



## **DECEMBER 18 | 8:30 – 12:00 “INTRODUCTION TO ASSET AND DATA MANAGEMENT”**

This class introduces asset and data management guiding principles. Asset management is the strategic and systematic process of operating, maintaining, and improving physical assets with a focus on engineering and economic analysis based upon quality information. Asset management helps to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practical cost. A properly developed Asset and Data Management Plan (ADMP) provides Tribal leaders with a tool for making infrastructure investments and sound resource utilization decisions.

## **DECEMBER 18 | 1:00 – 4:30 “FOUNDATION FOR USING GIS”**

A Geographic Information System (GIS) improves efficiency in the management, analysis and presentation of spatial information. It allows asset managers the ability to quickly visualize asset conditions, risks, and needs. This 3.5-hour class allows participants to become familiar with applications of GIS. Participants will learn about various methods to quickly capitalize on the efficiencies of using GIS in infrastructure management applications. General GIS concepts will be covered throughout this introductory course. This class combines lecture with group discussion, case studies, and group activities.

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## **DECEMBER 19 | 8:30 – 12:00 “INTRODUCTION TO GPS”**

The Global Positioning System (GPS) is a satellite-based navigation system using satellites that orbit the earth multiple times within a 24-hour period. These satellites transmit information to GPS receivers, which use the information to calculate the distance between the satellite and receiver. A GPS receiver can triangulate its location on the ground with the proper number of signals, generating a 3D position (latitude, longitude, and elevation). This 3.5-hour class provides information about GPS and applications for its use in the transportation field.

## **DECEMBER 19 | 1:00 – 4:30 “GPS DATA COLLECTION AND ASSET MANAGEMENT”**

Global Positioning Systems (GPS) is changing the way GIS users collect and manage geographic data. The high accuracy GPS provides GIS professionals with new ways to store and manage their data with asset management applications. GPS provides a key component for collecting and managing data, but there are many considerations when using GPS to obtain and understand accurate information. The class will outline how GPS data collection and asset management are beneficial to end users.

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**DECEMBER 20 | 8:30 – 12:00 “MAINTENANCE CONDITION ASSESSMENT”**

This class walks the student through the maintenance condition assessment process, which evaluates the current condition of infrastructure and estimates the funding needs to reach a minimum level of service. Collecting roadway maintenance information to determine the overall condition of roadways provides the information to develop a maintenance needs report, which addresses required funding levels, a strategy for prioritizing maintenance activities and identifies areas of excessively high/low maintenance.

**DECEMBER 20 | 1:00 – 4:30 “DEVELOPING AN INVENTORY OF HIGHWAY FEATURES”**

Developing inventories of highway features allows transportation departments to manage their asset needs, ultimately leading to improved compliance with local regulations. This class introduces the reasons, benefits and techniques for developing an inventory of highway features. The class addresses the benefits of maintaining an inventory of highway features, the proper techniques for conducting roadside inventory of highway features, common practices for developing an effective strategy for highway feature management.

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**DECEMBER 21 | 8:30 – 12:00 “OBJECTIVE PRIORITIZATION OF NEEDS”**

Objective prioritization of needs is the process of managing the relative importance and urgency of different requirements to cope with the limited transportation resources. Adequate prioritization ensures the most critical requirements are addressed immediately in case time or budgets run out. This 3.5 hours class provides an understanding of the process for managing resources to their maximum extent.

**DECEMBER 21 | 1:00 – 4:30 “UNDERSTANDING LIFE CYCLE COSTS AND TREATMENT TYPES”**

Life-Cycle Cost Analysis (LCCA) is an economic analysis tool that allows transportation officials to quantify the differential costs of alternative investment options for a given project. LCCA can be used to study either new construction projects or to examine preservation strategies for existing transportation assets. This 3.5-hour class introduces several transportation related products, treatment types and practices for life cycle cost consideration.

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**TTAP brings transportation training your way. This highly interactive training combines lecture with group discussions and practical exercises.**

- Intro. to Asset & Data Management
- Foundation for Using GIS
- Introduction to GPS
- GPS Data Collection & Asset Mgmt.

- Maintenance Condition Assessment
- Developing an Invent. of Hwy Features
- Objective Prioritization of Needs
- Understanding Life Cycle Costs

To register: Check beside the classes you would like to attend. Email this form to Kevan Parker at [kevan.ttap@virginia.edu](mailto:kevan.ttap@virginia.edu) or call 833-484-9944 or visit [ttap.enrollware.com](http://ttap.enrollware.com).

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