

REGIONAL GIS MEETING

May 14, 2026 - 8:30am - 4:30pm
City of Denton

MORNING SESSIONS

9:00am **Welcome & Spatial Data Cooperative Program Update - Shelley Broyles & James McLane - NCTCOG**

9:30am **Using Arcade and HTML within Webmap Pop-ups - Jacob Crocker - City of Denton**

The map in this presentation was created for the City of Denton Residents. It is used to find information specific to their addresses, such as trash pick-up days, watering days, or parks locations. It utilizes Arcade Spatial Joins and HTML to create a unique and easy to use pop-up for public use. In this presentation, Mr. Crocker will go over the challenges faced during creation, including how to layer HTML and Arcade together to make complex webmap pop-ups.

10:00am **Preserving Images from Our Region's Past: Using GIS to Digitize Historical Aerial Imagery - Sarah Jackson - NCTCOG**

This presentation highlights the ongoing Historical Imagery Preservation Project, an effort to safeguard aerial imagery flown between 1971 and 1994. These photographs have been housed at the North Central Texas Council of Governments (NCTCOG) offices since their original flights. To prevent data loss and improve accessibility, NCTCOG's Data and Analytics team is digitizing the imagery. The presentation will walk through the scanning and georeferencing process, including issues that have arisen or may arise when working with the imagery. The presentation concludes with an interactive game that allows participants to see the potential of the historical imagery.

10:45am **Go with the Flow: Automations with Power Automate - Amanda Cooper & Adailin Mallin - City of Grapevine**

This presentation highlights several Microsoft Power Automate workflows used by the City of Grapevine Public Works GIS staff to streamline daily operations. The session will demonstrate how automation supports routine tasks such as email notifications for internal and external stakeholders, automated PDF and report generation, and integrations that help complex GIS processes run more efficiently. The goal of this presentation is to showcase practical applications of Power Automate within a municipal GIS environment and provide examples that fellow GIS professionals may adapt for their own organizations. The session will conclude with an open discussion, inviting attendees to share how they incorporate automation into their workflows and to exchange ideas for future improvements.

11:10am **ArcGIS Field Apps: Best Practices for Field Workflows - Ernest Mallonga - ESRI**

Field operations present unique challenges, including limited connectivity, data quality requirements, and the need for reliable offline workflows. This session explores best practices for designing and deploying effective field solutions, with a focus on offline readiness, location accuracy, and metadata standards. Learn how ArcGIS Field Maps, ArcGIS Survey123, and ArcGIS QuickCapture support high-quality data collection in disconnected and remote environments.

AFTERNOON SESSIONS

1:30pm Mapping Urban Floods with Advancing GIS & Remote Sensing Technologies - Hiren Bista - UNT

This presentation explores how evolving GIS and remote-sensing technologies, such as cloud-based geospatial platforms, radar (Sentinel-1), and high-resolution optical imagery are transforming flood mapping and disaster response. It will discuss the advantages of Synthetic Aperture Radar (SAR) for detecting inundation under cloud cover, integration with Digital Elevation Models (DEMs) for estimating water depth, and the use of platforms like ArcGIS Pro, SNAP, and Python for automated analysis. The session will also highlight ongoing research and real-world applications that demonstrate how these tools enhance situational awareness, risk communication, and resilience planning in urban watersheds.

2:00pm Mapping urban tree mortality in Denton, Texas, with multi-temporal LiDAR data and imagery - Veronica Briggs - UNT

Tree mortality was classified and mapped in Denton over a period from 2011-2020 using remote sensing to explore and adapt existing methodologies to an urban environment. This research examines the potential for using open-source datasets to capture spatial and temporal patterns of tree mortality at the individual crown level for applications in city planning, urban forest management, and tree demography studies.

2:30pm From Floor Plans to Function: Building a Campus Map That Works - Sarah Sharp & Emma Leary - NTTA

In this presentation, NTTA will share how they built and now maintain their internal Campus Maps solution. Their team collected on-the-ground information, incorporated existing floor plans, used existing Esri capabilities, without the use of Indoors licensing, and created a process that keeps the map updated. Ms. Sharp & Ms. Leary will walk through what worked, what didn't, and the practical steps any organization can use to build a similar resource.

3:15pm How to set up a Municipal GIS Program as a One Person Operation - General Berry III - City of Duncanville

This presentation covers how to build a GIS program for small or mid-sized cities who don't already have one established. Information discussed will guide newly hired GIS professionals on what base layers to start out with, where to obtain them and how to use them for the City's needs. It will also provide suggestions on how maintain progress and promote longevity.

3:45pm Visualizing Long-Term Service Planning for Small Paratransit Providers in North Central Texas - Robert Tantiado - NCTCOG

DFW is Growing, and so is the need for effective Public Transit. While much of the discourse has been around improving "Metropolitan Transit" (DART, Trinity Metro, DCTA). Another aspect of Transit has often been overlooked: Paratransit. Much of the population growth in the region is due to be experienced in areas serviced by Paratransit alone. Which Paratransit Provider will see the most growth, how will Paratransit support said growth, and how will both Metropolitan and Paratransit providers integrate to make a cohesive system? Come for the maps, stay for the regional mobility planning

SOCIAL

4:30pm | East Side Denton | 117 E. Oak Street | Denton