



UTILITY PROJECT SCOPING & COORDINATION TECHNICAL COUNCIL

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AMERICAN ASSOCIATION OF
STATE HIGHWAY AND
TRANSPORTATION OFFICIALS

AASHTO
THE VOICE OF TRANSPORTATION

INTRODUCTION

- On May 5, 2003, the full Subcommittee of Right of Way and Utilities voted to adopt an organization of councils.
- The councils were revised in 2013 and the Utility Project Scoping & Coordination Technical Council was created.

OBJECTIVES

- The objectives of the Technical Council are to:
 - ✓ encourage and facilitate broader participation
 - ✓ allow people to meet to compare notes and share ideas for improvement
 - ✓ use the ideas to help the Subcommittee plan for future work efforts, research and conference programs
 - ✓ provide an annual report on current issues for the Subcommittee's Executive Board meeting in January on the council's discussions and activity.

UTILITY PROJECT SCOPING & COORDINATION

The elements of utility project scoping and coordination with utility company stakeholders when developing and executing a project include, but not be all inclusive of, the following:

- How the project development process (planning and design) incorporates utility involvement.
- How the project execution process (construction) is impacted by utility involvement.
- How each process interacts and addresses utility matters.
- Involves existing utility infrastructure, proposed and relocations.
- The three C's are important factors

TECHNICAL COUNCIL MEMBERS

- Members – The council includes 33 members from:
 - ❖ 22 DOTs personnel from 18 DOTs
 - ❖ the FHWA
 - ❖ 9 Consultants personnel from 6 Consulting Firms
 - ❖ 1 Academia

ANNUAL REPORT REVIEWS

- Council Items
- Recommendations
- Appendix A: Member Contact List
- Appendix B: Survey Results

COUNCIL ITEMS

- Quarterly Meetings
- Surveys
- Subcommittees
- Summary

QUARTERLY MEETING

- Buy America
- Prior Rights
- Casing of Utilities
- Locating of Underground Utilities
- Utility Delays
- Utility Abandonment
- State Coordination Policies
- Website
- Utility Conflicts and Inspection Practices

SURVEYS

- Prior Utility Property Rights
- Contractor Claims
- Abandonment of Underground Utility Facilities
- Utility Coordination Policies
- Buy America
- Subsurface Utility Engineering
- Delay Claims
- Utility Relocation Coordination Training
- Master Agreements

SUBCOMMITTEES

- The Council will create subcommittees to do further research.
- So far, the council has created a group for SUE Scope of Work Standards. It consists of 9 members and they are working to create a standard scope of work for SUE.

SUMMARY

- The report identifies recommendations for session topics for the annual meeting and for research topics.
- The council will continue to have quarterly meetings to compare notes, share ideas and use council subcommittees as needed.

RECOMMENDATIONS

- Annual Meetings Session Topics
- Research Projects
- Other Recommendations

ANNUAL MEETING SESSION TOPICS

- Delay Claims
- Prior Rights
- Alternative Bidding
- Best Practices
- Master Agreements
- Buy America

RESEARCH PROJECTS

- Subsurface Utility Engineering (SUE)
- Buy America
- Utility Conflict
- Utility Inspection Practices
- Utility Coordination Best Practices for Design Build and Alternative Bidding
- Dig Law Revisions & Impacts
- Utility Impact Analysis and Subsurface Utility Engineering

OTHER RECOMMENDATIONS

- The Council recommended that the Subcommittee develop a website for the Council to store documents.

APPENDIX A: CONTACT LIST

- The member contact list is in the report as appendix A.
- It's also on the Technical Council's website <http://rightofway.transportation.org/Pages/Home.aspx?siteid=61&pageid=952>
- http://rightofway.transportation.org/Pages/UtilityScoping_Coordination.aspx

APPENDIX B: SURVEY RESULTS

- The survey results are in the report as appendix B.

SUB-COUNCIL REPORT

- SUE Standard Scopes of Work
- NCHRP 20-5 - Proposed Research Needs Statement

SUE

STANDARD SCOPES OF WORK

- The purposes are:
 - to gather information about the Scopes of Services
 - to compile and consolidate common language, like thinking, like scope terminology

RESEARCH NEEDS

- Title - Enhanced Utility System Mapping for utility risk mitigation; Challenges to State Transportation Departments in developing a Scope of Services.

OBJECTIVE

- To create a scope of services with clear work tasks, universal terminology and well defined accuracy guidelines. Organize the scope without references to other standards (it should be a stand-alone document). Provide the suggested scope to States using enhanced utility mapping services and follow up for their comments, and try to build consensus on the issues stated above.

SUMMARIES

Subsurface Utility Engineering (SUE) Scoping Sub-Committee Scope of Service Summaries from:

- Florida Department of Transportation
- Georgia Department of Transportation
- Maryland State Highway Administration
- Nevada Department of Transportation
- New Hampshire Department of Transportation
- New York State Department of Transportation
- South Carolina Department of Transportation
- Virginia Department of Transportation
- Washington State Department of Transportation
- City of Lenexa, KS (Submitted by Jim Anspach)
- Michigan Department of Transportation
- Nebraska Department of Transportation
- Idaho Department of Transportation
- Ohio Department of Transportation, District 7

SUB-COUNCIL REPORT DETAILS

Utility risk can be significantly mitigated by using proven best practice procedures for depicting existing utilities accurately on design and construction documents. A fully researched, comprehensive inventory of utilities, accurately geo-located, will identify potential utility problems early and aid in crafting resolutions.

Unfortunately there is inconsistent use of the enhanced utility mapping techniques on many projects. A carefully prepared Scope of Services document can do much to rectify these problems by helping DOT's to the request deliverables of useful accuracy at reasonable cost.

A need exists to clarify what services the DOTs are actually using (compared to the stated scope of service), and to produce an updated scope of service document which mirrors those requirements. A review of international practices should be conducted because utility related issues are not unique to the U.S. Utility mapping produced by combined geophysical methods

FUTURE TOPICS & RESEARCH AREAS

- **Discussion Topic: Subsurface Utility Engineering and Utility Infrastructure Mapping Scopes**
- Perception that Scope should concentrate on deliverables and work product reliability measures/meta data, not techniques and technologies used.
- **Call to Action: Open Discussion, Agree or Disagree ... Comments**

FUTURE TOPICS & RESEARCH AREAS

- Notes: Subsurface Utility Engineering and Utility Infrastructure Mapping Scopes
- Prequalification is a need that does not exist today
- We need specialized experience, defined
- For SUE/GIS tech council – what questions should dot be expecting in terms of resources. i.e. enough trucks, staff, etc.
- If the DOT is looking at performance measures, DOT needs to allow flexibility
- How can we determine that a company has adequate experience? We may need a standard. PennDOT has a standard that defines minimum qualifications.
- ASCE plan is to create training for PE/LS for SUE Certification. ASCE SUE Certification may serve as a prequalification for DOT's. ASCE is thinking about Technician certification too.

FUTURE TOPICS & RESEARCH AREAS

2014 Revisited: Notes

- SUE –Impacts of Dig Law Revisions
- Utility Coordination Training
 - One or two days of training does not make you a utility coordinator
 - Needs lots of detail and rigorous
 - Tough because basic training is needed
 - Big task to do this right
 - Job duties vastly different state to state, wide ranging
 - Perhaps the NHI course needs update, enhancement, and clarity. Needs more value to DOT. 50000 ft perspective.
 - Perhaps focus on commonalities btwn DOT's (CFR, FHWA expectation) and higher level perspective on project coordination which varies state to state
 - Bring in utility companies for input in development
 - Training for utility DOT staff, design DOT staff, consultants, and utility companies
 - Relate our needs and expectations to utility companies (during training)
 - Train on common topics / elevate the profession and practice
 - Modular training / just in time delivery / web based
 - Consider 3D design in training?? Teach need to get utility coordinator in the room early enough.
- Alternative Bid Projects and Utility Coordination Best Practices

FUTURE TOPICS & RESEARCH AREAS

2013 Revisited: Notes

- Buy America
- Delay Claims
 - Delay studies identifying causes / lacking in process will ID resolutions to an issue we all have.
 - 3D modeling seems to help id issues early. Avoiding delays and helping construction sequencing.
 - Finishing a report for FHWA on 3D models, lessons learned. Cesar glad to do a session in future.
 - Get construction SME's involved. Find out their perspective.
 - Analyze cause of delay claims. Get everyone in the room.
 - see cost study, national perspective, with backing and good rep
- Prior Rights
- SUE

FUTURE TOPICS & RESEARCH AREAS

SHRP₂ Products:

- Round 6
 - R01B – Utility Locating Technologies
 - R15B – Identifying and Managing Utility Conflicts
- Round 5
 - R01A – 3D Utility Location data Repository
- Round 3
 - R15B – Identifying and Managing Utility Conflicts

FUTURE TOPICS & RESEARCH AREAS

SHRP₂ Products:

- Implementation Successes
- Round 6 Products – application launch May 29, 2015

FUTURE TOPICS & RESEARCH AREAS

Open Discussion: Future Topics

Railroad property rights/ processing fees. How are other states

Addressing business model that utility companies are using and how that impacts project schedule.

Impacts of utility company downsizing

Promote utility coordination in engineering / tech curriculums

Follow up on research studies to see implementation effectiveness

FUTURE TOPICS & RESEARCH AREAS

Open Discussion: Research Areas

One call during construction project is wrong.
Need to consider study of One Call System
function, applicability, and effectiveness

SUMMARY & QUESTIONS

- Questions and Comments?