Collecting, Mapping, Analyzing, and Communicating Field Data with ArcGIS

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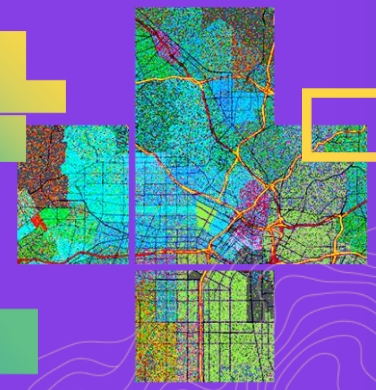
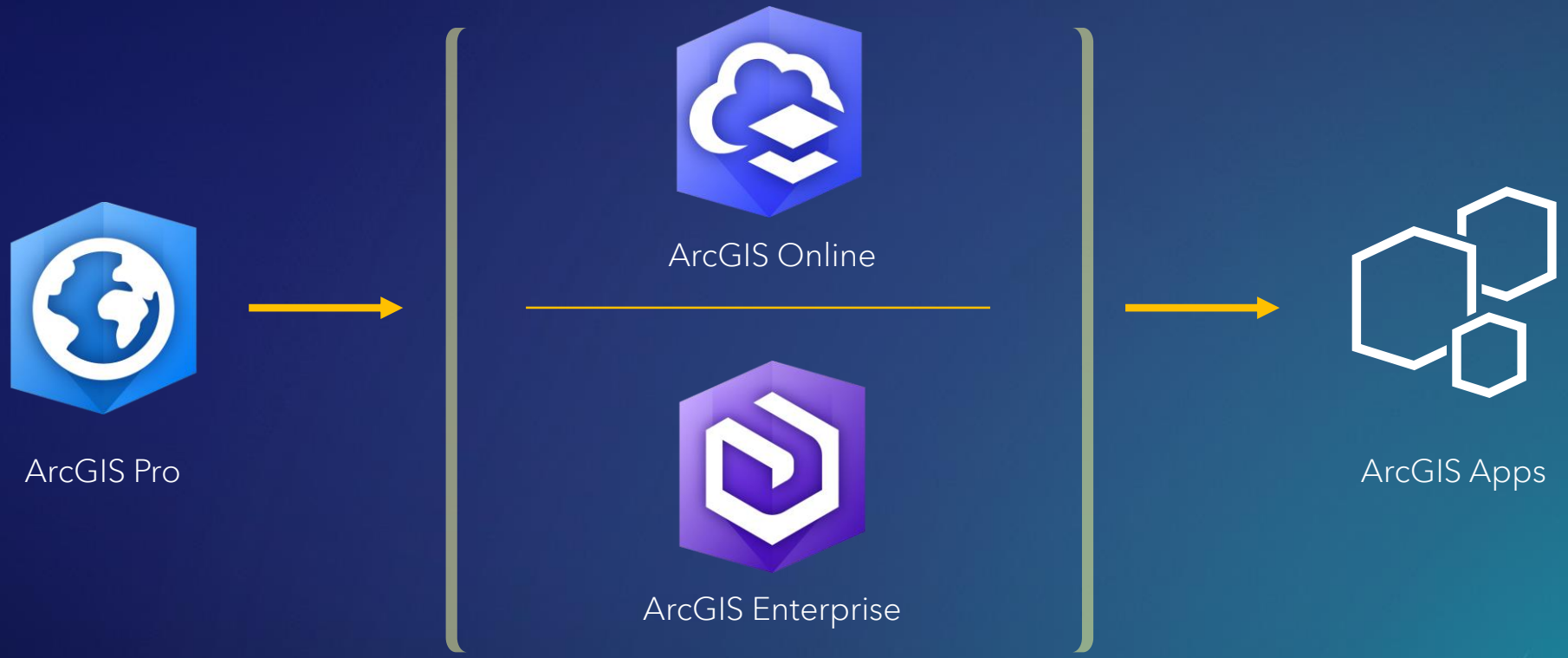


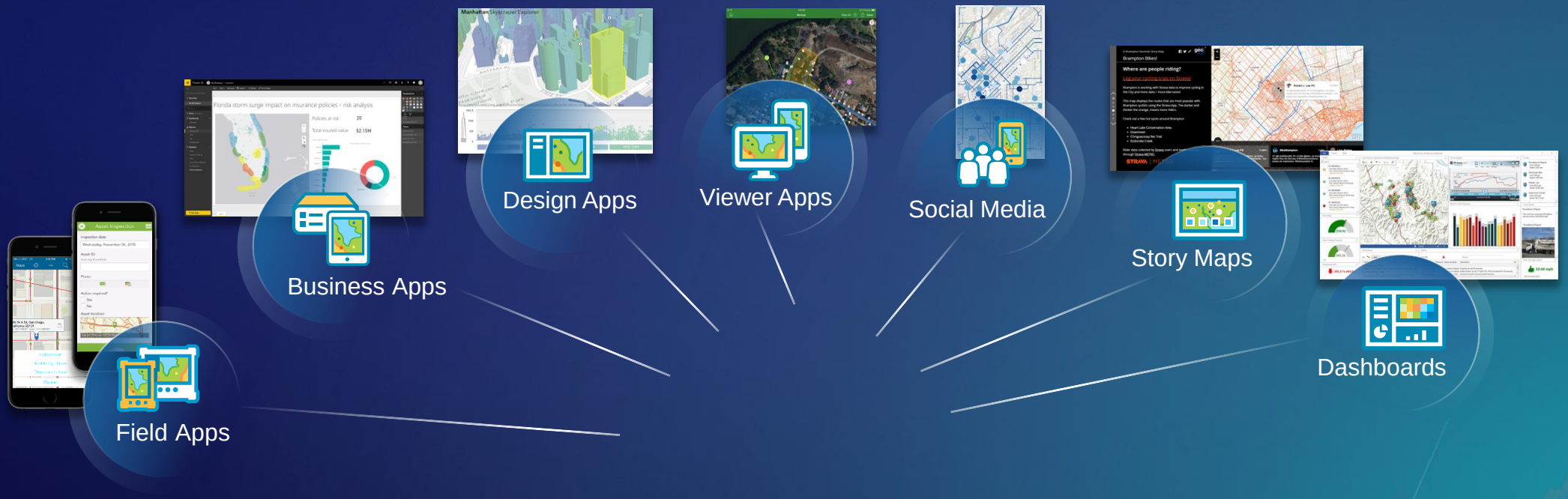
The Web GIS Paradigm



ArcGIS for Developers

ArcGIS Apps Bring the Power of Location to Everyone

Extending the Reach of GIS



Across Organizations and Beyond

Apps by theme

Focused, powerful, ready to use

Office

ArcGIS Earth

Esri CityEngine

Maps for Office

Maps for SharePoint

Insights for ArcGIS

Esri Business Analyst

GeoPlanner for ArcGIS

Story Maps

ArcGIS Dashboards

Field

Workforce for ArcGIS

Navigator for ArcGIS

Tracker for ArcGIS

Survey123 for ArcGIS

Collector for ArcGIS

Drone2Map for ArcGIS

ArcGIS Explorer

ArcGIS QuickCapture

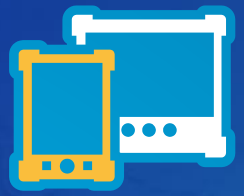
Workshop workflow

1- Collect data
Using Survey123

2-Map data
Using ArcGIS Online

Analyze data
Using ArcGIS Online

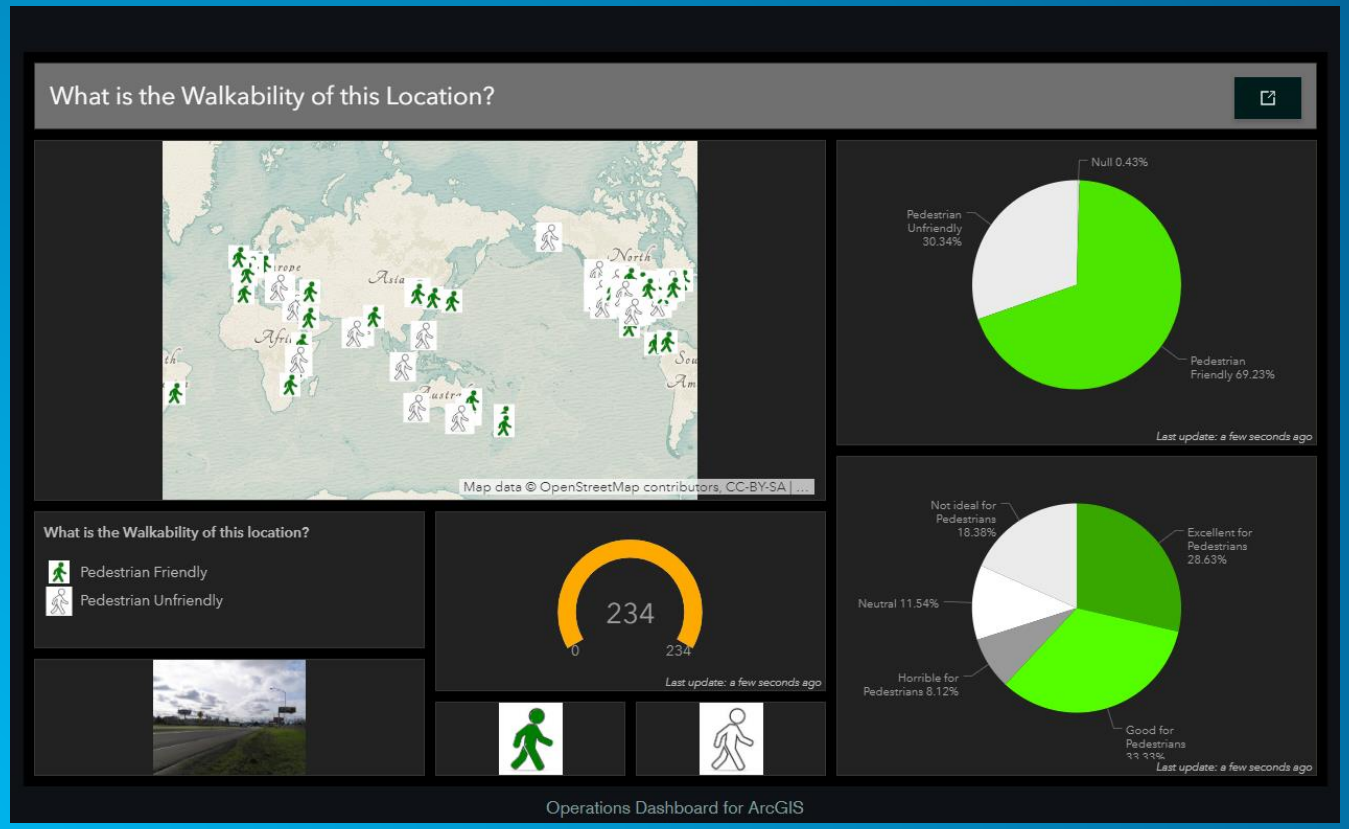
3- Create
Dashboard

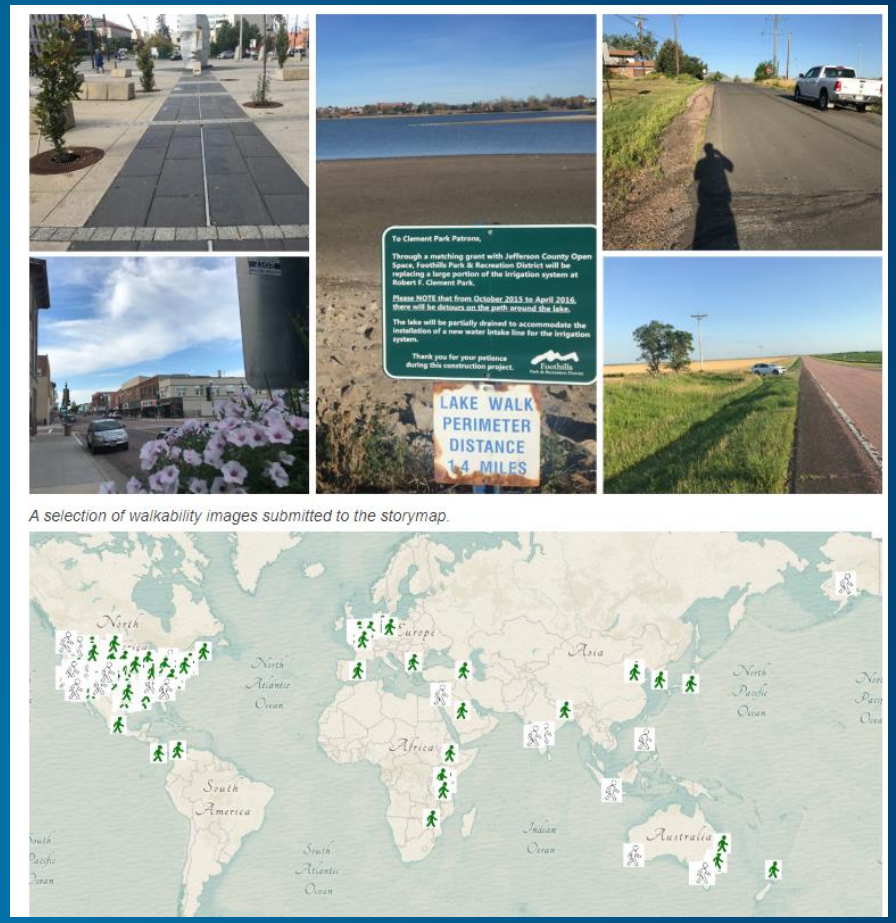


4 - Create Story Map

We will build this example: Survey, ArcGIS Online Map, Story Map, Operations Dashboard

https://community.esri.com/community/education/blog/2019/08/27/how-walkable-is-your-community





A selection of walkability images submitted to the storymap.

Let’s go to work!

This lesson is organized in 4 parts:

Part 1: Creating a field survey using Survey123.
Part 2: Creating and analyzing a map from your survey data.
Part 3: Creating a dashboard from your survey data.
Part 4: Creating a storymap from your field data.

Why teach the platform?

1. Collect needed data.
2. Connect people with issues in their own community.
3. Develop skills in field data collection, citizen science, data assessment, mapping, spatial analysis, permissions, web apps, sharing.
4. Data fluency; critical thinking; spatial thinking. What they will encounter in the workplace.

Can you name this location?

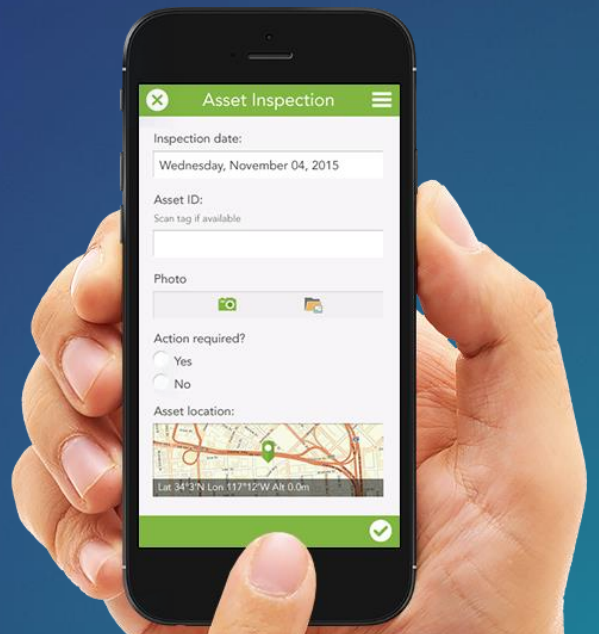
1. Create Survey

Survey123 for ArcGIS

Form-centric field data collection

Leverages Smart forms

Analyze results immediately



Download on the App Store

ANDROID APP ON Google play

Survey123 workflow

1- Ask Questions

(Design & Publish)

2- Get Answers

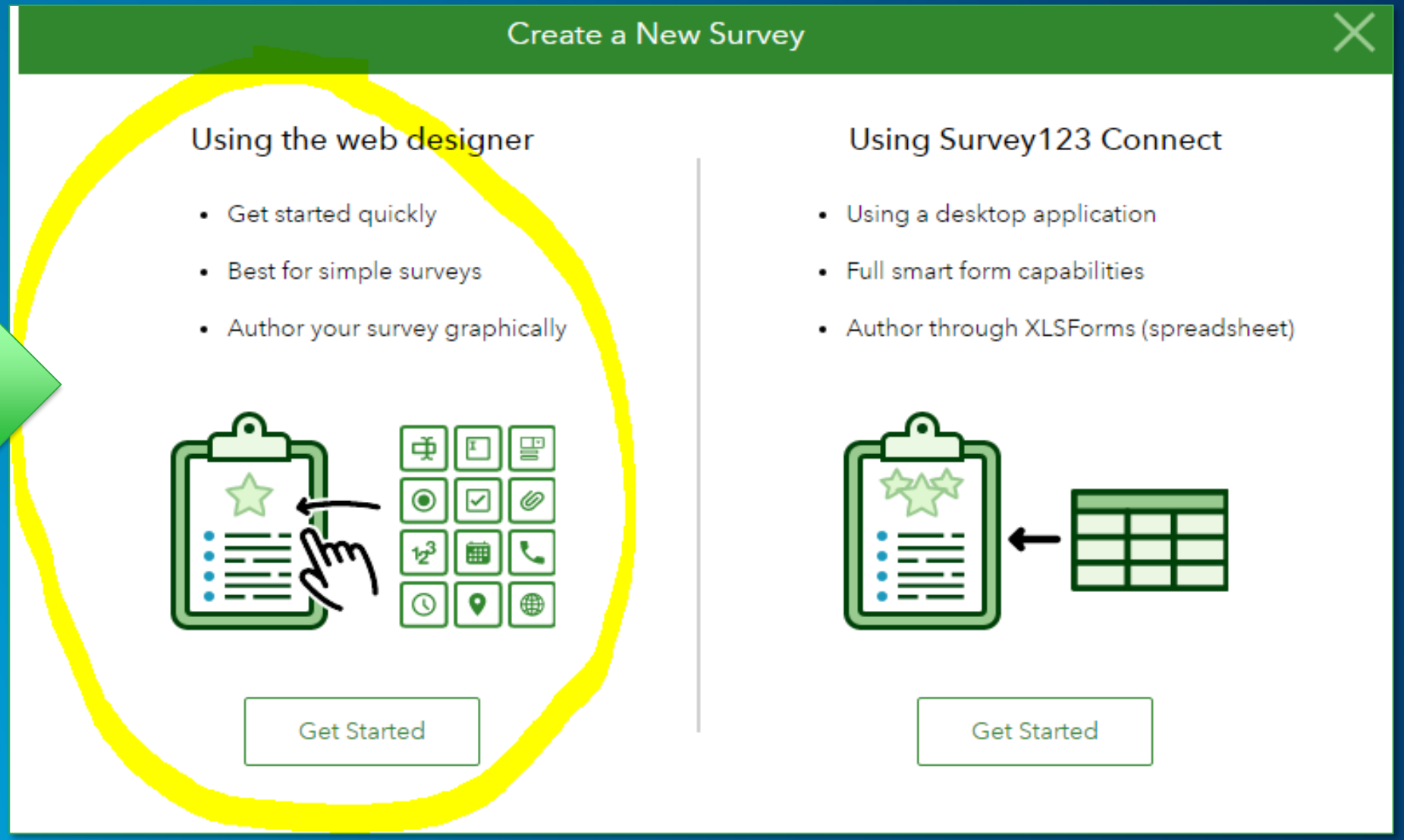
(Capture Data)

3- Make Decisions

(View & Analyze)

2 ways to create a Survey123

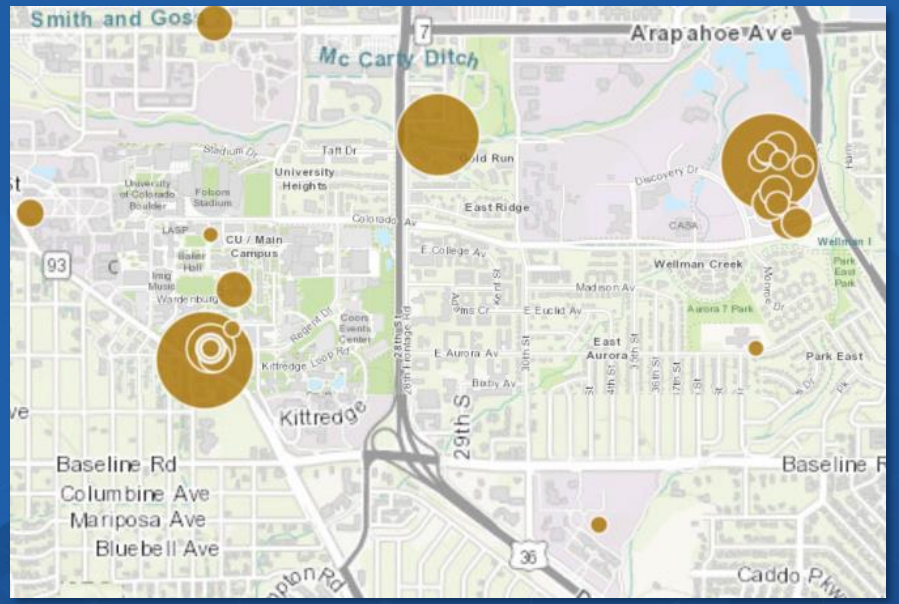
Today we will use this method



2. Create map

[2a]. Open feature layer (hosted) > fill in metadata.

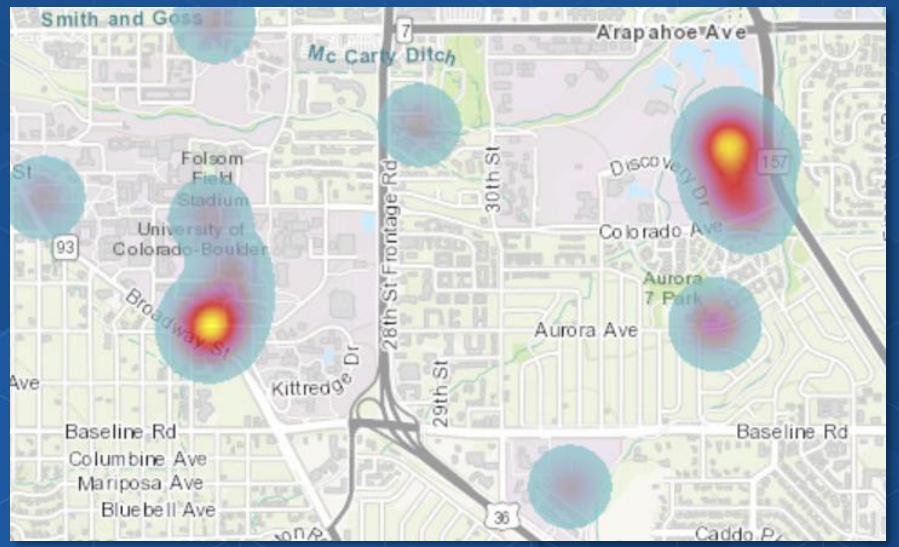
[2b]. Open layer in ArcGIS Online Map Viewer. Save map.



The End Goal:

Not – points on a map, but *understanding.*

Hence, analyze the results spatially.

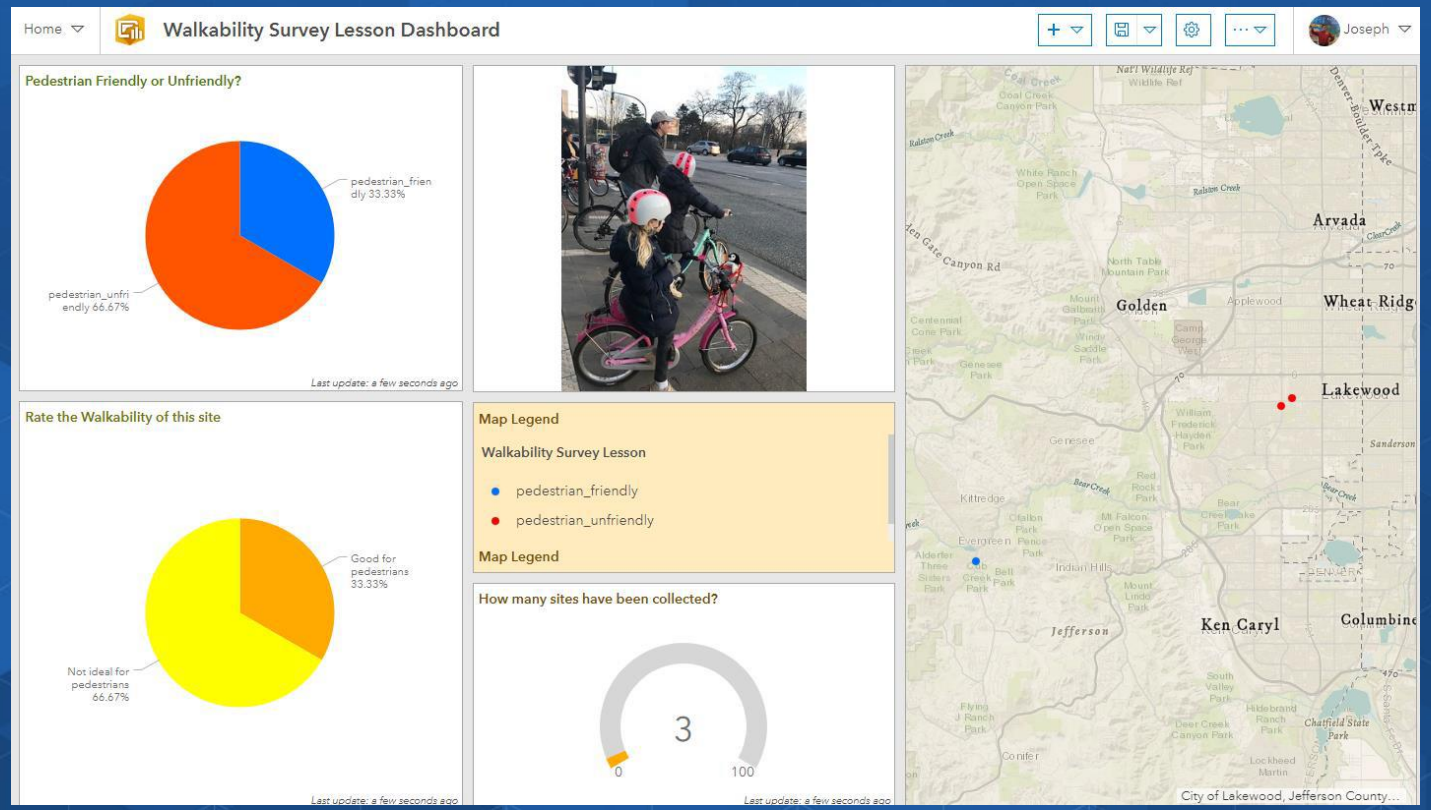


3. Create Dashboard

A dashboard allows you and others to quickly visualize your survey results in a series of maps and graphs.

[3a]. While viewing your web map, > Share > Create a web app > Dashboard.

[3b]. Edit your dashboard. Save. Share.

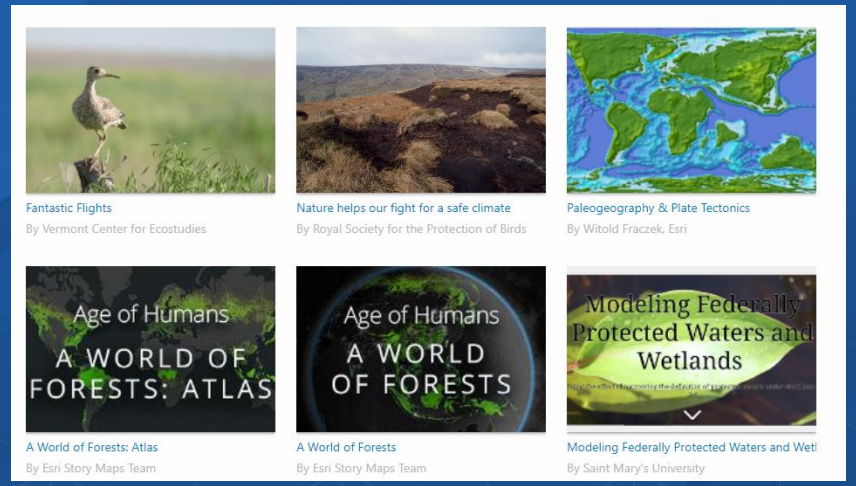


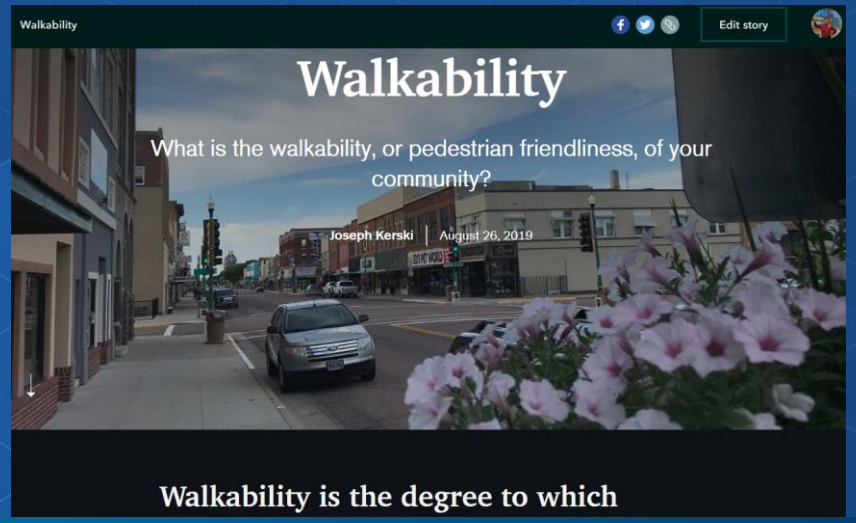
4. Create Story Map

A storymap allows you, with multimedia and interactive web maps, to tell the story about the problem you are studying, along with possible solutions.

[4a]. Go to: https://storymaps.arcgis.com > Create story map.

[4b]. Add elements to story map > save > share.





Connect these tools—GIS is a platform!

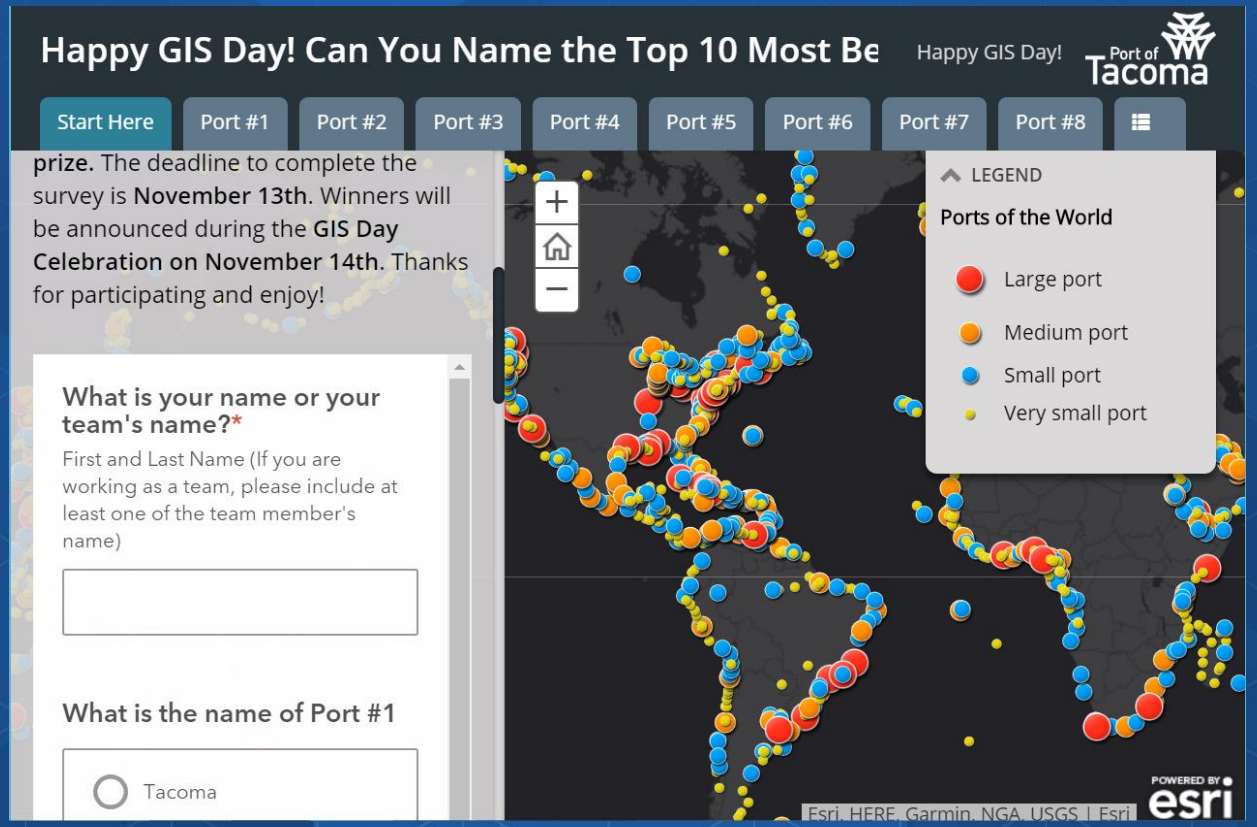
Embed a survey in a story map:

The Top 10 beautiful Ports

Use a survey in a dashboard:

Learn Lesson:

https://www.arcgis.com/home/item.html?id=856da9aeb6944e3da2384906c7139dea

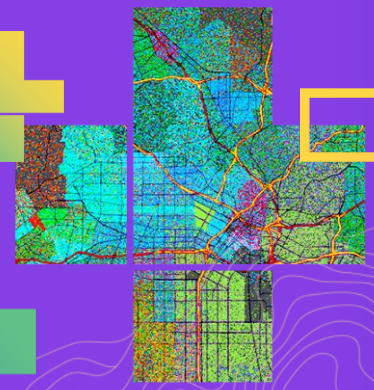


This Lesson

Connecting surveys, maps, dashboards, storymaps:

https://community.esri.com/community/education/blog/2020/03/13/lesson-connecting-surveys-maps-dashboards-and-story-maps

4-part video series with 30 minutes on each step:
https://esriurl.com/ourearth



Keep learning!

Esri Training: http://www.esri.com/training (teaching with GIS, field data collection).

Survey123 for ArcGIS. http://survey123.arcgis.com

Esri MOOCs: http://www.esri.com/mooc (Do-it-yourself web apps).

GeoNet place on Survey123: https://community.esri.com/groups/survey123

Learn library of lessons: https://learn.arcgis.com

The fantastic 4 apps (WAB, Story maps, Experience Builder, Dashboards):
https://storymaps.arcgis.com/stories/b46fcdd8a28945499b4b1eada6936a94

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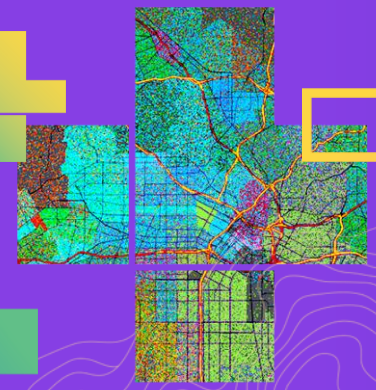
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