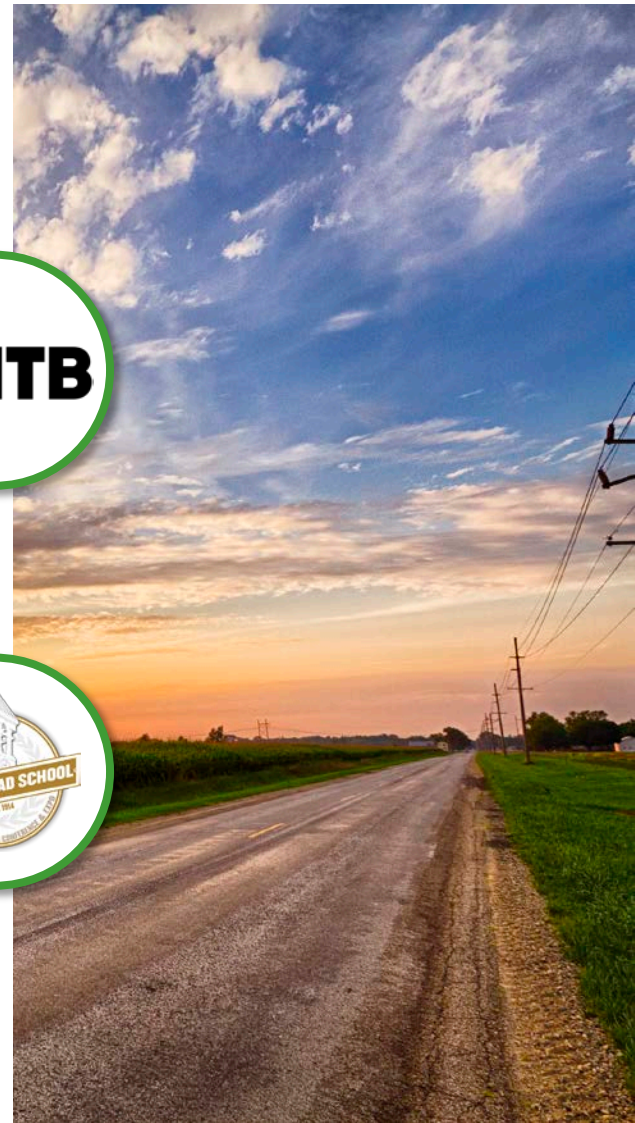




Using Collector for ArcGIS for Field Surveys

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Agenda

- Introduction
- Data
- Advantages/
Disadvantages
- Approach
- Examples



Level of Data Collections

- Tape Measure & Clipboard
- ArcCollector
- Survey Grade

ArcCollector Accuracies

- iPad only: 3-5 meter location accuracy
- External GPS device (require additional app)
 - Bad Elf GNSS Surveyor - \$600 = +/- 1 Meter
 - Trimble R1 Receiver- \$3000 = +/- Sub Meter
 - Trimble R2 Receiver- \$8000 = +/- Centimeter



Advantages of ArcCollector

- Free Intuitive App that is quick and easy to configure
- Accessible on any Tablet or Smartphone
- Quickly Collect data
- Share Data to entire project team

Disadvantages of ArcCollector

- Accuracy - although less now with external GPS
- Need GIS resource to build the database schema
- Requires ESRI ArcGIS organizational account

Typical Approach

- Work with Project Team to develop the Data Model/Schema
- Build Schema in ArcMap - Typically a minimal effort
- Publish the Schema to a web service
- Open the service in Collector
- Check out area of interest
- Go collect the data
- Come back to office and sync data

Example Projects

- Windshield screening
- Utility/Sign locations
- Asset Assessment
- Annual Inspections

Metropolitan Washington Airports Authority - Dulles Toll Road - State of Good Repair Assessment

Asset Assessment

- Need to assess roadway every 8 years to demonstrate SOGR to VDOT and FHWA.
- Baseline assessment was windshield assessment.
- Assets were located using ArcGIS Collector and were rated Good, Fair, Poor.
- Additional Inspection information was collected using Collector App based on Asset Type.
- Data Model/Schema was developed in GIS based on the Baseline Report to create consistency in rating.
- Data was used for statistical analysis for overall assessment of the roadway condition.
- Data collected was used to generate dynamic reporting



Annual Inspection

New Jersey Turnpike Authority - Annual Inspection Report

- Inspection of roadway and appurtenances every year for Maintenance Activities
- Previous Inspection was windshield and clipboard based.
- Assets were located using ArcGIS Collector and were rated A, B, C
- Additional Inspection information was collected using Collector App based on Asset Type.
- Data Model/Schema was developed in GIS.
- Delivered the database as well as Inspection Report.



Ops Dashboard

New Jersey Turnpike Authority - Annual Inspection Report

- Operations Dashboarding
- Make the data collected in the field available to decision makers in the office.



Other Apps

ESRI Applications within this Family

- Ops Dashboard
- 123 Survey
- Workforce

Questions

Thanks!