

Committee on Right of Way, Utilities and Outdoor Advertising Control 2019 Annual Meeting

*Chattanooga, Tennessee
April 28–May 2, 2019*



Utility Locating Technologies R01B

Feasibility of Mapping & Marking Underground Utilities by DOTs



Heather Howe

Heather.C.Howe@odot.state.or.us

Oregon DOT

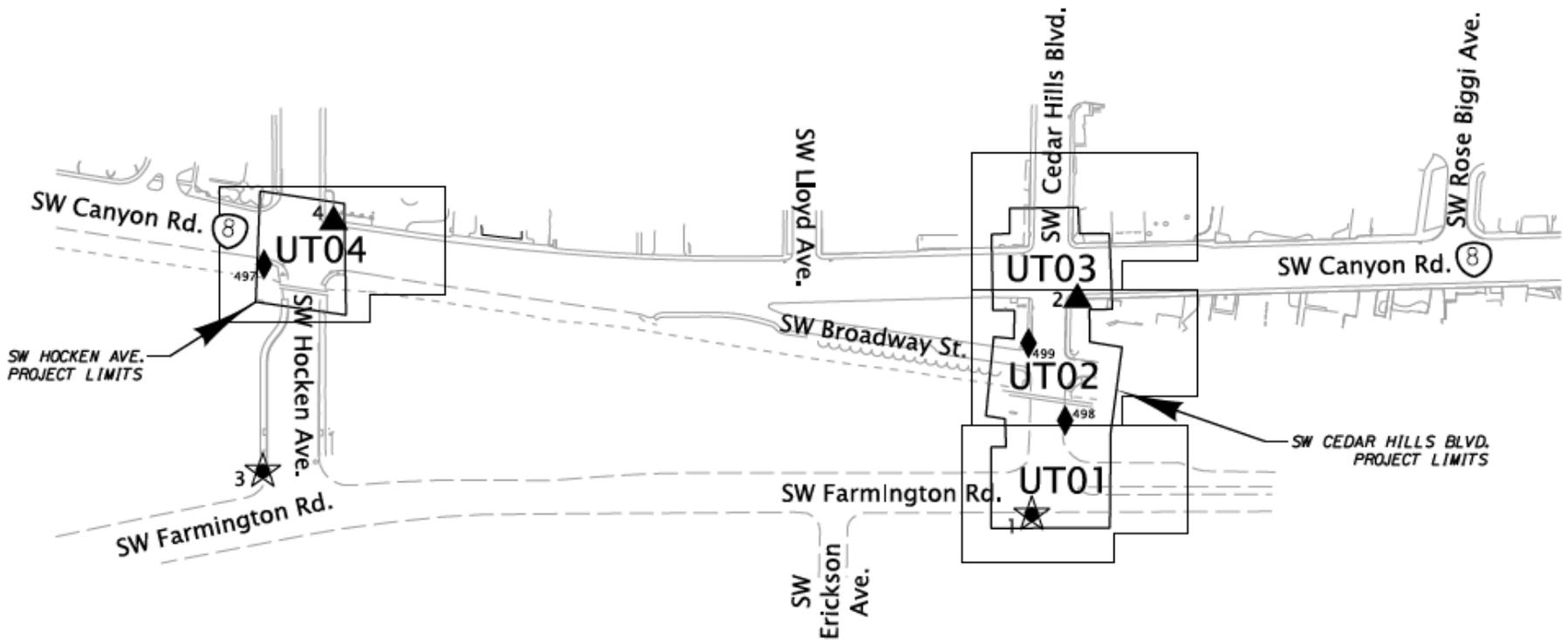
Establishing a SUE Program

- Backing of ODOT's Chief Engineer
- Recruited multi-skilled team of staff
- Created an initial set of documents
- Outreach to key stakeholders
- Went hunting for projects



Project Area

OR 8: Hocken to Short



Overall Project Scope

OR 8: Hocken to Short

- Signal replacement
- Roadway geometry adjustment
- Create a left turn lane
- Improvements to sidewalks and curb ramps, illumination, drainage and water quality treatment elements

R01B: Why OR 8?

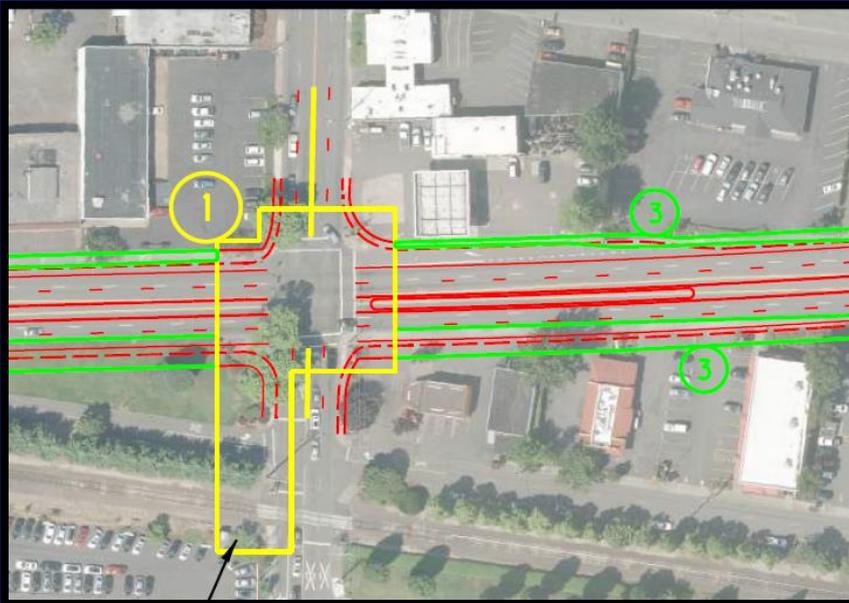
OR 8: Hocken to Short

- Located in the Portland-Metro area
- Project scope was a good fit
- Good mix of existing features to test MCGPR and TDEMI
- Reasonable sized project, appropriate for our first SUE project

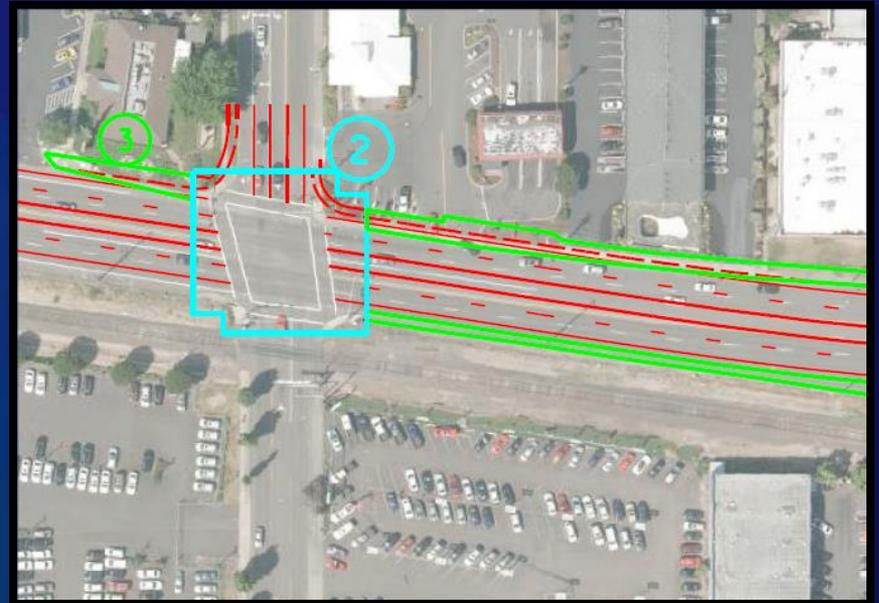
R01B: Why OR 8?

OR 8: Hocken to Short

Intersection at SW Cedar Hills Blvd

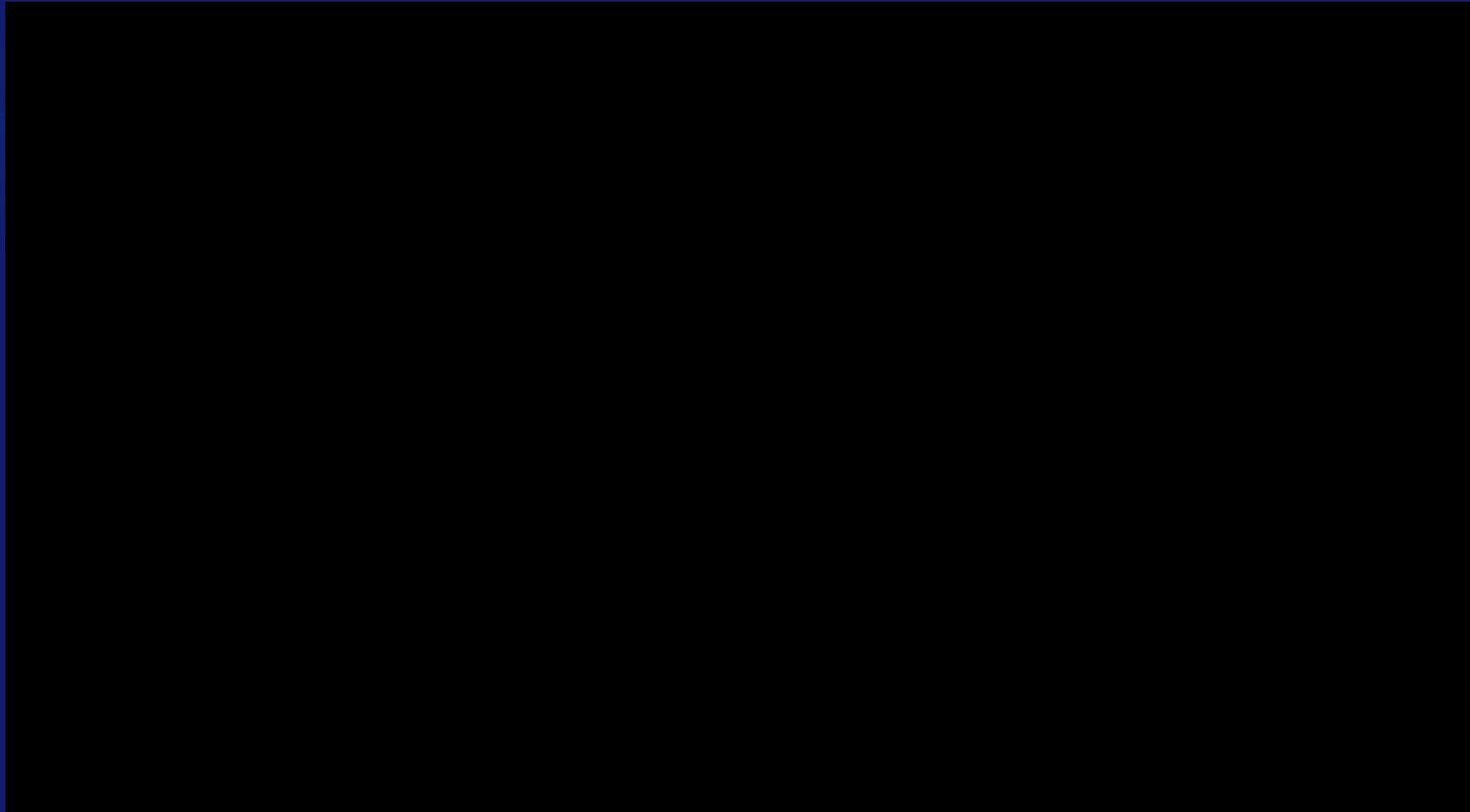


Intersection at SW Hocken Ave



R01B: Trying Something New

OR 8: Hocken to Short



Committee on Right of Way, Utilities,
and Outdoor Advertising Control Annual Meeting, 2019



R01B Project

OR 8: Hocken to Short

- Field work – 300 man hours, approx.
 - MCGPR – IDS Stream EM system
 - TDEMI – A Geonics EM-61 MK2A
- Data analysis – 800 man hours, approx.



R01B Project Challenges

OR 8: Hocken to Short

- Overcoming internal processes needed to execute a contract
- Maintaining the delivery schedule

Lessons Learned

Increased knowledge and awareness of SUE methods and applications

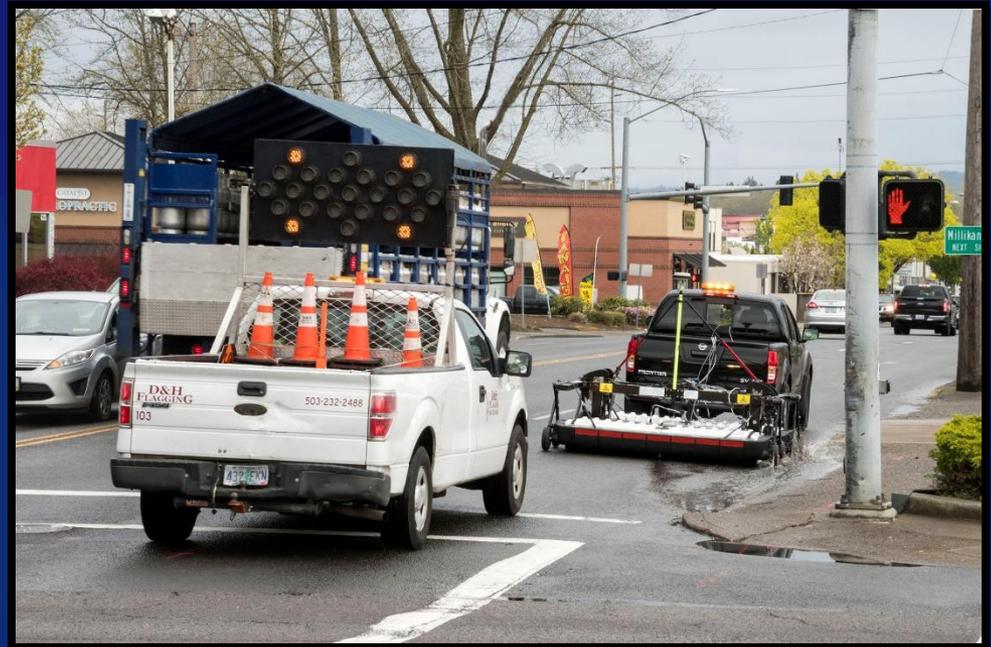


- Availability of tools
- Benefits SUE can provide
- Risk mitigation
- Acknowledgement of uncertainty

Lessons Learned

MCGPR and TDEMI are complex and complicated

- Field work is safer and quicker
- Equipment is easy to use
- Data processing requires more time and skill



Lessons Learned

SUE requires new contract language and dedicated procurement processes



- Start early
- Distinguish SUE from utility coordination
- Meet procurement team face-to-face
- Conduct outreach
- Know your end game

Lessons Learned

At the onset of project development –
Always be thinking SUE

- Timing is key
- Evaluate the project's complexity early
- Engage the utility coordinator
- Determine needs – 2D or 3D



Lessons Learned

Never forget, cost is king

- Project leaders want to know “what’s my bottom line”
- Track every project to build a cost history
- Every job is different



Lessons Learned

Need for prequalified contractor list to expedite procurement process



- RFP process is long
- Establish standard contract language
- Make it easy for project leaders to use

Oregon DOT's Next Steps

- ✓ Update our procurement and contracting documents
- ✓ Develop new tools and refine our existing ones
- ✓ Expand stakeholder outreach and education efforts
- ✓ Look for projects

Connect with us



[/OregonDOT](#)



[@OregonDOT](#)



[@Oregon_DOT](#)



[/company/Oregon-
Department-of-
Transportation](#)



[/OregonDOT](#)



[www.Oregon.gov/ODOT](#)