esri labs
QuickCapture
A BIG button mobile app to capture data while on the go

Overview

- TxDOT Case Study
- QuickCapture overview
- Demo

TxDOT Case Study

Overview

- Issue: ET PLUS End treatment was a risk. Causing fatalities…
  - …Data Capture at speed is a regular thing
- No existing statewide inventory of guardrails or end treatments

- Needs: Collect guardrail end treatment types to determine the total number of each type

- Build an inventory to manage the assets long term

- Solution: Create a mobile app with an easy to use interface for use in vehicles

- ***Key Concepts: Speed and Basic Location

End Treatment Examples

ET PLUS

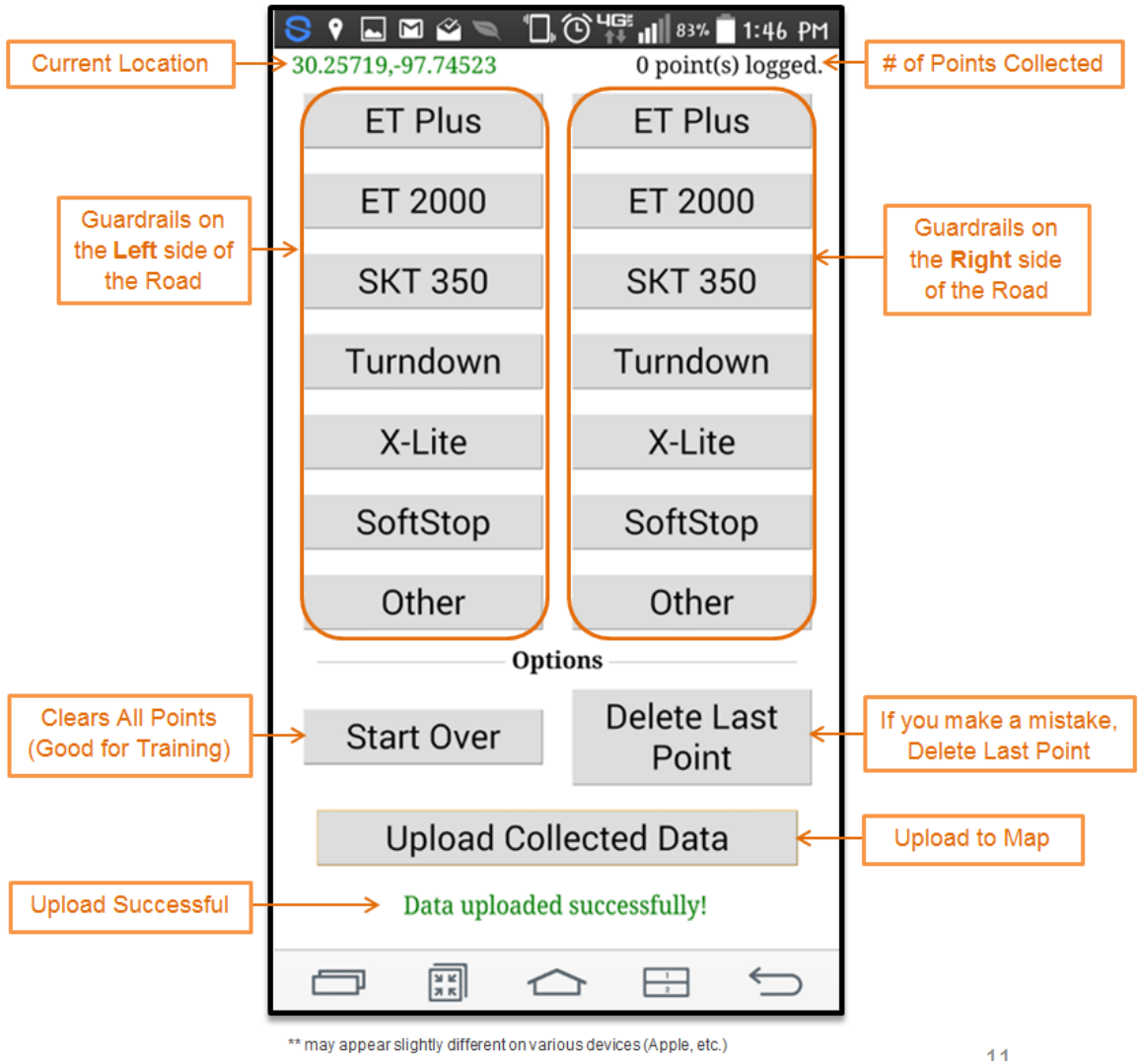
X-LITE

ET 2000

Turndown

App

- Built for two man teams from the maintenance division with a driver and a collector
- Drive each roadway one direction to speed collection
- Keep the interface simple to run on one screen



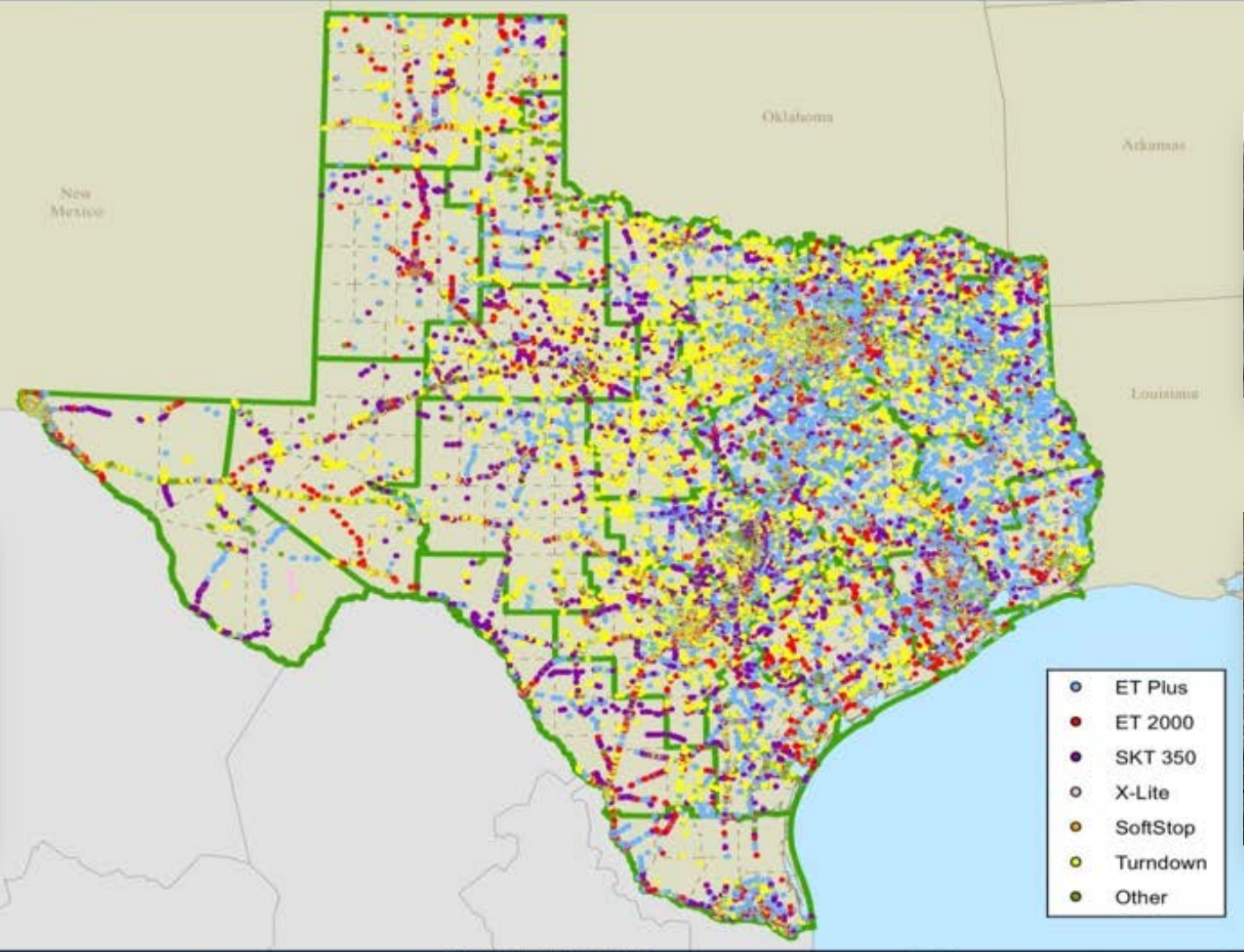
Results

- Start Date: May 19th
- End Date: June 30th
- Project Duration: 30 working days
- Average Collection Speed: 35 mph
- Average Accuracy Rating: 26 ft
- Most common Device: iPhone
- ~134,000 Total Statewide End Treatments

- Most points collected in a day: 10,801 (June 9th)

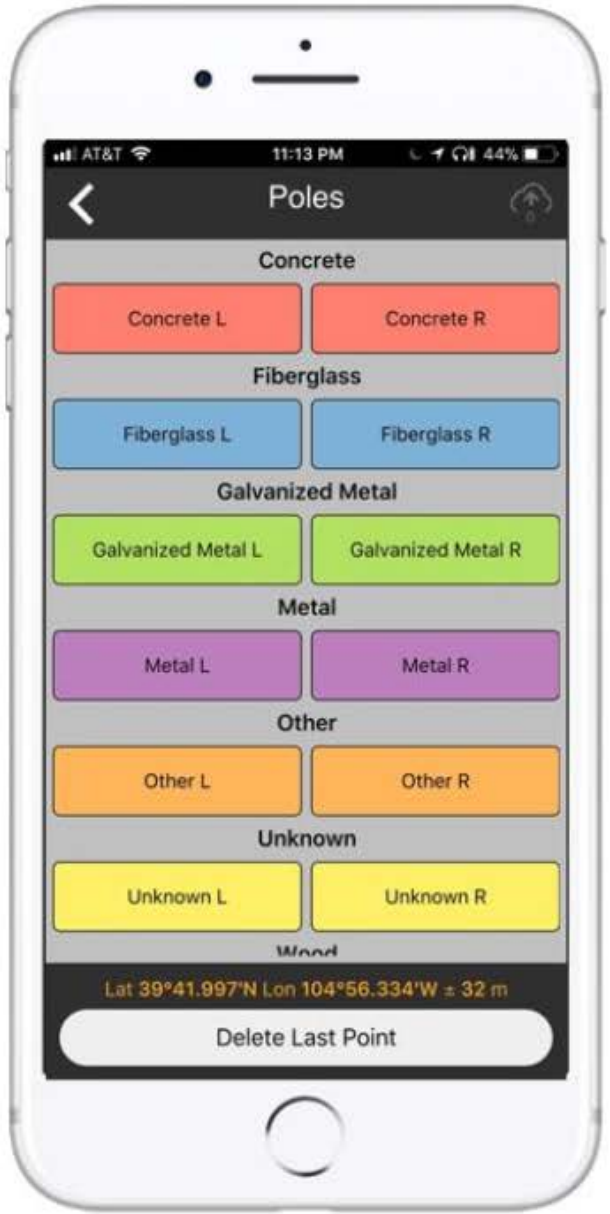
Guardrail End Treatments

2015 Collection Project

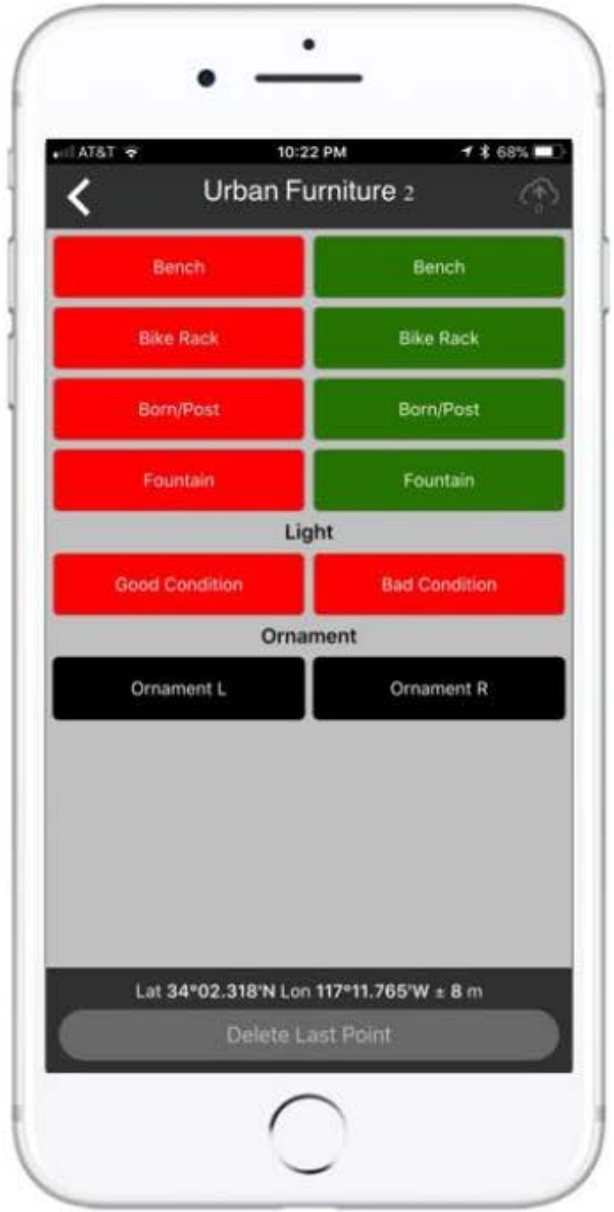


QuickCapture

- New app in the App store and Google Marketplace
  - Delivered through Esri Labs
- Speed of data collection is primary focus
  - Single button click data collection
- Configurable by feature services in a portal
- Open source through AppStudio for ArcGIS


AT&T
11:13 PM
44%
Poles
Concrete
Concrete L
Concrete R
Fiberglass
Fiberglass L
Fiberglass R
Galvanized Metal
Galvanized Metal L
Galvanized Metal R
Metal
Metal L
Metal R
Other
Other L
Other R
Unknown
Unknown L
Unknown R
Lat 39°41.997'N Lon 104°56.334'W ± 32 m
Delete Last Point

Verizon
11:45 PM
45%
WindshieldSurvey
Appliances (White Goo...
Construction and Demo...
Electronic
Hazardous Waste
Mixed
Other
Personal Property
Sediment (Soil, Mud, S...
Vegetation
Vehicles
Vessels
Lat 39°41.990'N Lon 104°56.320'W ± 30 m
Delete Last Point

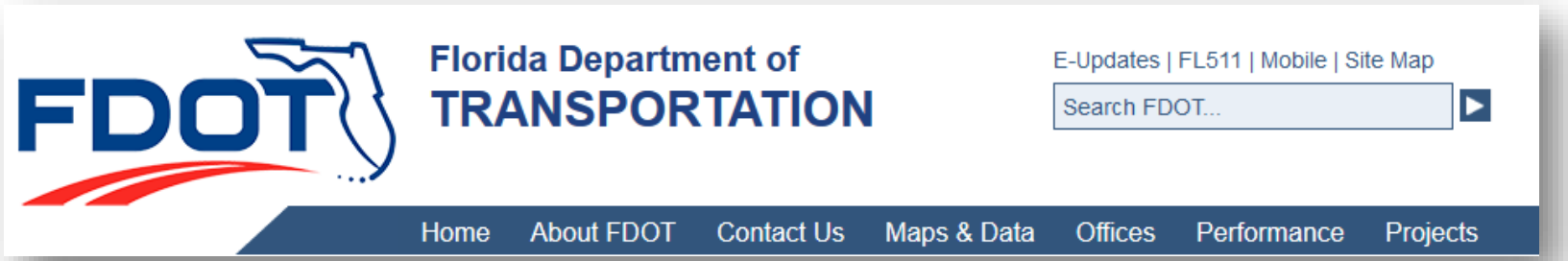

AT&T
10:22 PM
68%
Urban Furniture 2
Bench
Bench
Bike Rack
Bike Rack
Born/Post
Born/Post
Fountain
Fountain
Light
Good Condition
Bad Condition
Ornament
Ornament L
Ornament R
Lat 34°02.318'N Lon 117°11.765'W ± 8 m
Delete Last Point

IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN

TRAFFIC CRITICAL PROJECTS

OFFICE OF TRAFFIC OPERATIONS

COLORADO DOT
DEPARTMENT OF TRANSPORTATION



ExxonMobil

minnesota power
AN ALLETE COMPANY

ONEFORTYONE
PLANTATIONS

Fresh from Florida

Accolade Wines

ORG 1873
ASSOCIATION OF
INTERNATIONAL
FIRE CHIEFS

dtsgis

PG&E
Pacific Gas and
Electric Company®

wfec
western farmers
electric cooperative
A Touchstone Energy® Cooperative

OZ
MINERALS

SENECA
RESOURCES

Utility Line Inspections

Pest mapping

Windshield Damage Assessments

Pipeline inspections (on foot, vehicle or helicopter)

Other applications

- Florida Department of Agriculture
  - Tracking placement of Fruit Fly Treatments
  - Dashboards in the office for tracking

Stop... demo time - Tom Brenneman