ArcGIS and Secondary Cities: from Collecting Data to Sharing Knowledge

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Solutions with the freedom of choice
Integrated workflow with open standards

Survey creation

- Survey 123

Data collection

- Survey 123

Data management and dissemination

- ArcGIS Online
- ArcGIS Open Data

Knowledge sharing

- ArcGIS Online
  - Story Maps
Survey creation
Survey123

- Open standard: design surveys with XLSForms
- Share survey with your community
- Store the results in a web service with an open API

Survey creation → Data collection → Data management and dissemination → Knowledge sharing
Survey123 in action: Kharkiv, Ukraine

Mobility Features

Survey creation: Is this a street intersection, stairs, or subway station entrance?
Data collection: Collect the GPS coordinates for this feature.
Data management and dissemination: Street Intersection
Knowledge sharing: Yes

Public Safety

Survey creation: Is this a street light lamp or evacuation gathering place?
Data collection: Collect the GPS coordinates for this feature.
Data management and dissemination: Street Light
Knowledge sharing: Yes

Community Resources

Survey creation: What type of community resource is at this location?
Data collection: Collect the GPS coordinates for this feature.
Data management and dissemination: Community Resources
Knowledge sharing: Yes

Survey creation ➔ Data collection ➔ Data management and dissemination ➔ Knowledge sharing
Survey123 in action: Kharkiv, Ukraine

The datasets after three weeks:
- 1,909 mobility features
- 1,082 community resources
- 10,699 public safety features
Survey123 in action: Kharkiv, Ukraine

Survey creation → Data collection → Data management and dissemination → Knowledge sharing
Data management and dissemination
Data management and dissemination

- Resulting data is cloud hosted
- Manage data in ArcGIS Online
- Share through ArcGIS Open Data
Part of the ArcGIS Platform
Providing open access to your published data

Simple
Integrated
Open

Desktop Web Device
Server Online Content and Services
ArcGIS Online Open Data Site

Survey creation → Data collection → Data management and dissemination → Knowledge sharing
ArcGIS Open Data Principles

Accessible

Discoverable

Explorable

Collaborative

Survey creation → Data collection → Data management and dissemination → Knowledge sharing
Developing Enhanced Functionality

Polling Locations: Boston
One dataset: Many views

Survey creation → Data collection → Data management and dissemination → Knowledge sharing
Demonstration
Knowledge sharing
Taking the data and turning it into information
Story Maps are simple web apps that combine interactive maps,
Story Maps are simple web apps that combine interactive maps, multimedia content,

Survey creation ——> Data collection ——> Data management and dissemination ——> Knowledge sharing
Story Maps are simple web apps that combine interactive maps, multimedia content, and user experiences.
Story Maps are simple web apps that combine interactive maps, multimedia content, and user experiences to tell stories about the world.
Most Story Maps are hosted by Esri in the cloud. (But you can opt to host them yourself.)
Most Story Maps incorporate builder functions that enable you to build a sophisticated story with no GIS or web development skills.
Most Story Maps work equally well on PCs, laptops, tablets, and smartphones.
Story Maps are open source. You’re free to download and customize them.
Demonstration
Summary
Summary

- Integrated solutions with freedom of choice
- Survey123 for collecting data in the field
- ArcGIS Online and ArcGIS Open Data for sharing the data back out
- Story Maps to turn the data into insights
Resources

Esri on Github: esri.github.io

opendata.arcgis.com

storymaps.esri.com

learn.arcgis.com

developers.esri.com
Understanding our world.