How Did That Get There?

Bicycle & Pedestrian Evaluation & Infrastructure: Digging Into Data

Presented by:
David Shipps AICP

OTEC 2015
Ohio’s Safe Routes to School Program

- SRTS Projects implemented in 78 of 88 Counties
- $60 Million Awarded since 2005
- Over 200 infrastructure projects
- Over 300 non-infrastructure projects

Since 2005, Ohio Safe Routes to School has awarded $60 million to communities in 78 counties for safety projects all over the state.
Ohio’s Safe Routes to School

- **School Travel Plan**
  - Planning Document
  - Addresses all 5 E’s
  - Team-based Approach
  - Required to Access Further SRTS Funding
Ohio’s SRTS – Data Needs and Solutions

3 Key Items
- Where are the kids coming from
- What travel mode are they using
- And why?
Data Solution – Priority Corridors

- Student/school locations, Crash data, Parent survey comments, Other items (crossing guard locations, infrastructure assets, scheduled roadway projects, etc.)

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In past have used paper maps (created in GIS) to record notes
  – Supplement with photos
  – Occasionally use GPS devices
  – Requires considerable work on back end
Collector for ArcGIS App

- Developed and maintained by Environmental Systems Research Institute (Esri)
- Free App Download accessible via IOS (app store) or Android (Google Play)
- App uses devices GPS location for mapping & data collected can be viewed real-time.
- Interacts with an Organization’s ArcGIS Online account
Walking Audits – Challenges

- Scoped for only 1 week of analysis
  - Trained Local Team on how to conduct Walk Audits
  - Consultant Team (20 audits)
  - Local Team (50 audits)

- How to get Local Team access Collector App?
  - Free ArcGIS online account (connected them to our site)

- How to use Collector App?
  - Multiple devices and platforms
ArcGIS

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Collector App – Overview

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Collector App – Overview

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Collection – Inserting Observations
Collection – Adding Photos

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Collection – Adding Notes to a Location

- Meeting with School Staff
- Ask a series of questions related to walking/biking and surrounding neighborhood
- Able to insert notes (comma separated)
ArcMap - Desktop

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Non-GIS Users

- ArcGIS Online Site
- Google Earth .kml files
- Excel spreadsheets
Lessons Learned/Conclusions

- Time/Cost savings – No paper!
- Captured all observations and analysis
- Start-up issues with new users
- Photo size (downloads)
- Sophistication!
Further Bike/Ped Applications

- Wayfinding
- Bicycling/Walking Audits
- Asset Management
- Pathway/Sidewalk Condition
- Walk/Bike Sheds
- Lighting

- Culverts, Bridge Inspections, Sign Inventories, Park & Ride Assets, Lighting Inventory, etc.