

# REGIONAL GIS MEETING

May 17, 2022 - 9:30am - 4:00pm  
NCTCOG - Transportation Council Room

9:30am **Modeling & Data for All Hazards of Texas** - Brent Porter - Center for Space Research - UT Austin

Discussing the collaboration, technologies, and goals of the Texas Disaster Information System program

10:00am **Machine Learning for Improved LiDAR Point Classifications** - Keith Owens - Fugro

Presentation on the recent Texas lidar classification project. Fugro deployed machine learning techniques for adding building, vegetation, and culvert classifications to USGS lidar data covering approximately 83,000 square miles of North, Central, and East Texas.

10:40am **Delineating the Public Use Microdata Areas for the 2020 Census** - Po-Chun Huang, Ph. D. - Texas Demographic Center, University of Texas at San Antonio

Public Use Microdata Areas, or PUMAs, are non-overlapping, statistical geographic areas that partition each state or equivalent entity into geographic areas containing no fewer than 100,000 people each. A PUMA is also the smallest geography containing American Community Survey (ACS) Public Use Microdata Sample (PUMS) data released by Census Bureau, allowing data users to create custom tabulations that are not available in the pre-tabulated ACS summary tables. PUMS data are valuable to state and local planning agencies/offices for use in long-range planning and research projects.

The Census Bureau is the only federal agency to create PUMAs. Every ten years the Census Bureau offers State Data Centers from each state the opportunity to delineate PUMAs for the tabulation and dissemination of decennial census and ACS PUMS data, using the decennial census population counts and updated census tract geography as critical inputs to delineation. The State Data Centers are the official participants for this program and must coordinate the delineation suggestions from other interested data users, such as local governments and regional planning agencies.

11:10am **WAZE Travel Time/Congestion Poller** - Helen Zhou & Daniel Burnham - City of Arlington

11:40am **GIS for Communication of Projects** - Kevin Babcock & Haley Salazar - City of Denton

City of Denton residents quite often like to know what projects are where, what they are for, how much is being spent, and how long they will take to complete. We have created a custom web map that allows us to communicate this information by leveraging Cartegraph, Cityworks, and a custom data entry tool (allows Project Managers to create/update projects). We are able to show all work from all departments in the City. We also have integrated with JD Edwards for financial information and have integrated with Procore Project Management software to provide the most up-to-date information available to our residents. This is accomplished by using ArcGIS Enterprise and Safe Software FME Server.

# After the Lunch Break

1:30pm **Fire Tactical Response Guide Solution using ArcGIS Online Web Apps - Kristina Deitz, GISP & Captain Keil Baldia - City of Plano**

The GIS team has partnered with the Fire Department to create a solution for reviewing and updating Tactical Response Guides for high occupancy buildings. This work began two years ago with an ESRI Solution and has evolved into a custom development utilizing ArcGIS Online Web apps, Hubs, Field Maps, and Dashboards. We have empowered the users, in this case firefighters, to regularly collect their own data in the field which allows them to better assess the type of equipment to be deployed in an emergency. This includes collecting data such as emergency contact information, building access points, key box locations, gate codes, and much more. We have designed a solution to regularly assign these buildings to be reviewed when there are no emergencies, so that we are consistently updating the emergency GIS information. We even have other departments such as Police interested in utilizing the same data and applications. This has been a great use of GIS in our public safety sector and we would love the opportunity to share it with our peers.

2:00pm **Spatial Data Cooperative Project: Overview & Special Use Cases - Shelley Broyles & James McLane - NCTCOG**

Since 2001, NCTCOG's RIS Department has facilitated the purchase of spatial data for in North Central Texas as a cost-sharing objective for local governments and other interested entities. Potential data acquisition includes high-resolution orthophotography, elevation data (LiDAR) and derivative products made from orthophotography and LiDAR like planimetric data, contours and landcover/landuse.

In this presentation we will discuss the history of the program, what makes the cooperative work and some innovated ways the data could be used moving forward.

2:55pm **Maintaining 9-1-1 Data Integrity Using FME - Bruno Blanco - NCT 9-1-1**

This presentation aims to show participants how FME can empower your GIS data through the use of traditional Extract-Transform-Load (ETL) processes and custom-tailored tools/applications. Examples of how NCT9-1-1 has used FME to transform, correct, and even enhance regional GIS data will be provided in this presentation. This presentation will focus on the impact that these transformative FME tools have had in the highly demanding environment that is 9-1-1/public safety, while also exploring other potential uses for GIS in general.

3:25pm **What's New in ArcGIS - Sean Gill & Pamela Kersh - ESRI**

March 2022 brought major releases and new capabilities of some of our most popular technology. In this session we will cover some of the highlights of what's new in the latest release in ArcGIS Online, ArcGIS Online capabilities, as well as some of the ArcGIS Applications.