

Transforming the Bus Stop Inventory Process

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Gold Coast Transit District



- 20 Routes
- 56 Buses
- 91 square mile service area
- 700+ Bus Stops
- Nearly 4 million annual passengers

Bus Stop Inventory

OVERVIEW

- PROJECT
- TOOLS
- PROCESS
- LESSONS LEARNED



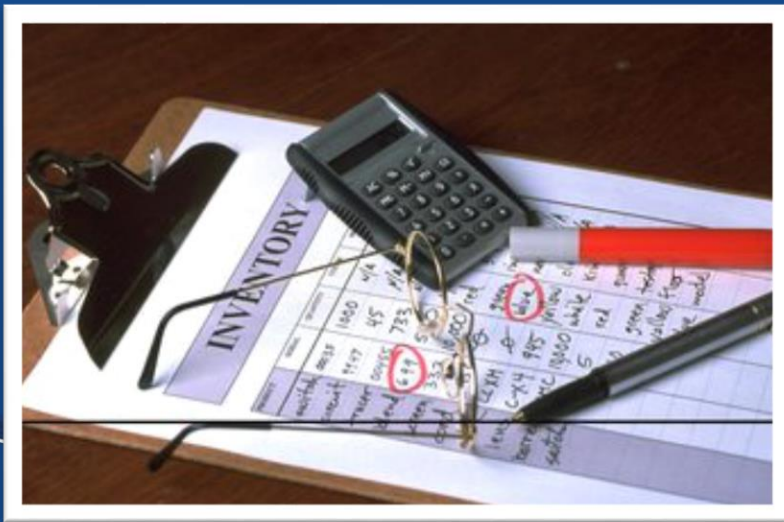
Old Data Collection

BENEFITS:

- Simple
- No technology costs

DRAWBACKS:

- Manually data entry
 - Room for error
- Little flexibility in analyzing data
- Limited methods with data sharing



Old vs. New Data Collection Method

Paper/Clipboard

Open Source Software



Subscription vs. Free & Open Source Tools

Various tools available online:



New Data Collection

BENEFITS:

- *FREE* software available
- Survey Offline and Online
 - No cellular data required
- Easy survey creation
- Minimal room for error
 - No skipping questions
 - No manual entry of data



New Data Collection

BENEFITS:

- Increased tools for analyzing data
- Mapping data
- Downloading data
- Sharing data just got easier...
- Time Savings



New Data Collection

DRAWBACK:

Not a permanent solution

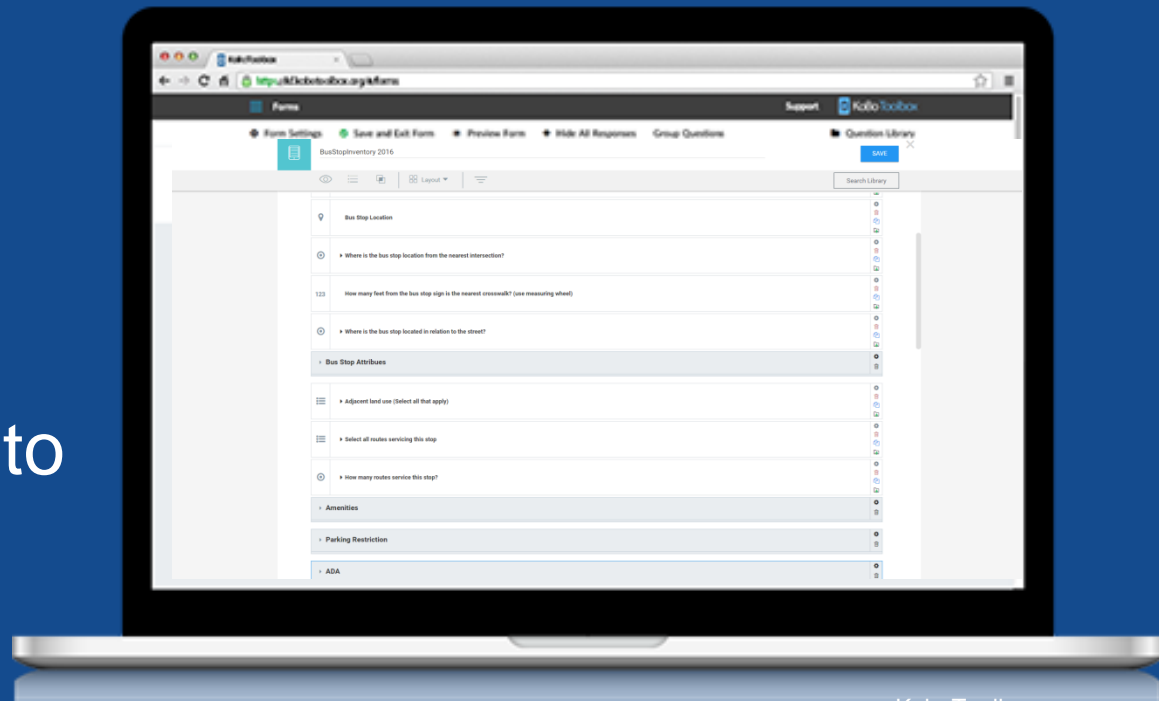


KoBoToolbox



KoBoToolbox

- Create Bus Stop survey form
- Easily deploy form to KoboCollect app



GCTD Survey Form



▶ **Bus Stop Attributes**



▶ **Adjacent land use (Select all that apply)**



▶ **Select all routes servicing this stop**



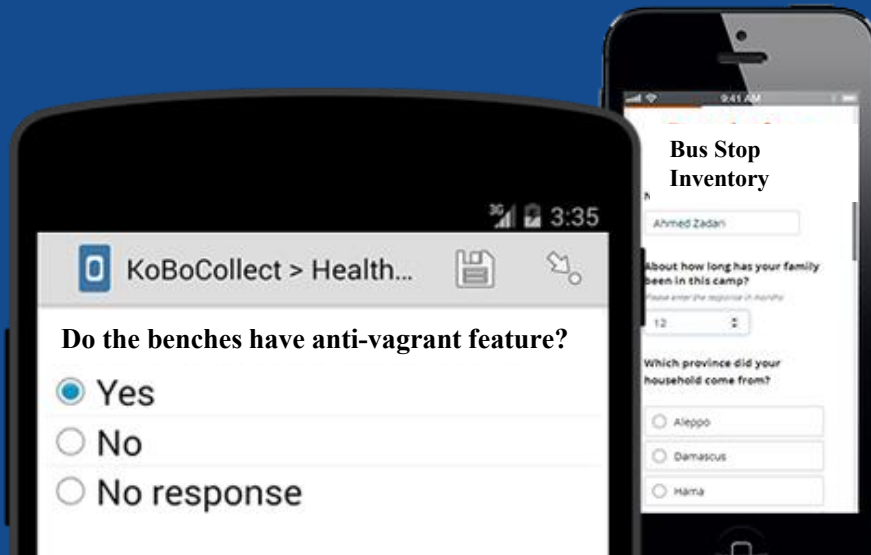
▶ **How many routes service this stop?**

▶ **Amenities**

▶ **Parking Restriction**

▶ **ADA**

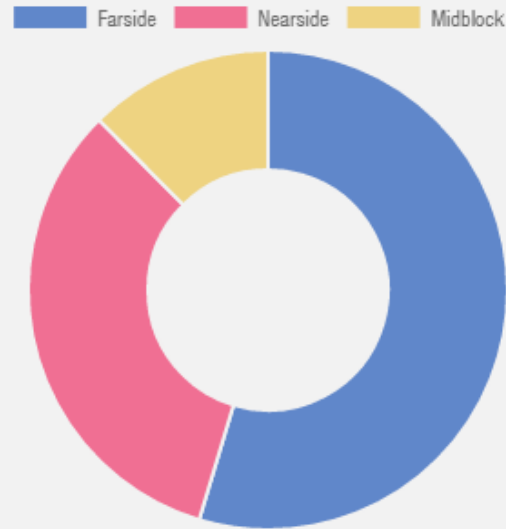
KoBoCollect App



KoboToolbox.com

- Attribute data can be collected online/offline
- On a tablet or a phone

Analyzing Data

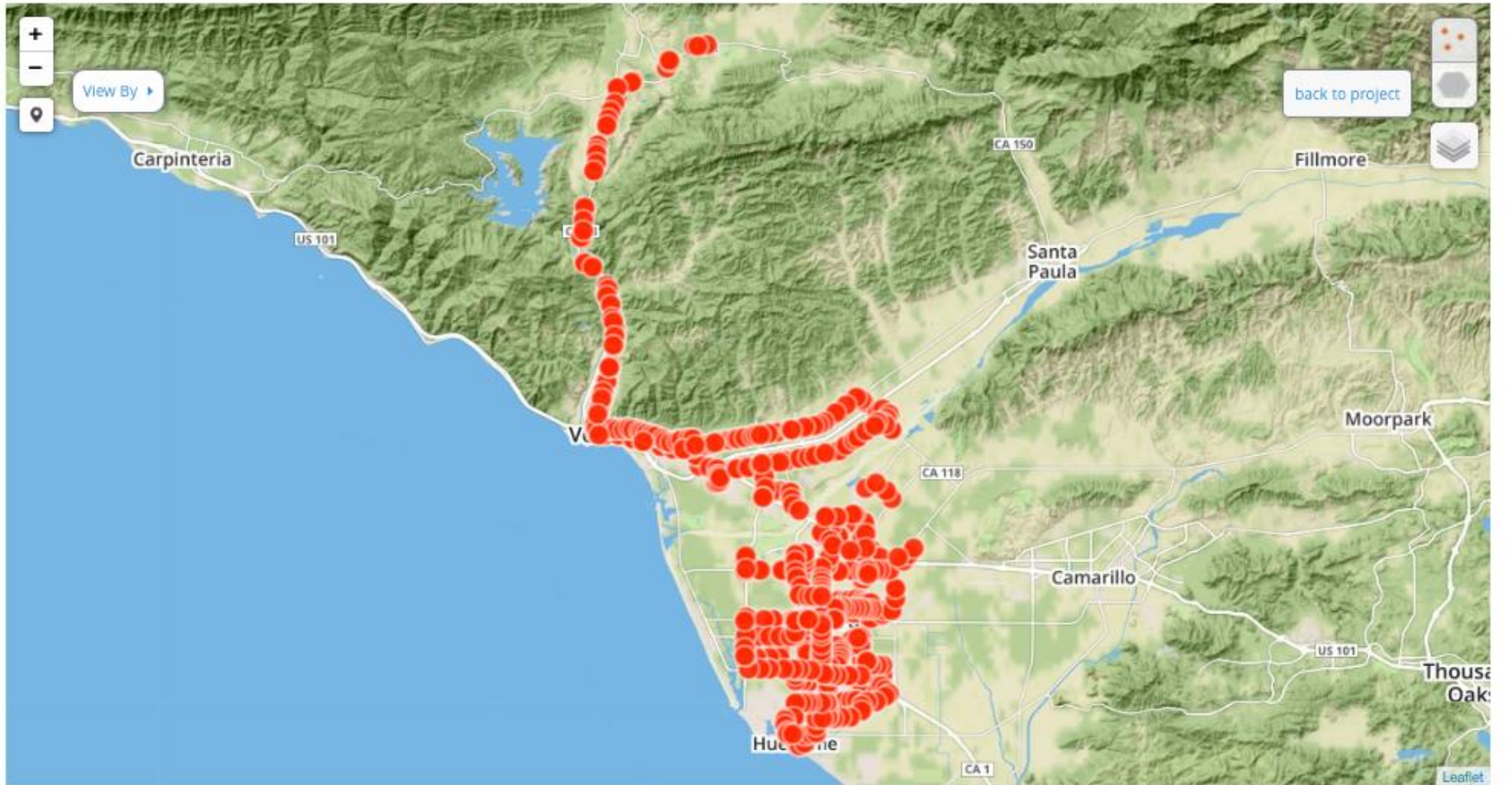


Value	Frequency	Percentage
Farside	377	54.64
Nearside	227	32.9
Midblock	86	12.46

Combines the process of collecting and reporting



- Collected data available immediately
- Reporting feature provides basic analysis of data

Mapping Data



Mapping Data

Data Profiles

Parking restriction at this bus stop (select all that apply)	no_parking_sig
Is there an ADA landing pad at the stop? (Must be at least 5' wide by 8' in length)	yes
Is the bus stop area accessible?	yes__connected
Maintenance Information (select all that apply)	property_damag
Photo: Front of stop	
Photo: Rear of stop	
Notes	Sign bent.
Other Agency Stop	none
City/County	oxnard
__version__	vGHLjyWGfx7KvcKUY4eCUg
meta/instanceID	uuid:db863f48-613d-4589-a2a9-980b7ab83a98

Data Visualization

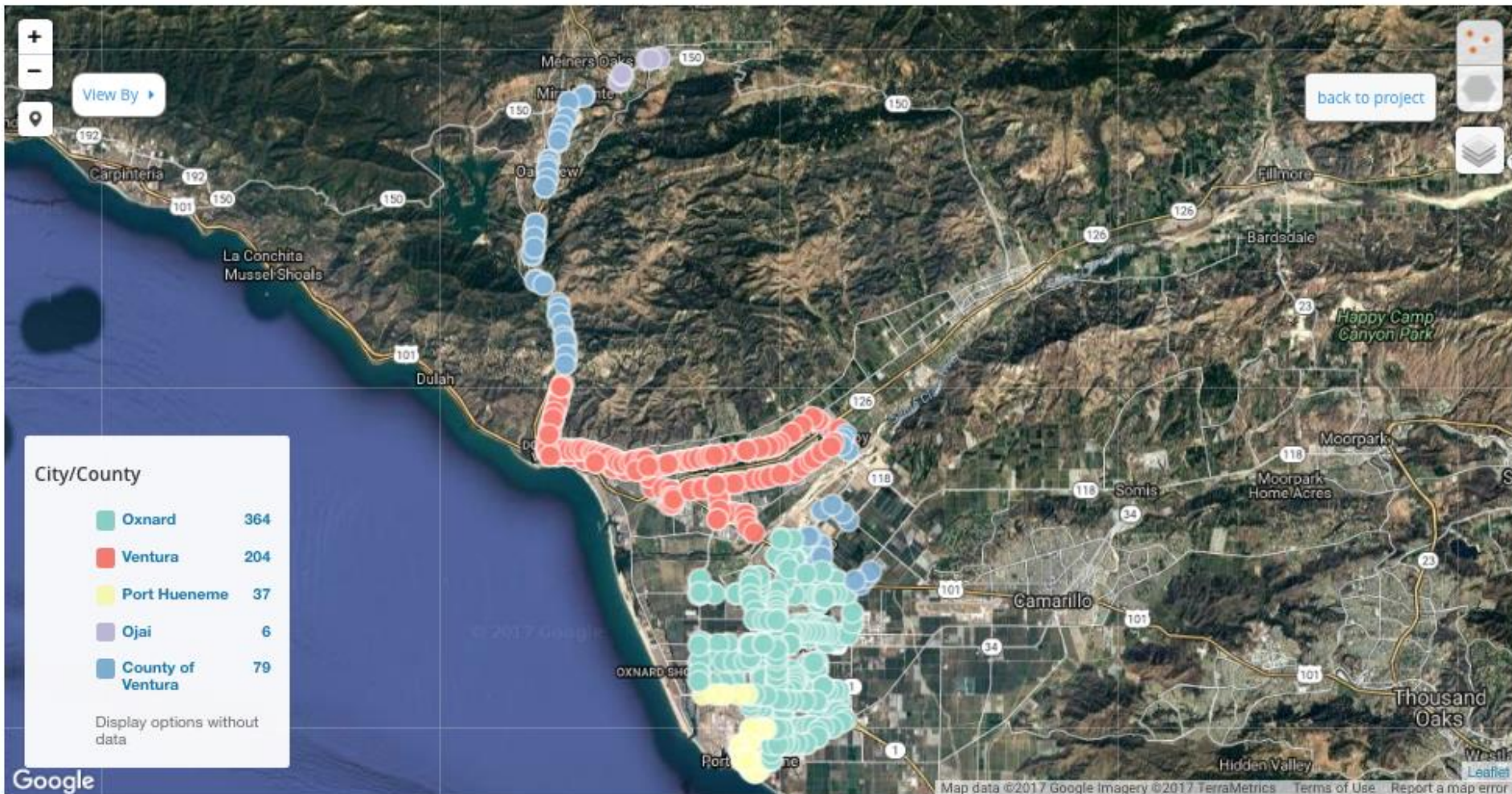


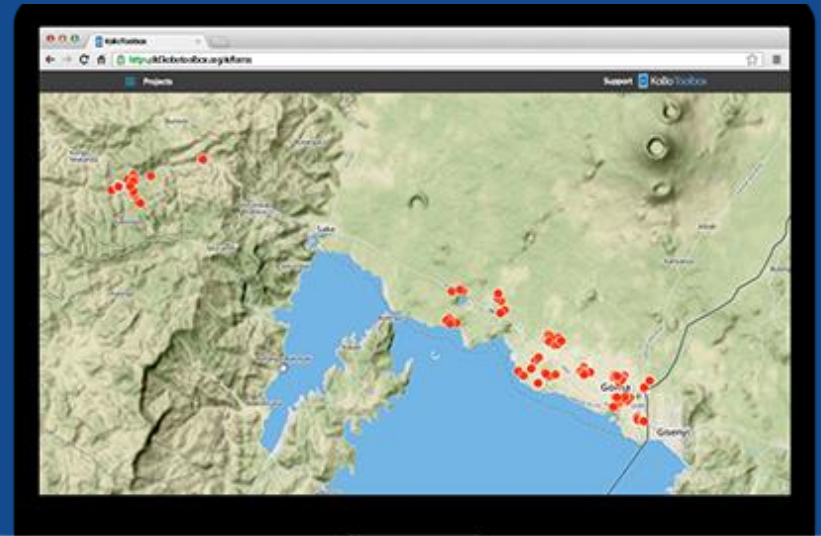
Photo Gallery



Data Sharing

Methods:

- Share by URL link
- Download KML, XLS, CSV
 - Import to GIS software & Google Earth
- Download media (photos, videos, sound recordings)



Key Takeaways

- **Cost-effective**
- ***Uncertainties exist* but can have a good payoff**
- **Set *precedent* for permanent solution**

