Dean Gustafson: Thank you everyone for joining us today. We will wait for others to get connected before we start.

Dean Gustafson: We will start in just a minute. Thank you for joining us.

Dean Gustafson: Feel free to post any questions in the chat.

Devki Rearden: yes

Bruce Dressel: What is your pull box spacing, typically?

Bruce Dressel: Good to know, thanks!

Ahmer Nizam: Is UDOT installing fiber within interstate ROW or releasing RFPs for fiber owners? Is the fiber open access to any intersted parties?

Galen McGill: Lynn - Did you have any challenges in getting the FHWA Division Office support for PPP fiber projects on the Interstate System?

ALEJANDRO GARI: Why does pull spacing have to be reduced for connected vehicles? Is it due to more roadside sensors?

Lynne Yocom: yes the distance of the sensors.

ALEJANDRO GARI: Thank you!

Ahmer Nizam: "VDOT can recieve ... goods, services or cash": is a fair market valuation required to establish equitable consideration?

Dean Gustafson: The agency has flexibility to determine how to valuate the market.

Lynne Yocom: Network peering is a huge value of fiber optics.

Kenneth Shiver: Mr. Earnest, Does VDOT permit access of your fiber asset managment tool to other TSM&O areas such as construction and public vendors?

Kenneth Shiver: Thank you.

Ron Vessey: Can you provide a ballpark estimate for the resourcing and timeline required to adopt and deploy the VDOT comprehensive Fiber Management Tool?

Kenneth Shiver: Mr. Vessey, FDOT also has a ITS Facilities Management tool and perhaps you might be interested in discussing sometime.

Kenneth Shiver: https://www.fdot.gov/traffic/itsfm/index

Ken Earnest: Our plan is to deploy the tool and populate with current asset info through the course of this calendar year. Establishing guidelines for asset info entry is first key step.

Lynne Yocom: I did a conversion from Insight to Bentley and the conversion took 2 years.

Lynne Yocom: Insight is a good product and so is Bentley our roads use MicroStation so we were just standardizing formats.

Kenneth Shiver: Our tool has export and WFS services that can feed to GIS. Additionally, exports to Microstation are some of the abilities including Google Earth. Our tool is from Byers

Ahmer Nizam: Do the upcoming Bentley Connect / OpenRoads products offer anything new?

Lynne Yocom: Not that I know of. We export to Esri for our web map instead of using the Bentley tools.

Bruce Dressel: To Lynn's comment: https://storymaps.arcgis.com/stories/e189fb955513488580eb5baa363ad4c3?rmedium=links_esri_com _b_d&rsource=https%3A%2F%2Flinks.esri.com%2FCommunicationsDataManagementforArcGISOnline% 2FGettingtoKnow

Lynne Yocom: There is a lot of cool tools now that were not available 12 years ago. If you are looking for one look at them all talk to Kenneth.

Lynne Yocom: Nice link Bruce.

Dean Gustafson: We will transition to a panel discussion next...Please keep your questions coming. We will go to live Q&A after the panel session.

Ron Vessey: From the utility corridor perspective, has anyone explored longitidinal installations of electric grid infrastructure alongside fiber? Resource shaing for fiber and "dig once" for the electric infrastructure. Preparing for smart cities, connected vehicles, electric vehicle charging, etc..

Md Tausif Murshed: The bandwidth requirements for autonomous vehicles are at least three to four times higher. Do you take any cost efficient strategy for that?

Bruce Dressel: Your point of service is the issue. Power drops are few and far between.

Lynne Yocom: Yes the power drops are few and far. This could really help.

Dean Gustafson: We will do 1 or 2 Panel Questions and transition to Audience Questions.

Lynne Yocom: https://www.youtube.com/watch?v=DxSaeDUhP2E   This is a fun video link to our I-70 build that we are just finishing up. Pretty views.

Lynne Yocom: What size of fiber do other DOT's install. We install 14 and 288 with 6 strand drops.

Lynne Yocom: 144

Ken Earnest: Similar counts for VDOT, but usually 12 strand drops to devices

Dean Gustafson: Keep your questions coming, we have 14 minutes left....

Gary Bubar: This is a terrific discussion. Particularly the rural broadband information. It affects, at least, part of every state. Thanks.

ALEJANDRO GARI: Can resource sharing affect security of a network?

Bruce Dressel: We should be planning between states to connect the conduit infrastructure, making it more marketable.

Chad Newman: are there any anticipated impacts to fiber installation/needs regarding the change to C2VX?

Daniela Bremmer: what are some of the lessons learned to negotiate these urban rural trades Lynne was describing just now?

Venkat Nallamothu: Are agencies facing any challenges with procurement in their broadband deployements - especially with telecom/IT equipment? Could the panelists share some experiences in mitigating the challenges?

Lynne Yocom: We did the CARES I-70 and I-84 all procurement and it was really a good way to go.

Bruce Dressel: Outstanding Webinar! Thank you all!

Dean Gustafson: Thank you everyone for your questions and participation.

John Hibbard: The change to CV2X from DSRC involves changing out the radios, but shouldn't have any impact to the fiber themselves.

Daniela Bremmer: thank you-great information

Devki Rearden: Thank you for sharing your knowledge.