fully address regional ITS integration.

(b) Any region that is currently implementing ITS projects shall have a regional ITS architecture by [Insert date 30 days after publication in the Federal Register plus 48 months].

(c) All other regions not currently implementing ITS projects shall have a regional ITS architecture within four years of the first ITS project for that region advancing to final design.

(d) The regional ITS architecture shall include, at a minimum, the following:

(1) A description of the region;

(2) Identification of participating agencies and other stakeholders;

(3) An operational concept that identifies the roles and responsibilities of participating agencies and stakeholders in the operation and implementation of the systems included in the regional ITS architecture;

(4) Any agreements (existing or new) required for operations, including at a minimum those affecting ITS project interoperability, utilization of ITS related standards, and the operation of the projects identified in the regional ITS architecture;

(5) System functional requirements;

(6) Interface requirements and information exchanges with planned and existing systems and subsystems (for example, subsystems and architecture flows as defined in the National ITS Architecture);

(7) Identification of ITS standards supporting regional and national interoperability; and
(8) The sequence of projects required for implementation.

(e) Existing regional ITS architectures that meet all of the requirements of paragraph (d) of this section shall be considered to satisfy the requirements of paragraph (a) of this section.

(f) The agencies and other stakeholders participating in the development of the regional ITS architecture shall develop and implement procedures and responsibilities for maintaining it, as needs evolve within the region.

§ 940.11 Project implementation.

(a) All ITS projects funded with highway trust funds shall be based on a systems engineering analysis.

(b) The analysis should be on a scale commensurate with the project scope.

(c) The systems engineering analysis shall include, at a minimum:

(1) Identification of portions of the regional ITS architecture being implemented (or if a regional ITS architecture does not exist, the applicable portions of the National ITS Architecture);

(2) Identification of participating agencies roles and responsibilities;

(3) Requirements definitions;

(4) Analysis of alternative system configurations and technology options to meet requirements;

(5) Procurement options;

(6) Identification of applicable ITS standards and testing procedures; and

(7) Procedures and resources necessary for operations and management of the system.
(d) Upon completion of the regional ITS architecture required in §§ 940.9(b) or 940.9(c), the final design of all ITS projects funded with highway trust funds shall accommodate the interface requirements and information exchanges as specified in the regional ITS architecture. If the final design of the ITS project is inconsistent with the regional ITS architecture, then the regional ITS architecture shall be updated as provided in the process defined in § 940.9(f) to reflect the changes.

(e) Prior to the completion of the regional ITS architecture, any major ITS project funded with highway trust funds that advances to final design shall have a project level ITS architecture that is coordinated with the development of the regional ITS architecture. The final design of the major ITS project shall accommodate the interface requirements and information exchanges as specified in this project level ITS architecture. If the project final design is inconsistent with the project level ITS architecture, then the project level ITS architecture shall be updated to reflect the changes. The project level ITS architecture is based on the results of the systems engineering analysis, and includes the following:

1) A description of the scope of the ITS project;

2) An operational concept that identifies the roles and responsibilities of participating agencies and stakeholders in the operation and implementation of the ITS project;

3) Functional requirements of the ITS project;

4) Interface requirements and information exchanges between the ITS project and other planned and existing systems and subsystems; and

5) Identification of applicable ITS standards.

(f) All ITS projects funded with highway trust funds shall use applicable ITS standards and interoperability tests that have been officially adopted through rulemaking by the DOT.

(g) Any ITS project that has advanced to final design by [Insert the effective date of this rule] is exempt from the requirements of paragraphs (d) through (f) of this section.

§ 940.13 Project administration.

(a) Prior to authorization of highway trust funds for construction or implementation of ITS projects, compliance with § 940.11 shall be demonstrated.

(b) Compliance with this part will be monitored under Federal-aid oversight procedures as provided under 23 U.S.C. 106 and 133.
A RESOLUTION OF THE MANKATO/NORTH MANKATO AREA
PLANNING ORGANIZATION RECOGNIZING THE MINNESOTA
DEPARTMENT OF TRANSPORTATION STATEWIDE REGIONAL ITS
ARCHITECTURE

Whereas, the US Department of Transportation has an adopted national intelligent transportation systems (ITS) architecture which specifies the proper relationships, such as information exchanges, among the components of all ITS projects implemented (in whole or in part) with federal funds; and

Whereas, the development of a Regional Intelligent Transportation Systems (ITS) Architecture has been mandated in national transportation legislation in an effort to integrate technological solutions into the transportation network to alleviate congestion and improve safety and efficiency; and

Whereas, the Minnesota Department of Transportation has updated the Minnesota Statewide Regional ITS Architecture to address changes statewide relating to ITS Systems, Stakeholders, Interconnections, Service Packages, and Project Inventory; and in conformance with the National ITS Architecture and Standards in accordance with 23 CFR 940 (FHWA Final Rule 940); and

Whereas, the FHWA Final Rule 940 ("Intelligent Transportation System Architecture and Standards") and Federal Transit Administration's "National Architecture Policy on Transit Projects" require each metropolitan planning organization (MPO) to adopt or recognize a regional ITS architecture that is consistent with its Long-Range Transportation Plan; and

Whereas, ITS projects in a metropolitan transportation planning area must be consistent with a Regional ITS Architecture to be eligible to receive federal funds for implementation; and

Whereas, the Mankato/North Mankato Area Planning Organization recognizes the Minnesota Statewide Regional ITS Architecture as the regional architecture that shall govern all ITS improvements statewide and within its metropolitan transportation planning area;

Now, therefore, it be resolved by the Mankato/North Mankato Area Planning Organization that it hereby recognizes the Updated Minnesota Department of Transportation's Statewide Regional ITS Architecture and any subsequent updates as the regional architecture that shall govern all ITS improvements within its metropolitan transportation planning area.

CERTIFICATION

State of Minnesota

I hereby certify that the foregoing Resolution is a true and correct copy of the resolution presented to and adopted by the Mankato/North Mankato Area Planning Organization at a duly authorized meeting thereof, held on the __________day of__________, as shown by the minutes of said meeting in my possession.

____________________________________  ________________________
Chair                            Date

____________________________________  ________________________
Executive Director                                   Date
Minnesota Statewide Regional ITS Architecture
Agenda

- Federal Regulations and ITS Architecture
- Regional ITS Architecture Supports the Transportation Planning Process
- Development of ITS Architecture with Stakeholder Involvement
- Use of ITS Architecture & Benefits
- Next Steps → Adoption of MN Statewide Regional ITS Architecture by all MPOs in Minnesota
What Is…

- **ITS? Intelligent Transportation Systems**

  *Intelligent Transportation Systems (ITS) means electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.*

- **ITS Architecture?**
  
  - Describes the region, boundaries, participating agencies & stakeholders
  - Defines how agencies, modes, and systems will interact and operate
  - Provides framework for planning, defining, and integrating your ITS
ITS Architecture is Required

- 23 CFR 940 FHWA’s Final Rule/FTA’s Policy
  → Foster Integration of Regional ITS Systems
- When Rule 940 Applies
  Rule 940 is required for the following:
  • All ITS projects funded (in whole or in part) with the highway trust fund; (Includes National Highway System (NHS) and non-NHS facilities)
  • All State Funded ITS projects in which ITS component(s) will be connected/integrated to another ITS component, project or system.

This allows projects to move forward, taking proper consideration of interoperability and future expansion needs to enable full integration of ITS.
Regulatory Requirements

- 23 CFR 450.306 Scope of Metropolitan Transportation Process
  - Subsection a.
    (6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
  - Subsection f.
    The metropolitan transportation planning process shall (to the maximum extent practicable) be consistent with the development of applicable regional intelligent transportation systems (ITS) architectures, as defined in 23 CFR part 940.
Regional ITS Architecture Supports the Transportation Planning

- Planning ITS projects to support regional goals
- Maximize integration of projects identified by the planning process
- Relationship to both → On-going & Iterative
- Refinements support maintenance efforts over time
Example: Systems Integration Within National Framework

**Transit Management Subsystem**
- Transit Management Center
- Central Computer System

**Communications**
- Wireline communications
- Wide area wireless communications
- Vehicle to vehicle communications

**Travelers**
- Remote Traveler Support
- Personal Information Access

**Centers**
- Info. Service Provider
- Emissions Mgmt.
- Emergency Mgmt.
- Toll Admin.
- Comm. Vehicle Admin

**Vehicle**
- Transit
- Commercial
- Emergency

**Roadside**
- Roadway
- Toll Collection
- Parking Mgmt.
- Commercial Vehicle Check

**Roadway Subsystem**
- Signal Control
- Controller Cabinet
- Surveillance
- Loops

**Transit Management**
- Transit Mgmt.
- Freight & Fleet Mgmt.

**Emergency Mgmt.**
- Emis. Mgmt.
- Toll Mgmt.
- Transit Mgmt.

**Commercial Mgmt.**
- Planning

**Vehicle to Vehicle**
- Communications

**Commercial Vehicle Check**
- Info. Service Provider
- Emissions Mgmt.
- Emergency Mgmt.
- Toll Admin.
- Comm. Vehicle Admin

**Vehicle**
- Remote Traveler Support
- Personal Information Access

**Travel**
- Transit
- Commercial
- Emergency

**Emergency**
- Emis. Mgmt.
- Toll Mgmt.
- Transit Mgmt.
- Planning
Development of 2014 MN Statewide ITS Architecture

“A Regional ITS Architecture provides a vision of how Intelligent Transportation Systems (ITS) and ITS projects can be deployed to satisfy the goals and objectives outlined in the Long Range Plan.”

- Stakeholder Involvement → Coordinated, Collaborated, & Developed w/a representative group of stakeholders for Planning, Operations, & Maintenance
  - Transit
  - Maintenance
  - MNDOT RTMC
  - MNDOT Districts
  - Local Agencies

23 CFR 450.208 Policy
ITS Architecture Resources

- ITS Website:
  - http://www.dot.state.mn.us/its/

- ITS Architecture:

- ITS Architecture, Volume 9 ITS Initiatives and Project Concepts for Implementation:

- FHWA Implementation Memo:
  - http://www.dot.state.mn.us/its/docs/fhwaimplementationmemo.pdf
Benefits of Using ITS Architecture

- Improves regional thinking of operations
- Ensures compatibility
- Enables future expansion
- Brings stakeholders together
- Allows information exchange

Lower Cost  ITS Integration  Less Risk
Adoption of 2014 ITS Architecture

- Provides MPO with a useful planning tool for managing ITS funding decisions (Volume 9)
  - Improves continuity across the project life cycle, from planning through project development and operations.
- Meets the intent of 23 CFR 940.9.b
  - Any region that is currently implementing ITS projects shall have a regional architecture.
- Formal adoption adds credibility to the Regional ITS Architecture
  - By establishing the process, tools, and support for architecture use and maintenance in these plans, the MPO can ensure financial support for these critical activities.
Thank You!

Contacts:

- **Rashmi S. Brewer, P.E.**
  MnDOT Office of Traffic, Safety and Technology
  Office: (651) 234–7063
  Email: Rashmi.Brewer@state.mn.us

- **Jim McCarthy, P.E., PTOE**
  FHWA Minnesota Division
  Office: (651) 291–6112
  Email: james.mccarthy@dot.gov
A meeting of the Technical Advisory Committee (TAC) of the Mankato Area Planning Organization was held on April 21, 2016, at 1:30 p.m. in the Minnesota Valley River Room of the Intergovernmental Center. Present were Landon Bode for Jeff Johnson – City of Mankato Public Works Director, Paul Vogel – MAPO Executive Director, Lisa Bigham – District 7 Minnesota Department of Transportation, Jake Huebsch – MAPO Transportation Planner, Jerry Kolander for Shari Allen – ISD 77, Ed Pankratz – Mankato Township, Sam Parker, Region Nine Development Commission, Al Forsberg – Blue Earth County Engineer, Karl Friedrichs – Lime Township, Brad Potter – City of Eagle Lake, Seth Greenwood – Nicollet County Public Works Director, Mark Anderson – City of Mankato Transit and Mike Fischer – City of North Mankato. Others present were: Michael McCarty - City of Mankato for Jeff Johnson as Landon Bode had to leave early and Jim McCarthy FHWA.

I. Call to Order

Vice Chair Greenwood called the meeting to order at 1:30 p.m.

II. Introductions

Introductions were made.

III. Approval of Agenda

Mr. Vogel moved and Mr. Potter seconded a motion to approve the agenda. With all voting in favor, the agenda was approved.

IV. Approval of Minutes, March 17, 2016

Mr. Kolander moved and Mr. Parker seconded a motion to approve the minutes. With all voting in favor, the minutes were approved.
V. New Business

1. Riverfront Drive Corridor Study Proposal

The MAPO received 4 proposals relating to Riverfront Drive Corridor Study RFP that was released on February 1st and closed on March 1st. On April 1st MAPO staff (Jake Huebsch & Paul Vogel) along Mark Anderson (City of Mankato Transit), Ronda Allis (MnDOT) and Landon Bode (City of Mankato Engineering Department) reviewed and ranked the study proposals.

Members based their scoring on the criteria outlined in the RFP which included:

Specialized expertise, capabilities and technical competence, as demonstrated by the Responder’s expressed project understanding, proposed project approach and methodology, project work plan, and project management techniques. 20%

Project background and experience, as demonstrated by the Responder’s ability, familiarity and experience with handling similar projects, and the qualifications and related experience of key staff members. 25%

The Responder’s record of past performance, including quality of work, ability to control costs, and ability to meet schedules. 25%

The availability of personnel and other specialized resources to perform the work within the specified time limit. 10%

Total price compared to other proposals. 20%

On the next page are cost and hours associated with the received proposals as well as the total and average scores based on the review and ranking process.
<table>
<thead>
<tr>
<th></th>
<th>WSB</th>
<th>SRF</th>
<th>Bolton &amp; Menk</th>
<th>ISG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>$142,103</td>
<td>$145,063</td>
<td>$140,121</td>
<td>$153,907</td>
</tr>
<tr>
<td>Hours</td>
<td>1,503</td>
<td>1,356</td>
<td>1,485</td>
<td>1,470</td>
</tr>
<tr>
<td>Rate/Person</td>
<td>$94.54</td>
<td>$106.97</td>
<td>$94.35</td>
<td>$104.69</td>
</tr>
</tbody>
</table>

Specialized expertise, capabilities and technical competence, as demonstrated by the Responder’s expressed project understanding, proposed project approach and methodology, project work plan, and project management techniques. **MAX 20 Points/Person (5 People Total)**

<table>
<thead>
<tr>
<th></th>
<th>WSB</th>
<th>SRF</th>
<th>Bolton &amp; Menk</th>
<th>ISG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>87</td>
<td>87</td>
<td>96</td>
<td>66</td>
</tr>
</tbody>
</table>

Project background and experience, as demonstrated by the Responder’s ability, familiarity and experience with handling similar projects, and the qualifications and related experience of key staff members. **MAX 25 Points/Person (5 People Total)**

<table>
<thead>
<tr>
<th></th>
<th>WSB</th>
<th>SRF</th>
<th>Bolton &amp; Menk</th>
<th>ISG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>117</td>
<td>114</td>
<td>121</td>
<td>78</td>
</tr>
</tbody>
</table>

The Responder’s record of past performance, including quality of work, ability to control costs, and ability to meet schedules. **MAX 25 Points/Person (5 People Total)**

<table>
<thead>
<tr>
<th></th>
<th>WSB</th>
<th>SRF</th>
<th>Bolton &amp; Menk</th>
<th>ISG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>107</td>
<td>113</td>
<td>114</td>
<td>82</td>
</tr>
</tbody>
</table>

The availability of personnel and other specialized resources to perform the work within the specified time limit. **MAX 10 Points/Person (5 People Total)**

<table>
<thead>
<tr>
<th></th>
<th>WSB</th>
<th>SRF</th>
<th>Bolton &amp; Menk</th>
<th>ISG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>41</td>
<td>42</td>
<td>47</td>
<td>26</td>
</tr>
</tbody>
</table>

Total price compared to other proposals. **MAX 20 Points/Person (5 People Total)**

<table>
<thead>
<tr>
<th></th>
<th>WSB</th>
<th>SRF</th>
<th>Bolton &amp; Menk</th>
<th>ISG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>77.53</td>
<td>75.8</td>
<td>96.79</td>
<td>58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSB</td>
<td>429.53</td>
<td>85.91</td>
</tr>
<tr>
<td>SRF</td>
<td>431.8</td>
<td>86.36</td>
</tr>
<tr>
<td>Bolton &amp; Menk</td>
<td>474.79</td>
<td>94.96</td>
</tr>
<tr>
<td>ISG</td>
<td>310</td>
<td>62</td>
</tr>
</tbody>
</table>

Mr. Vogel moved and Mr. Friedrichs seconded the motion to recommend to the MAPO Policy Board that the MAPO accept Bolton & Menk’s Riverfront Drive Corridor Study Proposal. With all voting in favor, the motion was approved.
2. **Belgrade Avenue Corridor Study Proposal Recommendation**

The MAPO received 4 proposals relating to Belgrade Avenue Corridor Study RFP that was released on March 1st and closed on April 1st. On April 15th MAPO staff (Jake Huebsch) along Michael Fischer (City of North Mankato Community Development), Seth Greenwood (Nicollet County Engineer), Sam Parker (Region 9 Development Commission) and Brad Swanson (City of North Mankato Public Works) reviewed and ranked the study proposals.

Members based their scoring on the criteria outlined in the RFP which included:

Specialized expertise, capabilities and technical competence, as demonstrated by the Responder’s expressed project understanding, proposed project approach and methodology, project work plan, and project management techniques. 25%

Project background and experience, as demonstrated by the Responder’s ability, familiarity and experience with handling similar projects, and the qualifications and related experience of key staff members. 25%

The Responder’s record of past performance, including quality of work, ability to control costs, and ability to meet schedules. 25%

The availability of personnel and other specialized resources to perform the work within the specified time limit. 10%

Total price compared to other proposals. 15%

On the next page are the cost and hours associated with the received proposals as well as the total and average scores based on the review and ranking process.
<table>
<thead>
<tr>
<th>Company</th>
<th>Price</th>
<th>Hours</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSB</td>
<td>$71,960.00</td>
<td>761</td>
<td>$94.56</td>
</tr>
<tr>
<td>Kimley-Horn</td>
<td>$69,971.81</td>
<td>560</td>
<td>$124.95</td>
</tr>
<tr>
<td>Bolton &amp; Menk</td>
<td>$55,062.00</td>
<td>662</td>
<td>$83.18</td>
</tr>
<tr>
<td>ISG</td>
<td>$77,703.50</td>
<td>735</td>
<td>$105.72</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>WSB</th>
<th>Kimley-Horn</th>
<th>Bolton &amp; Menk</th>
<th>ISG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialized expertise, capabilities, and technical competence, as demonstrated by the Responder’s expressed project understanding, proposed project approach and methodology, project work plan, and project management techniques. <strong>MAX 25 Points/Person 5 People Total</strong></td>
<td>107</td>
<td>107</td>
<td>108</td>
<td>90</td>
</tr>
<tr>
<td>Project background and experience, as demonstrated by the Responder’s ability, familiarity and experience with handling similar projects, and the qualifications and related experience of key staff members. <strong>MAX 25 Points/Person 5 People Total</strong></td>
<td>109</td>
<td>108</td>
<td>119</td>
<td>87</td>
</tr>
<tr>
<td>The Responder’s record of past performance, including quality of work, ability to control costs, and ability to meet schedules. <strong>MAX 25 Points/Person 5 People Total</strong></td>
<td>108</td>
<td>108</td>
<td>118</td>
<td>87</td>
</tr>
<tr>
<td>The availability of personnel and other specialized resources to perform the work within the specified time limit. <strong>MAX 10 Points/Person 5 People Total</strong></td>
<td>38</td>
<td>38</td>
<td>46</td>
<td>40</td>
</tr>
<tr>
<td>Total price compared to other proposals <strong>MAX 15 Points/Person 5 People Total</strong></td>
<td>43</td>
<td>53</td>
<td>75</td>
<td>28</td>
</tr>
</tbody>
</table>

**TOTAL AVERAGE**

<table>
<thead>
<tr>
<th></th>
<th>405</th>
<th>414</th>
<th>476</th>
<th>337</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>81</td>
<td>82.8</td>
<td>95.2</td>
<td>67.4</td>
</tr>
</tbody>
</table>

Mr. Fischer moved and Mr. Parker seconded the motion to recommend to the MAPO Policy Board that the MAPO accept Bolton & Menk’s Belgrade Avenue Corridor Study Proposal. With all voting in favor, the motion was approved.

Mr. McCarthy from FHWA presented on Intelligent Transportation System (ITS). Mr. McCarthy indicted that the US Department of Transportation has an adopted national intelligent transportation systems (ITS) architecture which specifies the proper relationships, such as information exchanges, among the components of all ITS projects implemented (in whole or in part) with federal funds. The use of the Minnesota Statewide Regional ITS Architecture, provides a positive move to fully meet planning requirements. Additionally, the implementation of the Minnesota Statewide Regional ITS Architecture supports FHWA’s planning for operations initiative. The purpose of the Rule/Policy is to foster integration of the deployment of regional ITS systems. Regional ITS architectures help guide the integration of ITS components. During the development of a regional ITS architecture, agencies that own and operate transportation systems must together consider current and future needs to ensure that today’s processes and projects are compatible with future ITS projects.

Mr. Anderson moved and Mr. Forsberg seconded the motion to recommend to the MAPO Policy Board that the MAPO adopt the presented ITS resolution. With all voting in favor, the motion was approved.

4. **Presentation on Mini-Roundabouts – Jim McCarthy, FHWA**

Mr. McCarthy with FHWA presented on mini-roundabouts which are roundabouts that are smaller than the typical sized roundabout. The inscribed circle diameter of a typical roundabout is 132 feet the mini-roundabout is supposed to have diameter of less than 90 feet so it can fit inside a standard intersection. Mr. McCarthy heighted constructed mini-roundabouts with the State of Minnesota and other in the United States.

5. **Election of MAPO TAC Chair and Vice Chair**

Mr. Fischer was nominated by Mr. Johnson via email to serve as the MAPO TAC chair for a two year term. Mr. Greenwood indicated he would be willing to serve as vice chair for another two year term.

Mr. Vogel motioned and Mr. Potter seconded the motion to have Mr. Fischer serve and MAPO TAC chair and Mr. Greenwood to serve as MAPO TAC vice chair. With all voting in favor, the motion was approved.

6. **Other Business**

None

7. **Adjournment**

Mr. McCarty moved and Mr. Vogel seconded a motion to adjourn the meeting. With all voting in favor, the motion carried unanimously.

________________________
Vice Chair, Mr. Greenwood
We've wrestled with the hard decisions about where to spend money. With projected revenue of $21 billion and needs that top $36 billion, not everything we want to see on the system will happen. Considering public input, policy direction from the state and federal levels, and policy and technical considerations coming from MnDOT, we’ve drafted a plan of investments for the next 20 years (2018-2037). Below is a chart showing where the money was invested, broken down by amount and percentage, and the projected outcomes of these investments.

### Draft Investment Direction

**MNSHIP 2018 - 2037**

- **Walking** $516 M 2.4%
- **Freight** $611 M 2.9%
- **Greater MN mobility** $26 M 0.1%
- **Twin Cities area mobility** $362 M 1.7%
- **New safety investments** $682 M 3.2%
- **Rest areas/weigh stations** $61 M 0.4%
- **Highway ownership** $93 M 0.4%
- **Regional/local priorities** $436 M 2.1%
- **Small programs** $559 M 2.6%
- **Project delivery** $3,195 M 15.1%

### Investment category

<table>
<thead>
<tr>
<th>Category</th>
<th>Current conditions</th>
<th>Projected outcomes by 2037</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highway surfaces/pavements</strong></td>
<td>- Interstate — 1.9% poor; 12.4 years average remaining service life</td>
<td>- Interstate — 4.5% poor; 10.4 years average remaining service life</td>
</tr>
<tr>
<td></td>
<td>- Remaining National Highway System — 2.0% poor; 10 years average remaining service life</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Non-National Highway System — 4% poor; 8.7 years average remaining service life</td>
<td></td>
</tr>
<tr>
<td><strong>Bridges</strong></td>
<td>- Current conditions: National Highway System — 4.5% poor</td>
<td>- Projected condition in 2037: National Highway System — 5% poor</td>
</tr>
<tr>
<td></td>
<td>- Non-National Highway System — 1.3% poor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Non-National Highway System — 7.8% poor</td>
<td></td>
</tr>
<tr>
<td><strong>Supporting infrastructure</strong></td>
<td>- The condition of more culverts, signals, signs, lighting, rest areas, and retaining walls are expected to deteriorate into poor condition.</td>
<td>For example, currently the percentage of culverts in poor condition is 10%. By 2037, it is projected that 14-15% of culverts will be in poor condition.</td>
</tr>
<tr>
<td><strong>Highway ownership</strong></td>
<td>- Through investment in Jurisdictional Transfer, MnDOT will be able to transfer more miles of roadway between MnDOT and local agencies to the right level of government with the right level of service to better meet customer expectations for maintenance, ride quality, and safety. These roadways are typically lower traffic roadways than the rest of the state highway system, and are lower priority for improvement by MnDOT. This Jurisdictional Transfer investment is expected to add to planned small repairs to make additional needed improvements acceptable to a city or county willing to take ownership of the road.</td>
<td>Only six percent of rest areas are projected to be in good condition by 2037. Forty-eight percent of rest areas will be beyond their service life by 2037. The frequency of replacement of weight scales is projected not to keep pace with deterioration of weigh scales allowing more scales to become outdated or inoperable.</td>
</tr>
<tr>
<td><strong>Rest areas/weigh stations</strong></td>
<td>- Only six percent of rest areas are projected to be in good condition by 2037. Forty-eight percent of rest areas will be beyond their service life by 2037. The frequency of replacement of weight scales is projected not to keep pace with deterioration of weigh scales allowing more scales to become outdated or inoperable.</td>
<td>Safely improvements made at 2/3 the current rate at unidentified low cost/high benefit locations through proactive and reactive projects. There is a limited ability to address locations with high sustained crash rate.</td>
</tr>
<tr>
<td><strong>New safety investments</strong></td>
<td>- Only six percent of rest areas are projected to be in good condition by 2037. Forty-eight percent of rest areas will be beyond their service life by 2037. The frequency of replacement of weight scales is projected not to keep pace with deterioration of weigh scales allowing more scales to become outdated or inoperable.</td>
<td>Safety improvements made at 2/3 the current rate at unidentified low cost/high benefit locations through proactive and reactive projects. There is a limited ability to address locations with high sustained crash rate.</td>
</tr>
<tr>
<td><strong>Twin Cities area mobility</strong></td>
<td>- From 2018-2023, investment made in two MnPASS corridors and six spot mobility improvements.</td>
<td>Safety improvements made at 2/3 the current rate at unidentified low cost/high benefit locations through proactive and reactive projects. There is a limited ability to address locations with high sustained crash rate.</td>
</tr>
<tr>
<td><strong>Greater MN mobility</strong></td>
<td>- Through investment, 6-10 improvements to be made at locations experiencing high travel time delays.</td>
<td>Safety improvements made at 2/3 the current rate at unidentified low cost/high benefit locations through proactive and reactive projects. There is a limited ability to address locations with high sustained crash rate.</td>
</tr>
<tr>
<td><strong>Freight</strong></td>
<td>- Investment in Freight category is set aside for the Freight Investment Plan which will determine how the investment will be used and what outcomes it will produce.</td>
<td>Safety improvements made at 2/3 the current rate at unidentified low cost/high benefit locations through proactive and reactive projects. There is a limited ability to address locations with high sustained crash rate.</td>
</tr>
<tr>
<td><strong>Bicycling</strong></td>
<td>- Investments made at ¾ the current rate of investment. This results in a limited ability to make new improvements for bicycling and maintain existing bicycle infrastructure as a part of pavement and bridge projects causing existing bicycle infrastructure to deteriorate.</td>
<td>Safety improvements made at 2/3 the current rate at unidentified low cost/high benefit locations through proactive and reactive projects. There is a limited ability to address locations with high sustained crash rate.</td>
</tr>
<tr>
<td><strong>Walking</strong></td>
<td>- The condition of more culverts, signals, signs, lighting, rest areas, and retaining walls are expected to deteriorate into poor condition.</td>
<td>Safety improvements made at 2/3 the current rate at unidentified low cost/high benefit locations through proactive and reactive projects. There is a limited ability to address locations with high sustained crash rate.</td>
</tr>
<tr>
<td><strong>Regional/local priorities</strong></td>
<td>- Respond to 2-5 economic development opportunities per year as a part of the Transportation Economic Development (TED) program.</td>
<td>Safety improvements made at 2/3 the current rate at unidentified low cost/high benefit locations through proactive and reactive projects. There is a limited ability to address locations with high sustained crash rate.</td>
</tr>
<tr>
<td><strong>Project delivery</strong></td>
<td>- Continue to invest in small programs such as Off-System Bridges and Historic Properties.</td>
<td>Safety improvements made at 2/3 the current rate at unidentified low cost/high benefit locations through proactive and reactive projects. There is a limited ability to address locations with high sustained crash rate.</td>
</tr>
</tbody>
</table>

### What do you think about our draft investment direction? (Circle of the options below)

- I love it!
- I like it alright.
- This isn't what I was hoping for, but I can see why these decisions were made.
- This does nothing for me. I do not like this plan.

Please take a minute to share why you voted the way you did!
## Increased Revenue Exercise

**If MnDOT received more money for the State Highway Network, where should we prioritize spending?**

### An Increase in Spending Would Allow MnDOT to:

<table>
<thead>
<tr>
<th>Investment Category</th>
<th>AN INCREASE IN SPENDING WOULD ALLOW MNDOT TO:</th>
<th>Priority</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional/local priorities - Mainstreets</td>
<td>Increase the number of state highway urban reconstructions that serve as mainstreets to allow locals to address their needs, such as city utilities, stormwater, and amenities.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Supporting infrastructure</td>
<td>Increase the ability to address deteriorating culverts, signage, signals, pavement marking, lighting and other supporting infrastructure.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Regional/local priorities - Expansions</td>
<td>Invest in a limited number of capacity expansion projects driven by local interests.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Bridges</td>
<td>Limit poor deck condition on state highway bridges and reduce the number of bridges in poor condition.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Walking</td>
<td>Address gaps in sidewalk network along state highways, improve pedestrian crossings, and include pedestrian elements such as street furniture, landscaping, and lighting.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Twin Cities area mobility</td>
<td>Expand MnPASS system to include as many as 3 – 4 new corridors, and increase the number of projects addressing travel time reliability and limiting delay in accordance with the Metropolitan Council’s 2040 Transportation Policy Plan.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>New safety investments</td>
<td>Increase the number of reactive and proactive safety projects, and address locations which have high sustained crash rates.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Highway surface/pavements</td>
<td>Limit poor ride quality on the state highway system and reduce the amount of pavements in poor condition.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Bicycling</td>
<td>Maintain existing bicycle facilities in good condition, enhance the statewide priority bicycle network, and initiate bikeway projects beyond those included in pavement and bridge projects.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Greater Minnesota mobility</td>
<td>Increase the number of projects addressing travel time reliability and limiting delay in Greater Minnesota.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Highway ownership</td>
<td>Increase the transfer of roads between state and local jurisdictions to ensure continued investments are consistent with public expectations.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Rest areas/weigh stations</td>
<td>Increase the number of rest areas and weigh stations in good condition, and limit the number falling into poor in order to meet expectations of the traveling public.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Regional/local priorities - Flood mitigation</td>
<td>Begin addressing identified or future flood risks at high priority locations.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
</tbody>
</table>

### Key

| 0 | None of the increased revenue should be spent in this category |
| 1 | Very little priority should be given to this category         |
| 2 | Some priority should be given to this category                |
| 3 | This category should absolutely be a priority                  |
## Increased Revenue Exercise

**IF MnDOT RECEIVED MORE MONEY FOR THE STATE HIGHWAY NETWORK, WHERE SHOULD WE PRIORITIZE SPENDING?**

<table>
<thead>
<tr>
<th>INVESTMENT CATEGORY</th>
<th>AN INCREASE IN SPENDING WOULD ALLOW MnDOT TO:</th>
<th>PRIORITY</th>
<th>WHY?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>Address gaps in sidewalk network along state highways, improve pedestrian crossings, and include pedestrian elements such as street furniture, landscaping, and lighting.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Regional/local priorities- Expansions</td>
<td>Invest in a limited number of capacity expansion projects driven by local interests.</td>
<td>0 1 2 3</td>
<td></td>
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**ZIPCODE**

**RACE/ETHNICITY**

**GENDER**

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<td>Increase the ability to address deteriorating culverts, signage, signals, pavement marking, lighting and other supporting infrastructure.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Twin Cities area mobility</td>
<td>Expand MnPASS system to include as many as 3 – 4 new corridors, and increase the number of projects addressing travel time reliability and limiting delay in accordance with the Metropolitan Council’s 2040 Transportation Policy Plan.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Greater Minnesota mobility</td>
<td>Increase the number of projects addressing travel time reliability and limiting delay in Greater Minnesota.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Highway surface/pavements</td>
<td>Limit poor ride quality on the state highway system and reduce the amount of pavements in poor condition.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Highway ownership</td>
<td>Increase the transfer of roads between state and local jurisdictions to ensure continued investments are consistent with public expectations.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Bridges</td>
<td>Limit poor deck condition on state highway bridges and reduce the number of bridges in poor condition.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Regional/local priorities-Expansions</td>
<td>Invest in a limited number of capacity expansion projects driven by local interests.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Walking</td>
<td>Address gaps in sidewalk network along state highways, improve pedestrian crossings, and include pedestrian elements such as street furniture, landscaping, and lighting.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Regional/local priorities-Mainstreets</td>
<td>Increase the number of state highway urban reconstructions that serve as mainstreets to allow locals to address their needs, such as city utilities, stormwater, and amenities.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Rest areas/weigh stations</td>
<td>Increase the number of rest areas and weigh stations in good condition, and limit the number falling into poor in order to meet expectations of the traveling public.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>New safety investments</td>
<td>Increase the number of reactive and proactive safety projects, and address locations which have high sustained crash rates.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>Bicycling</td>
<td>Maintain existing bicycle facilities in good condition, enhance the statewide priority bicycle network, and initiate bikeway projects beyond those included in pavement and bridge projects.</td>
<td>0 1 2 3</td>
<td></td>
</tr>
</tbody>
</table>

**Additional priority?**

**KEY**

0 None of the increased revenue should be spent in this category

1 Very little priority should be given to this category

2 Some priority should be given to this category

3 This category should absolutely be a priority
### INVESTMENT CATEGORY

<table>
<thead>
<tr>
<th>Supporting infrastructure</th>
<th>AN INCREASE IN SPENDING WOULD ALLOW MDOT TO:</th>
<th>PRIORITY</th>
<th>WHY?</th>
</tr>
</thead>
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| Twin Cities area mobility | Expand MnPASS system to include as many as 3 – 4 new corridors, and increase the number of projects addressing travel time reliability and limiting delay in accordance with the Metropolitan Council’s 2040 Transportation Policy Plan. | 0 1 2 3 |       |

| Highway ownership         | Increase the transfer of roads between state and local jurisdictions to ensure continued investments are consistent with public expectations. | 0 1 2 3 |       |

| New safety investments    | Increase the number of reactive and proactive safety projects, and address locations which have high sustained crash rates. | 0 1 2 3 |       |

| Regional/local priorities-Flood mitigation | Begin addressing identified or future flood risks at high priority locations. | 0 1 2 3 |       |

| Regional/local priorities-Expansions | Invest in a limited number of capacity expansion projects driven by local interests. | 0 1 2 3 |       |

| Walking                    | Address gaps in sidewalk network along state highways, improve pedestrian crossings, and include pedestrian elements such as street furniture, landscaping, and lighting. | 0 1 2 3 |       |

| Highway surface/pavements  | Limit poor ride quality on the state highway system and reduce the amount of pavements in poor condition. | 0 1 2 3 |       |

| Rest areas/weigh stations  | Increase the number of rest areas and weigh stations in good condition, and limit the number falling into poor in order to meet expectations of the traveling public. | 0 1 2 3 |       |

| Greater Minnesota mobility | Increase the number of projects addressing travel time reliability and limiting delay in Greater Minnesota. | 0 1 2 3 |       |

| Regional/local priorities-Mainstreets | Increase the number of state highway urban reconstructions that serve as mainstreets to allow locals to address their needs, such as city utilities, stormwater, and amenities. | 0 1 2 3 |       |

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| Additional priority?       |                                             |          |       |

### KEY

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NOTICE IS HEREBY GIVEN that on the 5th day of May at 6:00 p.m. the Mankato/North Mankato Area Planning Organization (MAPO) Policy Board will hold their regularly scheduled meeting.

The Meeting will be held in the Minnesota River Room of the Intergovernmental Center, 10 Civic Center Plaza, Mankato, Minnesota.

Copies of the agenda and materials will be available upon request by January 29th at the Intergovernmental Center, 10 Civic Center Plaza, Mankato, Minnesota, during regular business hours. To receive electronic copies please visit http://www.mankatomin.gov/city-services-a-z/city-services-a-m/mankato-north-mankato-area-planning-organization-mapo or call (507) 387-8630 for additional information.

Paul Vogel
Executive Director
Mankato/North Mankato Area Planning Organization