

**AASHTO Committee on Right of Way, Utilities, and Outdoor Advertising**  
**Utility Mapping, GIS & Information Management Technical Council**

**FINAL MEETING MINUTES 9/26/2017**

**September 20, 2017**

**1:30 - 3 p.m. MST**

**Introductions:**

Alana Spendlove - Utah (Vice-chair)  
Dana Bijold - Goodbee and Associates  
Barry Cruz - Arkansas  
Don Haines - UMS  
Elisha Ritchie - KCI  
Gabe Priebe - Montana  
Gus Awali - Tennessee  
Heather Howe - Oregon  
Ken Kerr - InfraMap  
Keri Bohlmann - Wyoming  
Jennifer McCleve - Kentucky  
Joann Kurts - Louisiana  
Kyle Campbell Utility Engineering and Survey Institute  
John Midyette - InfraMap  
Caltrans Participant -  
Lapo Cozzutto - Berenice  
Larry Ditty - Pennsylvania  
Lawrence Arcand - Cardo  
Lisa Robbins - HWC Engineering  
Matt Reynolds- Virginia  
Melanie Arnolds - Alaska  
EricWilson - KCI  
Monte Dockter - North Dakota  
Patricia Clark - Colorado  
Paul Fredrickson - Caltrans  
Rob Martindale -Colorado (Chair)  
Richard Manser - UMS  
Scott Greene - Michigan

**Purpose:** The purposes of the Utility Mapping, GIS & Information Management Technical Council (TC) are to:

- allow people who have an interest in utility Mapping, GIS, and Information Management to meet and share ideas;
- use pertinent ideas to assist the Committee in planning future work efforts, research and conference development; and
- promote the TC's interests and ideas in the area of transportation data management.

**Current Items:**

- **As-built Data collection and data management**
  - Tracking and collection of relocated utilities within project limits

9/8/17

- Current data repositories may not be available to users moving forward (ProjectWise, etc). Today as-builts may come in as .pdfs vs. electronic or the electronic version is not compatible with current DOT systems.
- Colorado is collecting as-builts in the field and then bringing it into CADD. Using Google Earth as a tool. SUDA and Open Roads integration are in the works. Hoping the process can be more utility friendly. Still have the problem of a central repository.
- Google Earth demonstration of water line data collection in Glenwood Springs, CO. The issue here is that there is no 3D line work. They are collecting QLA but there is no good way to display 3D data in Google Earth. Colorado looking for ways to collect, maintain, and display 3D data.
- Colorado also working to implement a SUE/CADD manual. Looked at So. Carolina manual as a base model. Manual to describe process of collecting data during projects. Utah also has a survey standards manual that can be used as a reference.
- Survey data needs to be specific enough to allow users to identify the lines (e.g., signal power vs. multi-conduit duct bank) including quality level and attribute level identification.
- Good practice is to follow ASCE-38-02 standards for collection of existing utility data.
- Are there other states that are manage utility CADD data?
  - None were given.
- Tracking and obtaining utility data of permitted installations
  - Same standards will apply and Colorado continues to develop a workflow for as-constructed data and expected deliverables from utility companies.
- **Construction Management (Utility Inspectors)**
  - The collection and data management of utility installations (I-70B Example)
    - Utility coordination and relocations including early relocations. Construction manager / inspector out in the field working with utilities to relocate. Goal to put together comprehensive utility roadmap to provide what was relocated prior to the road contractor coming in. Const. Mrg/Insp. performing survey to create the map. Map provided at pre-bid meeting to prospective bidders prior to award. Roll plot showed typical cross section for common trench. Benefit of having const. inspect. allowed utilities to “thread the needle” between between existing utils while three util. contractors were in the same project area. Another benefit was being able to provide QLA map for this pilot project to contractors. The goal was to reduce risk to the contractors prior to bidding.
    - Lawrence Arcand (Cardno) - ASCE as-built standard will have accuracy standards vs. SUE quality levels. As-built data will contain quality levels and accuracy levels. The hope is that the ASCE as-built standard is followed and in 10-20 years we’ll have a much better idea of what we have in our ROW. It’s a separate standard from ASCE 38-02. Lawrence will send Rob a copy of the draft as-built report.
    - Paul Fredrickson (CalTrans) - Has anyone else had pushback from utilities regarding homeland security? This is a challenge and needs to be addressed. We are already gathering locations for projects/permits and relocates today and in many cases aren’t showing fiber counts, rather just conduit locations for damage protection. Colorado has had some success with utilities sharing CADD layers.

- Ken Kerr (InfraMap) - Also on the ASCE as-built committee. Homeland security has been discussed and is incorporated into the new standard. It will be beneficial to have the standard published.
- Scott Greene (Michigan) Developing the Geospatial Utility Data Exchange (GUIDE) which documents the workflow, GIS Database, and utilizes ESRI ARCGIS. They are in a proof of Program Phase where they are picking up as built utility information that are being installed under permit within the MDOT ROW this year. Draft Manual is located here: [http://www.michigan.gov//documents/mdot/GUIDE\\_Procedural\\_Manual\\_2017\\_Draft\\_547744\\_7.pdf](http://www.michigan.gov//documents/mdot/GUIDE_Procedural_Manual_2017_Draft_547744_7.pdf). Not detailing what is inside of the conduit to help with homeland security, but to prevent damage.
- As-built standard will outline what to collect, how to attribute, etc.
- Don Haines (UMS) - Question to Scott. Storing the data for future? Yes. Nick Lefke has a demonstration showing that. Option to have him present during a future meeting.
- **Software**
  - How is data managed within each DOT?
    - Michigan provided their GUIDE program
  - Google Earth KMZ format?
  - CAD geo-referencing data (Google Earth example of Grand Ave Bridge)
  - Any other goals or research topics/ideas? Share with Rob and Alana
- **Quarterly Meeting**
  - Next meeting prior to annual report deadline?
  - Future meetings will be recorded
  - Rob will make the decision to hold another meeting prior to the annual report due date
  - Topics for Nov/Dec meeting?
  - RNSs and topics for next year's annual conference

**Actions Items:**

Larry will send Rob draft ASCE As-built standard.