REGIONAL GIS MEETING
May 3, 2023 – 9:30am – 4:00pm
City of Grapevine - The Vine Arts & Event Center

MORNING SESSIONS

9:30am   **Welcome & State of the Region** – Shelley Broyles – NCTCOG

Brief overview of new regional GIS layers available from NCTCOG.

9:40am   **Grapevine GIS Projects & Infrastructure – Keeping the Map Current** – Betsi Chatham, GISP – City of Grapevine

Departmental collaboration, database and infrastructure consolidation, ArcGIS Online and desktop migration, and short-term projects are key to keeping the map current. From ArcGIS Pro and ArcGIS Enterprise to FieldMaps and Survey123, the City of Grapevine taps into many platforms and Esri technology to ensure data integrity, efficient infrastructure, and ultimately a turnkey GIS for users, decision-makers, and citizens alike.

10:10am   **Building a Digital Twin Model of University of North Texas Using Airborne LiDAR and GIS data** - Shwarnali Bhattacharjee – University of North Texas

Digital Twins are virtual renditions of the actual world that include real-world assets, connections, activities, and processes. This presentation covers a study that aims to build a digital twin of the University of North Texas (UNT) using LiDAR and GIS data; addresses the following research questions: (1) How can LiDAR and high-resolution satellite image be effectively used for creating 3D building models? (2) How can we integrate 3D buildings, trees, and GIS data into a digital twin? (3) What are the potential applications of a digital twin for a smart campus?

10:50am   **Dashboards in Crime Analysis** – Creel Java – Garland Police Department

Dashboards allow crime analysts to monitor the spatial relationships of crime at a glance, quickly finding sprees or patterns as they appear on the map. After a brief overview of how the map was developed and how it is maintained with an hourly automation, the presenter will demonstrate the ways in which Garland PD uses this map to explore crime patterns, connect related incidents, and discover potential leads. Additional dashboards have been created to monitor specific situations such as a gunshot calls for service and discharge of firearms side-by-side dashboard, as well as dashboards for gangs/gang member activity, robbery, and tracking field contacts.

11:20am   **Garland ISD Application & Reporting for Door Security Audits** – James Walker, Robert Oleson & Mark Quinn – Garland ISD

The following presentation covers the steps Garland ISD took to address the Texas Education Agency mandate that all schools in Texas inventory their exterior doors and begin weekly safety audits during the school day. (1) collect necessary data and update database. (2) set up an application for campus administrators and security staff for auditing and inspections. (3) set up reporting and a scheduling application for campus and district administrators. (4) created a dashboard using ArcGIS Insights so that the security department can monitor door audits in real time.

AFTERNOON SESSIONS

1:30pm | **Texas 811 and Utility Damage Prevention –** Sara Taylor, GISP & Tina Sanders – Texas 811

Cities often have lots of assets and infrastructure that fall under a legal obligation to be protected within the 811 system. Unfortunately, underground utilities are at a high risk of damage due to facilities inability to accurately locate and efficiently share this information. The Texas811 mission is to prevent damages by consuming information from excavators and notifying utility owners when and what type of excavation work will occur. Texas811 has been working to develop an application for cities to manage their damage prevention service areas without the need for heavy training and software licensing. This application is also mobile friendly, allowing edits directly in the application from an iPad or other large format mobile device.

2:00pm | **Growing: The Implementation of a GIS for a Small City –** Ian Patrick– City of Granbury

This presentation discusses the overall strategy for Implementing an Enterprise GIS including Data Standardizing, Data Creation and Staff training moving forward, Data Migration, and the Challenges posed by the existing spatial and non-spatial data.

2:30pm | **From Visiting a Cool Conference Booth to Saving $400,000 While Improving the Student Experience –** Scott Sires – Brookhaven College

The Dallas College GIS Program has a projected to develop floorplan features for interior space in 99 buildings on 14 college properties. The estimated square footage is 4.8M. Our deliverable is a geodatabase including polygon features for each room with some must-have attributes, and an app that provides access with the workflow experience to meet the facilities member's needs. Through a focus on this project, we are contextualizing GIS credit course lessons in several Spring, Summer and Fall 2023 GIS courses. Students in three current courses are performing all the steps to study the project and develop solutions, tools, templates, and needed resources while they also launch the project. We have purchased 2 additional GeoSLAM lidar sensors and are paying the students as part time workers (for hours outside class time). The value to the students has already exceeded expectations. The value to the college is that we look to save $400K while improving their experience, building their portfolios and adding to their resumes.

3:10pm | **Building a Real-Time Application –** Pamela Kersh – ESRI

Learn how to build apps that allow you to connect to, visualize and analyze real-time feeds. In ArcGIS, you can use ArcGIS Velocity and GeoEvent Server to connect feeds, then analyze them in real-time and serve data to ArcGIS client apps via ArcGIS Stream Services. We will show how you can use these Stream Services in apps, including various ways to visualize, interact, and analyze the information.

NETWORKING EVENT (Sponsored by New Edge Services & Woolpert)
Chill – 814 S. Main Street, Grapevine, TX