

# ***Implementation Plan***

Utility Coordination Process  
December 6, 2006



# Implementation Plan

## Utility Coordination Process

### Table of Contents

- I. **Goals:** *Page 5*
  - II. **Approach:** *Page 5*
  - III. **Barrier Development:** *Page 6*
  - IV. **Strategies and Actions:** *Page 6*
  - V. **Themes: Pages 7-8**
    - Statewide Group (*Page 7*)
    - Communications and involvement (*Page 7*)
    - Existing mechanisms and new resources (*Pages 7-8*)
    - Local projects (*Page 8*)
    - Relationships with utility owners (*Page 8*)
  - VI. **Priority Actions: Pages 9-13**
    - Establish a statewide utility coordinating group within Mn/DOT (*Page 9*)
    - Redesign web site to support all stakeholders and develop online tools as appropriate (*Page 10*)
    - Develop a regular communications vehicle with information that clarifies process, reinforces changes, and provides updates for internal audiences; develop a similar vehicle for external audiences (*Page 10*)
    - Establish Minnesota utility coordinating committee with all stakeholders (*Pages 10-11*)
    - Work with management at all levels to ensure that they show support for the process (*Page 11*)
    - Enhance annual Mn/DOT district meetings with utility owners (*Page 12*)
    - Define and establish resources for project managers and construction engineers (*Page 12*)
    - Establish working group to implement process on local projects that involve Mn/DOT trunk highway right of way and to assist with other implementation opportunities for local projects; develop training classes for local government, if possible, in conjunction with other training (*Pages 12-13*)
    - Establish measures of success (*Page 13*)
  - VII. **First Steps** (*Page 13*)
- Appendix A: Implementation Team Roster** (*Pages 15-17*)
- Appendix B: Survey Results** (*Pages 19-22*)
- Appendix C: Process Improvements** (*Pages 23-26*)
- Appendix D: List of Barriers** (*Pages 27-30*)



# **Implementation Plan**

## **Utility Coordination Process**

In 2005, the Minnesota Department of Transportation (Mn/DOT) established a new utility coordination process that helps Mn/DOT to:

- Minimize project delays, construction costs, and contractor claims associated with utility issues
- Optimize the project development process with greater emphasis on early coordination to reduce design and construction time later in the process
- Strengthen relationships and cooperation with utility owners
- Foster consistent application

To facilitate the transition, Mn/DOT formed an Implementation Team with representatives from the functional areas that are impacted by utility coordination and from private utility companies, city and county government, and consultant firms (see Appendix A – Implementation Team Roster).

### **I. Goals**

The Implementation Team’s mission involved developing strategies and actions to help ensure successful implementation of the new utility coordination process and help realize its benefits.

The team’s goals included:

- Assessing initial application of the process
- Identifying barriers to implementation
- Developing solutions that support department-wide implementation of the new process and offering recommendations for the most promising solutions
- Defining approaches for measuring the success of implementation and the impact of the new process
- Suggesting ways to reward successes and providing incentives
- Completing the Implementation Plan
- Acting as an advocate for the process

### **II. Approach**

Implementation Team met in a series of four meetings, which culminated in the development of the Implementation Plan.

The team reviewed the results of a survey of project managers. The survey was designed to learn more about the use of the process, to identify the first projects that are impacted by the new process, and to gather feedback from project managers about their experiences and perspectives. Respondents identified 44 projects where they applied, in some form, the new process (see Appendix B – Survey Results).

In its first meeting, the team also brainstormed the barriers that stand in the way of full adoption of the utility coordination process by stakeholders, as well as ways to improve

the process (see Appendix C – Process Improvements). In subsequent meetings, the team used the list of barriers to identify strategies that offered potential solutions and determined the actions and tactics that support the strategies.

At its last meeting, the team prioritized the actions with the most significant potential for impact.

### **III. Barrier Development**

The team approved the list of 18 barrier statements (see Appendix D – Barrier Statements) at its second meeting. The barrier statements resulted from the brainstorming session at the first team meeting, as well as from feedback that was received in the survey and at training sessions. They cover the key elements of change adoption: technical support, training, communications, accountability, and administration.

The team also prioritized the barrier statements, ranking the top five statements as follows:

- The lack of understanding of the benefits (time investment versus cost savings) that hinders acceptance by private and public utility owners, including local agencies
- The lack of timely responses, follow-up, and written documentation that undermines accountability
- Pressure to compress schedules to the point that there is not enough time to follow the utility coordination steps
- Issues of inconsistent application and lack of continuity in practices that jeopardize success
- The perception and reality that utility owners will not participate in the full utility coordination process, especially because not all actions are statutory requirements

### **IV. Strategies and Actions**

The team developed strategies – or the broad approaches that offers solutions to the identified barriers. Each of the following six strategies addresses multiple barriers:

- Engage and involve utility owners through outreach and communication
- Develop mechanisms that support ongoing participation by all parties and process improvements
- Improve communication within and among stakeholder groups
- Track and communicate results of new utility coordination process application
- Recognize and acknowledge successes, improved relationships, and individual performance
- Involve local government in applying the utility coordination process to all types of local projects and in implementing the process

With the strategies in place, the team identified the actions for each strategy, as well as responsibility for executing the action, timing, and resources. The accompanying chart summarizes this work.

## **V. Themes**

Of all the actions in the draft Implementation Plan, team members prioritized the ones that they felt were most valuable and key. In making the decisions about these critical actions, the team cited the importance of the following themes:

### ***Statewide group***

The team identified a clear need for a statewide Mn/DOT utility coordinating group with the charge of implementing the plan's actions, as well as process improvements. It recommended a group with representatives from functional groups that impact utility coordination. In turn, those representatives can bring back information to their functional group, as well as sharing information from their functional group with the utility coordinating committee.

The team also recommended establishing this group as quickly as possible, with the Utility Unit serving as the champion to launch it and top staff announcing the establishment of the group for credibility. The group would communicate with district leadership and top staff.

### ***Communications and involvement***

Team members, as well as the survey, noted that the greater the involvement, the greater the level of acceptance and application. The survey in particular showed a strong positive working relationship between project managers and utility owners who attended the training together.

As a result, the actions that call for communication and engagement ranked highly with team members. Those actions included redesigning the web site to support all stakeholders, developing online tools, and establishing e-newsletters for internal and external audiences.

These tools serve practical functions. They are a source of technical support and a way for those who are involved in the process to learn and share. They also offer a means to show the interdisciplinary nature of utility coordination, which promotes an understanding of the big picture and of all the players, as well as the successes. On the most basic level, effective ongoing communication makes it possible to use the process to its maximum benefit. If those who are involved with utility coordination don't know about changes and improvements, they can't apply them.

### ***Existing mechanisms and new resources***

Many of the actions reflect the desire of team members to use existing mechanisms. For example, one action calls for adding utility coordination as a topic to project managers' meetings. Another action looks to build on existing mentoring relationships by encouraging informal mentoring. Yet another will explore possible collaborations with Gopher State One Call.

The team also discussed the action of defining and establishing resources for project managers and construction project engineers. It recommended initially asking each

district to identify a district utility resource to respond to questions, not to conduct utility coordination tasks. The recommendation supports the long-term vision of utility coordinators in each district or in regions that serve more than one district. Ultimately, the utility district coordinator model makes much sense for Mn/DOT, as it offers support for project managers and strengthens the district's ability to develop productive relationships with utility owners. At least five states nationwide recently have adopted this model.

In addition, the team emphasized the importance of working with management at all levels to ensure that they show support for the process. The team strongly believes there must be a visible champion for utility coordination at a level higher than the Utilities Engineer.

### ***Local projects***

There is an interest, need, and desire to apply the process to the diversity of local projects. However, because of the complexity in different types of local projects, there are issues and concerns that need resolution before attempting to move the utility coordination process forward in greater depth at local levels.

To resolve those issues, the team recommended establishing an internal working group with representatives from the Utility Unit and Office of State Aid to clarify Mn/DOT's role and the application of the 15-step process for local projects that are on trunk highway right of way. The group also would include representation from district state aid, district permits, and municipal agreements and would be charged with working through issues and making recommendations about process application, roles, responsibilities, and other logistics.

There also is the larger question of applying the process to state aid projects, as well as sharing the process with local government for consideration on their local-only projects. Local governments may face challenges with timely relocations of utilities by utility owners and may find benefits in applying the process to their projects. Communication and outreach activities are one way to share information about the process with local agencies.

### ***Relationships with utility owners***

The team recognizes the continuing urgency to develop and deepen working relationships with utility owners and believes there are opportunities to build from the annual statewide district meeting with utility owners.

A statewide utility coordinating committee, based on the Florida model, offers a venue for voicing concerns, developing relationships, and finding long-term solutions to issues. It may evolve into committees at the district level.

In addition, the plan also details other ways to strengthen relationships, including communication activities.

## **VI. Priority Actions**

The Implementation Team identified priority actions within the Implementation Plan. A smaller working group, consisting of Implementation Team co-chairs Marilyn Remer and Glen Ellis, as well as Cheri Marti, CTS project manager, and project consultants Darlene Gorrill and Vinnie LaVallette, further explored the actions, offering more detail about implementation and required resources. A summary and description of these priority actions follows.

### **Establish a statewide utility coordinating group within Mn/DOT**

A statewide utility coordinating group plays a critical role in continuing efforts to improve utility coordination. Since utility coordination involves numerous functions throughout Mn/DOT, a statewide utility coordinating group offers a means to involve functional representatives in raising and resolving issues, in monitoring implementation of the process, in documenting successes, and in identifying new opportunities for improvements.

*Role:* Bring together representatives from diverse functions that are responsible for the utility coordination process to ensure ongoing successful implementation of the utility coordination process and to maximize the benefits of the process.

*Goals:* The statewide utility coordinating group is responsible for moving the utility coordination process forward:

- Working to execute Implementation Plan actions
- Developing ongoing strategies for implementation
- Proposing and implementing ongoing process improvements
- Defining additional resource requirements
- Collecting feedback from those who are involved in the process
- Proposing policy changes
- Providing updates to upper management at least twice yearly

*Leadership:* Co-led by Utilities Engineer and district PCMG representative at the ADE level.

*Membership:* Representatives from design, construction, land management, permits, Utility Unit, PCMG, CMG, metro utilities, state aid.

*Meetings:* Suggested six times at least for the first year, with group to adjust if necessary, then minimum of quarterly meetings yearly; half-day kick-off meeting in St. Cloud.

*Required Resources:* Meeting facilitation support (eight hours per meeting); technical support (10 hours per meeting); pre- and post-meeting communication (eight hours per meeting). Support for kick-off meeting (40 hours).

## **Redesign web site to support all stakeholders and develop online tools as appropriate**

The web site can serve both as a communications tool and as a technical resource for those involved in the utility coordination process. The working group identified a redesign and expansion of the web site as a higher priority than the regular communication vehicle.

*Steps:* Construct new site that is user friendly to the key stakeholder groups (project managers, Construction Group, utility owners, local government, Statewide Utility Coordinating Committee); determine screens and drill downs; write copy for screens; redesign main page and accompanying screens; program screens; proof and pilot test site.

*Required Resources:* Development of structure of expanded site (10-20 hours); writing of copy for screens and assembling of documents for posting (40-50 hours); redesigning of main page and template (30-40 hours); programming of screens (40-60 hours); proofing and piloting test site (five-10 hours); ongoing maintenance (10 hours monthly).

## **Develop a regular communications vehicle with information that clarifies process, reinforces changes, and provides updates for internal audiences; develop a similar vehicle for external audiences**

A regular communication vehicle will help bring updates to the many functional areas that are involved in utility coordination, as well as clarify responsibilities, reinforce changes and best practices, share successes, and encourage ongoing dialogue for improvements.

*Steps:* Develop mailing internal and external e-mail lists, distribute e-mails, evolve into e-mail newsletter.

*Required Resources:* List development (five hours) and maintenance (one hour with each e-mail); initial e-mail communications (five hours per e-mail); e-mail newsletter (10-15 hours of writing and five hours of technical support per issue; five to 10 hours of design to establish e-mail newsletter template).

## **Establish Minnesota utility coordinating committee with all stakeholders**

Based on the model of the Florida Utilities Coordinating Committee, a Minnesota utility coordinating committee offers all statewide stakeholders a venue to promote mutually beneficial working partnerships, discuss common concerns, and share information that help improve utility coordination throughout the state.

*Role:* The Minnesota utility coordinating committee works together through coordination, cooperation, and communication to resolve problems and develop standards for effective and efficient utility coordination on highway road construction projects.

*Goals:* Bring together representatives from all stakeholder groups in the state to improve utility coordination by:

- Supporting the utility coordination process on state highway construction projects
- Identifying opportunities for further improvements
- Sponsoring stakeholder forums and information sessions
- Developing ways to encourage working relationships between utility owners and the state that promote mutually beneficial cost-sharing strategies

*Leadership:* Initially co-led by Utilities Engineer and utility owner representative; eventually committee to elect its leadership

*Membership:* Representatives from utility owners (Quest, Centerpoint, Xcel, Comcast, Great River Energy, Metropolitan Council), Federal Highway Administration, local government (cities and counties), consultant engineers, Municipal Utility Coordinating Committee, Gopher State One Call, Mn/Ops, and contractors

*Meetings:* At least twice yearly; half-day to full-day kick-off meeting

*Required Resources:* Meeting facilitation support for at least the first three meetings (10-15 hours per meeting); technical support (10-15 hours per meeting); pre- and post-meeting communication (10-15 hours per meeting). Support for kick-off meeting (50 hours).

### **Work with management at all levels to ensure that they show support for the process**

For the new utility coordination process to succeed, management support at all levels is important. The approach calls for communicating with management groups and asking those groups to serve as liaisons to other contributors who are involved in the process, such as project managers, resident engineers, and project engineers.

*Steps:* Distribute communication from upper management that reinforces full implementation of the process effective this fall; organize and conduct ongoing presentations to key groups, including PCMG and CMG

*Required Resources:* Development of PowerPoint (five to 10 hours); coordination of agendas (one hour per month); presenter packet (five to 10 hours)

## **Enhance annual Mn/DOT district meetings with utility owners**

Mn/DOT can build on the foundation of its successful annual district meetings with utility owners. The action calls for each district to enhance its annual meeting with utility owners to review upcoming projects and discuss the utility coordination process, with the Utility Unit offering guidance on structure, suggested agendas, possible topics, and potential meeting formats.

*Steps:* Continue to enhance annual district meetings with utility owners, with the Utility Unit offering guidance on structure, suggested agendas, possible topics, and potential meeting formats. The statewide utility coordinating group within Mn/DOT and the Minnesota utility coordinating committee with all stakeholders also can offer ideas for improving district meetings, and key issues and needs that emerge from district meetings can be shared as appropriate with either or both groups.

*Required Resources:* None at this time.

## **Define and establish resources for project managers and construction engineers**

Ongoing technical support for the utility coordination process supplements and reinforces training. It helps ensure that those who are responsible for making the changes have a place to turn with questions. The first step involves establishing an expert in each district to respond to questions and requests for information.

In the long term, the statewide utility coordinating committee can take the lead in moving toward the long-term vision of shared-district utility coordinator positions, which, in large part, is also determined by project volume.

*Next Steps:* Discuss with assistant district engineers, then district engineers; request districts to identify utility coordination expert at the minimum level of engineering specialist or technical specialist to serve as internal resource.

*Required Resources:* Time from existing position to support resource role (estimated five to seven hours per project). Note: District 7 already has identified such a resource.

## **Establish working group to implement process on local projects that involve Mn/DOT trunk highway right of way and to assist with other implementation opportunities for local projects After making process decisions, develop training class for local government, if possible in conjunction with other training**

There are many different types of local projects. There is a need to clarify Mn/DOT's role and application of the process to local projects that impact Mn/DOT right of way or

Mn/DOT funding. In addition, there is an opportunity to communicate the benefits of the process to local government for consideration on their projects. Once the processes are defined, then training for local agencies can occur on both what Mn/DOT needs from them and on the value of the process to them.

*Next Steps:* Establish an internal working group with the Utility Unit and state aid to clarify Mn/DOT's role and the application of the utility coordination process to local projects that involve Mn/DOT trunk highway right of way (estimated four meetings). The group also would include representation from district state aid, district permits, and municipal agreements and would be charged with working through issues and making recommendations about process application, roles, responsibilities, and other logistics. In addition, ongoing communication and outreach activities are one way to share information about the process with local agencies.

*Required Resources:* Meeting facilitation support (eight hours per meeting); technical support (10 hours per meeting); pre- and post-meeting communication (eight hours per meeting).

### **Establish measures of success**

Tracking the implementation of the utility coordination process helps illuminate benefits and opportunities for improvements. Already the process is making a measurable impact: According to one estimate, the receipt of daily utility reports has increased from 5 percent to 80 percent. Both short-term and long-term measurements can be used to track progress and impact.

*Next Steps:* Investigate short-term measurements that include annual survey, tracking of individual projects, number of daily utility reports, and number of utility coordination projects completed before construction. Investigate long-term measurements that include reduction of claims, increased satisfaction of project managers and utility owners, and development of case studies based on tracking of individual projects.

*Required Resources:* Statewide utility coordinating group to determine resources.

### **VII. First Steps**

The Implementation Plan contains many actions that support the continued use and improvement of the utility coordination process. The following first steps are key:

- Review and approve Implementation Plan
- Establish the statewide coordinating committee group as soon as possible. The group is a key vehicle to moving the initiative forward.
- Reinforce full implementation of the utility coordination process throughout Mn/DOT
- Allocate resources for priority actions



***Appendix A***  
Utility Coordination Executive Summary  
Implementation Team Roster



# Mn/DOT Utility Coordination Implementation Team

*Updated August 2006*

Marilyn Remer	Mn/DOT Utility Agreements and Permits <b>(Co-Chair)</b>
Glen Ellis	Mn/DOT Metro Design <b>(Co-Chair)</b>
Curt Fakler	Mn/DOT Metro Utilities
Ann Driver	Mn/DOT Utility Agreements and Permits
Stan Haugen	Mn/DOT Utility Agreements and Permits
Maryanne Kelly-Sonnek	Mn/DOT Municipal Agreements
Joe Pignato	Mn/DOT Office of Land Management
Mike Leegard	Mn/DOT Office of Construction
Tom Highum	Mn/DOT D3 Design
Bill Lohr	FHWA
Andrew Balgobin	Utility Owner – CenterPoint Energy
Lance Newman	Consultant – Progressive Consulting

Ron Dahlquist	Mn/DOT Office of State Aid
Bob Vasek	Mn/DOT Metro State Aid
Kevin Hansen	City of Columbia Heights
Matt Theisen	City of Monticello
Virgil Hawkins	Wright County and MN County Engineers Assoc.

## **Center for Transportation Studies (CTS) Support Team:**

Cheri Marti	Project Management, Facilitation
Darlene Gorrill	Communications, Writing/Editing
Vinnie LaVallette	Technical Support, Facilitation – TBE Group
Jeff Sowers	Technical Review – TBE Group
Stephanie Jackson	Project Support



***Appendix B***  
Utility Coordination Executive Summary  
Survey Results



# Mn/DOT Utility Training Follow-Up Survey

## **Summary** **5/30/2006**

### **Survey Goals**

Mn/DOT continues its efforts to implement the new utility coordination process. To help the Implementation Team with its work in assessing initial application of the process, identifying barriers to implementation, and developing solutions that support department-wide implementation of the new process, Mn/DOT conducted a survey of project managers.

The survey was designed to learn more about the use of the process, to identify the first projects that are impacted by the new process, and to gather feedback from project managers about their experiences and perspectives.

### **Survey Logistics**

Mn/DOT identified project managers from the list of those who have completed training in the utility coordination process. The Center for Transportation Studies sent an e-mail survey to 106 identified project managers and received three undeliverable responses.

Respondents also received a second e-mail that extended the survey deadline and directed them to complete the survey via Survey Monkey, which allowed them greater anonymity. They also received a third reminder e-mail the day before the deadline.

### **Survey Response**

A total of 64 project managers responded to the survey, for a response rate of approximately 60 percent.

### **Highlights of Results**

The survey provided information about process use and the issues that project managers are facing as they implement the new process. Highlights of survey results follow. For a complete report, see question-by-question responses.

- Just under half of the respondents report using the new process (31 yes, 33 no)
- Many respondents who answered no did not answer the question about why; of those who did, a common response was that it did not apply to their projects.
- Respondents who said yes identified 44 projects where they applied, in some form, the new process. A few respondents did not identify specific projects, indicating that they were using the process but not providing information on those projects, so the number of projects that are impacted by the new process is likely larger than 44.

- The majority of respondents who answered the question about ease of following the steps say it has been easy to follow the process (26 responded yes, 4 responded no, and 1 not too bad).
- Many respondents who are using the process report that they have contacted utility owners (24 responded yes, 5 responded no).
- Those respondents who contacted the utility owners report mixed results. About half of those who completed verbatim comments found utility owners to be responsive and positive about the new process; about half also reported some challenges in dealing with utility owners.

Project managers who worked with utility owners who also attended training reported positive experiences. It's possible that other project managers may be contacting utility owners who are not yet aware of the change.

- Overall project managers feel that they do not need additional information to use the process (41 responded no, 8 responded yes).
- Of those respondents who wanted additional information, they were looking for the following types of information: sample utility coordination forms (Gopher State One), explanation for applying this process to smaller projects, the process to help ensure utility owner participation, definition of 'reasonable' date for Notice and Orders, and requirements for permit issuance.
- Most respondents (32) did not have any suggestions for improvements; 15 respondents provided suggestions. Key areas of suggestions included the need for utility owner cooperation; the need for flexibility, especially in smaller projects where many respondents believe the process can be shortened; definition of consultant role; and workload issues.

# ***Appendix C***

Utility Coordination Executive Summary  
Process Improvements



## Process Improvements

During their work, the Implementation Team identified a number of process improvements or issues that relate to process improvements. The chart summarizes improvements and issues, as well as the proposed resolution

<p><b>1. Application of steps to smaller projects/additional flexibility in process</b>          RESOLUTION: Utility Unit in collaboration with internal statewide utility coordinating group to track feedback from project managers and districts to see if it is necessary to add more variations</p>
<p><b>2. Deadlines in notice and order match deadlines in supplemental agreements</b>          RESOLUTION: Utilities Engineer to explore necessary follow-up steps</p>
<p><b>3. Consistency in deadlines between notice and order and permits</b>          RESOLUTION: Utility Unit to request that districts check dates as they complete their review for consistency</p>
<p><b>4. Improvement of field locate accuracy</b>          RESOLUTION: Utility Unit to ask statewide utility coordinating committee to explore the issue, as well as the related issues of statute changes to require XYZ for permit as-builts and to include Z coordinate in Gopher State One Call</p>
<p><b>5. Information to Mn/DOT about consultant design contract requirements for locally let projects</b>          RESOLUTION: Utility Unit to take the lead in collaboration with state aid and consultant services to review efforts</p>
<p><b>6. Clarification of 'abandoned' facilities versus in place, out of service</b>          RESOLUTION: Utility Unit in conjunction with technical consultant to review spec book and special provisions and involve representatives from the Construction Group and legal</p>
<p><b>7. Clarification of right of way clearing issue</b>          RESOLUTION: Utility Unit to take the lead in consultation with construction, districts, and the state forester</p>
<p><b>8. Timely right of way acquisition</b>          RESOLUTION: Land management and district land management to take the lead</p>
<p><b>9. Clarification of ASCE standards on utility depiction for surveyors</b>          RESOLUTION: Utility Unit to work on communication with surveyors in the short term; Utility Unit to bring issue to statewide utility coordinating group for long-term solutions</p>
<p><b>10. Incorporation of changes from new Mn/Ops rules</b>          RESOLUTION: Utility Unit to take the lead in communicating the information</p>
<p><b>11. Review project development process to ensure milestones correspond with utility steps</b>          RESOLUTION: Utility Unit to collaborate with new Highway Project Development Process initiative to add steps for design in document</p>

<p><b>12. Change construction specification to clarify owner and contractor responsibility</b></p> <p>RESOLUTION: Construction to take the lead in collaborations with special provisions with Utility Unit review</p>
<p><b>13. Reword Notice and Order to refer to utility owner responsibility during design phase</b></p> <p>RESOLUTION: Utility Unit to investigate further</p>
<p><b>14. Communicate to utility owners when project does not move forward after letting or when a project has not yet been let, a start date is delayed by addendum, and coordination already has taken place</b></p> <p>RESOLUTION: Utility Unit to work with Technical Support to request notification, so Utility Unit can notify utility owners; also to determine if other areas may need notification</p>
<p><b>15. Application to compressed schedules and rush jobs</b></p> <p>RESOLUTION: Statewide utility coordinating group to address</p>
<p><b>16. More consistent application of estimated reasonable time frames</b></p> <p>RESOLUTION: Utility Unit to reinforce consistent application in communications</p>
<p><b>17. Increased use of SUE</b></p> <p>RESOLUTION: Utility Unit to encourage use in short term, in collaboration with statewide utility coordinating group</p>
<p><b>18. Available of plan data for local projects</b></p> <p>RESOLUTION: Utility Unit and state aid to address as part of Implementation Team recommendations</p>
<p><b>19. Standardized layouts</b></p> <p>RESOLUTION: Statewide utility coordinating group to take the lead in exploring standardization of utility depictions on layouts</p>
<p><b>20. Use of master utility agreements outside of design-build</b></p> <p>RESOLUTION: Utility Unit to take the lead in collaboration with the Minnesota statewide utility coordinating committee to explore possibilities</p>
<p><b>21. Utility adjustment plan sheets</b></p> <p>RESOLUTION: Utility Unit in conjunction with design to define plan sheets and evaluate standard format</p>
<p><b>22. Utility work by highway contractor</b></p> <p>RESOLUTION: Statewide utility coordinating group to discuss and recommend options for Minnesota utility coordinating committee to consider</p>
<p><b>23. Utility work schedule</b></p> <p>RESOLUTION: Construction to work with utility owners on details; statewide utility coordinating group to discuss and recommend options for Minnesota utility coordinating committee to consider</p>

***Appendix D***  
Utility Coordination Executive Summary  
List of Barriers



## Barrier Statements

### *Barriers that stand in the way of full adoption of the process by stakeholders*

- (A) Pressure to compress schedules to the point that there is not enough time to follow the utility coordination steps.
- (B) The perception and reality of project manager workloads, which make it more difficult for them to incorporate the process in their projects.
- (C) The lack of resources for project managers to support them as they attempt to apply the process to their projects.
- (D) The perception and reality that utility owners will not participate in the full utility coordination process, especially because not all actions are statutory requirements.
- (E) The lack of understanding of the benefits (time investment versus cost savings) that hinders acceptance by private and public owners, including local agencies.
- (F) The lack of familiarity with the new utility coordination process that prevents participation by private and public utility owners, including non-traditional partners, such as the Department of Natural Resources, Metropolitan Council, and state agencies.
- (G) Set ways of thinking by all stakeholders, as well as stakeholders who do not understand other stakeholder perspectives, which stand in the way of full adoption.
- (H) Issues of inconsistent application and lack of continuity in practices that jeopardize success.
- (I) The lack of timely responses, follow-up, and written documentation that undermines accountability.
- (J) Miscommunication among Mn/DOT, contractor, and utility owners in the field that results in accountability issues.
- (K) Coordination issues within districts and between functions (such as design and construction, design and surveys, design and permits) that hinders application.
- (L) Lack of participant skill in negotiation, meeting facilitation, communication, and listening that undermines effectiveness.
- (M) Lack of reinforcement of process that hinders participants' ability to continue implementing the process.
- (N) No mechanism to continue application and improvement of the process.

(O) Difficult for all parties to understand and appreciate the whole process and their impact on it that can lead to noncompliance.

(P) Lack of trust and ongoing problems with utilities that erode confidence in the process.

(Q) Lack of formal structure for communication among state and utility owners that makes it challenging to develop cooperative relationships.

(R) The diversity and complexities of local projects that complicate adoption by local agencies.