



**COLORADO**

Department of  
Transportation

# GIS Assets Data Collection Survey123/Spike Integration Efforts at CDOT

## Collector/Survey123 User Group Meeting Feb. 15, 2018

by

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## Points to cover

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1. Background information (Roberto)
2. Introducing Spike (James)
3. CDOT asset data collection using ESRI's Survey123 and Spike (Roberto)
4. Demos (James & Roberto)
5. Questions/comments



## Background Information

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- GIS asset data collection workflow has been inefficient and time-consuming
- Contractors collected data on printed spreadsheet and/or Juno devices
- Data was brought to headquarters, QA/QC, and input into a central database
- This particular workflow caused data to be handled multiple times and it was predisposed to errors
- CDOT needed a GIS technology solution that leverage ESRI's ArcGIS platform to store, automate, and share roadways transportation data to CDOT stakeholders



# Asset data collection web apps

Survey 52 for ArcGIS

### Sign Inventory

This form captures sign data from CDOT roadways.  
**Caution: at the moment it is for testing purposes only.**

#### Sign Location

Select a Region \*  
 Region 1  Region 2  Region 3  Region 4  Region 5

Select a Section \*  
 Section 5  Section 9

Select a County \*  
Jefferson

Select a Route \*  
040C

Route Direction \*  
 Eastbound  Westbound  Northbound  Southbound

Select a Patrol \*

Milepost:  
284.134

Sign Location Photo:  
After you take the photo, press the gray x button to delete the photo and try again.

Sign Location:  
39°42'N 105°13'W

Signs

Survey 52 for ArcGIS

### CDOT Outfall Inventory

This form captures outfall data from CDOT roadways.  
**Caution: at the moment it is for testing purposes only.**

#### Inspection Information

Survey Team

GPS Location \*  
39°44'N 105°10'W ± 2336.04 m

#### Images

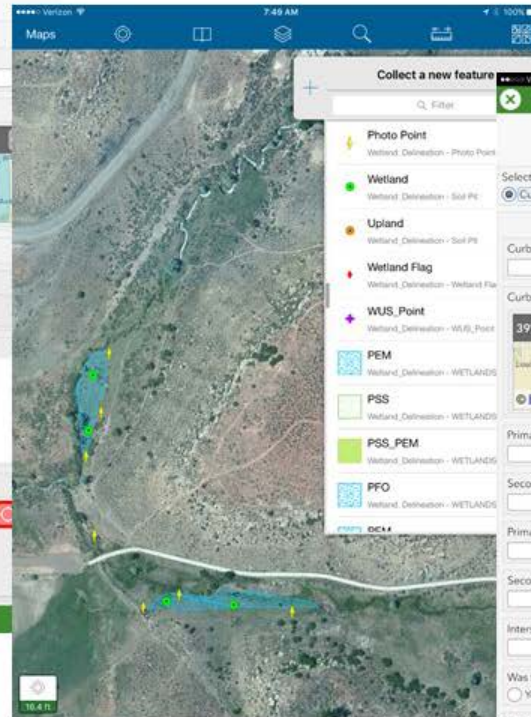
Image

Image Note

Image Location  
No Location

Press to capture location using a map

Outfalls



Wetlands

Survey 52 for ArcGIS

### Curb Ramp and Pedestrian Pushbutton

This form captures curb ramp and pedestrian pushbutton data.  
**Caution: at the moment it is for testing purposes only.**

Select the Inspection Type?  
 Curb Ramp  Pedestrian Pushbutton

#### Curb Ramp Location and Information

Curb Ramp ID \*

Curb Ramp Location  
39°42'N 104°56'W ± 976.705 m

Primary State Highway Route

Secondary State Highway Route

Primary Reference Point

Secondary Reference Point

Intersection Position ID

Was the curb ramp constructed?  
 Yes  No

Is there a sidewalk leading to the curb ramp?  
 Yes  No

Curb ramp



# Introducing Spike

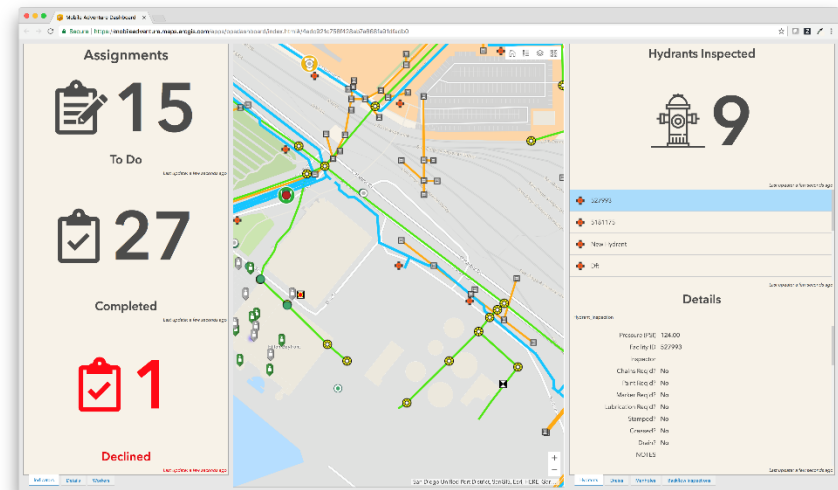
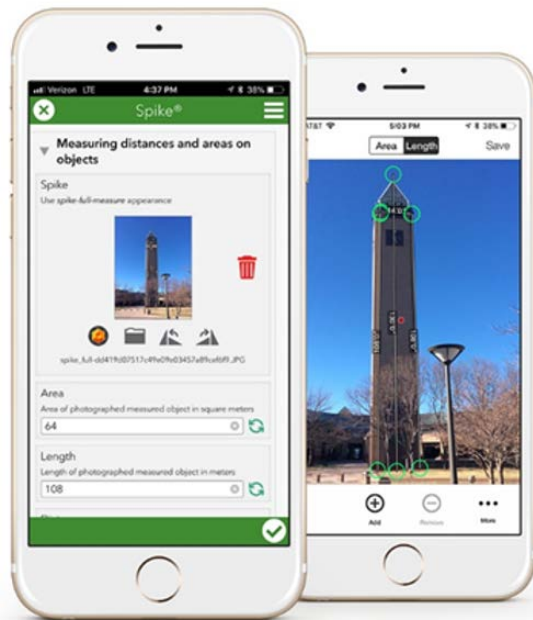
## Measure... Measure lengths and areas





# Background Information

...bring measurements directly into ArcGIS  
Spike measurements and photo stored as GIS attributes



...submit into ArcGIS

Tap, snap, measure...



# Demos

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**Spike demo followed by CDOT Survey123/Spike  
sign app demo**



## Questions/comments

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Thank you!

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