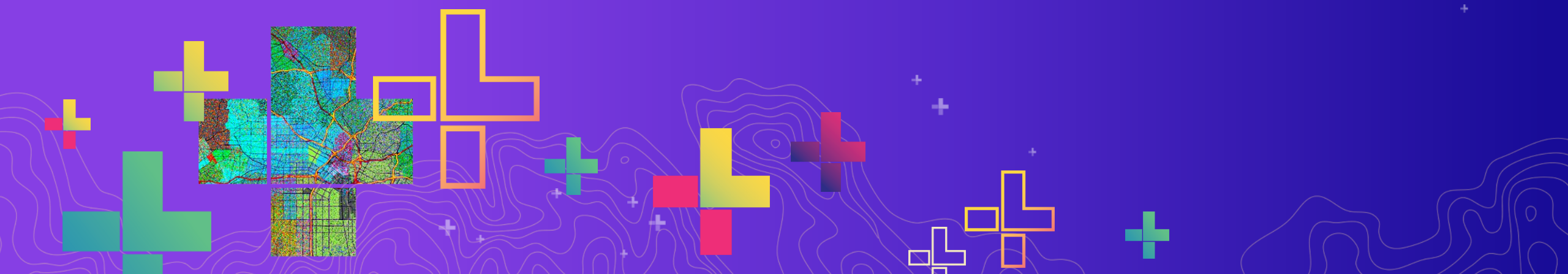




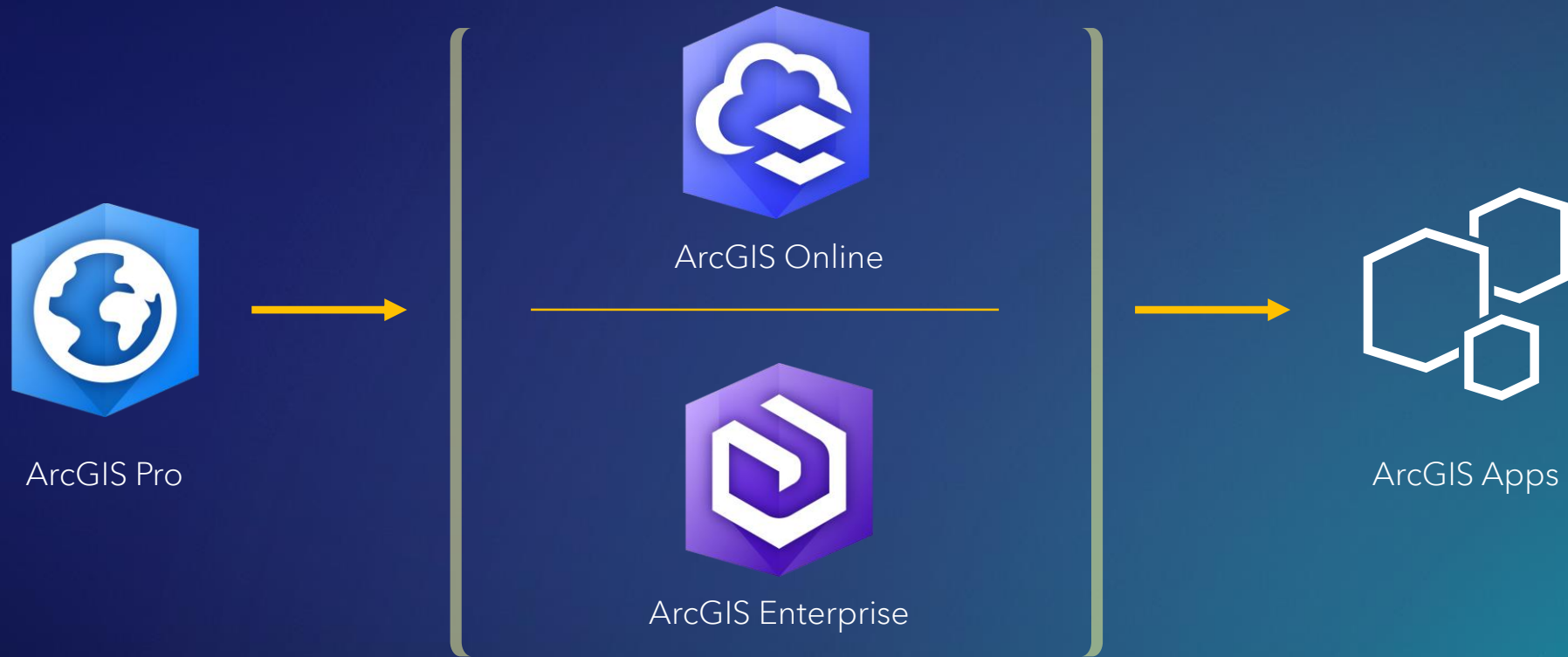
Collecting, Mapping, Analyzing, and Communicating Field Data with ArcGIS

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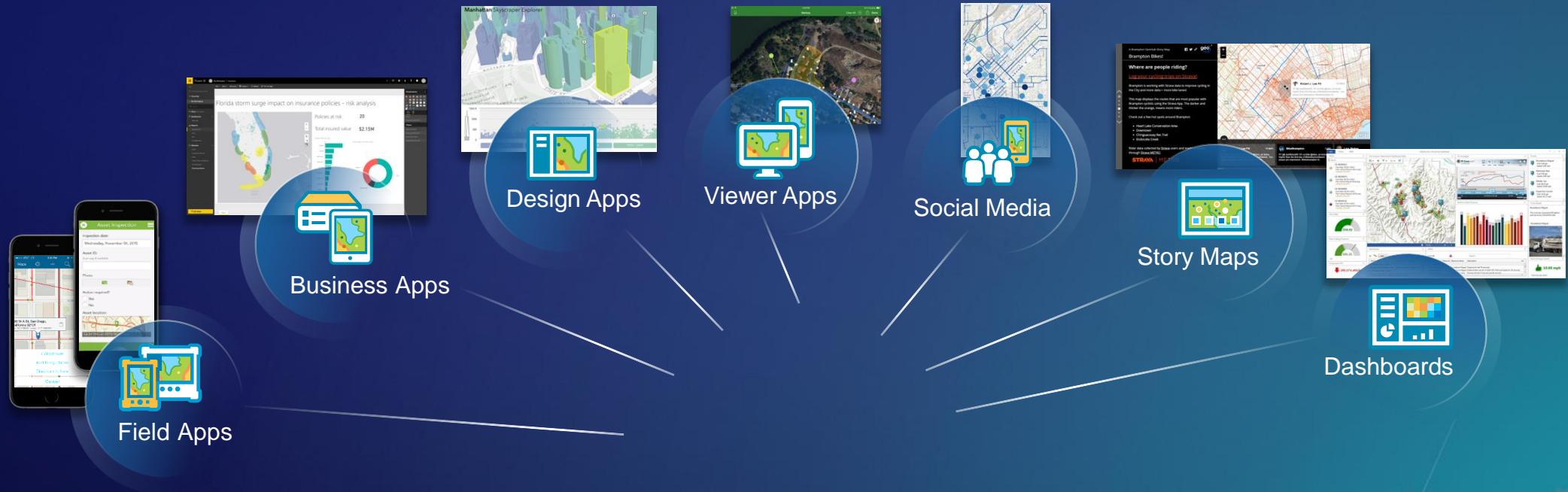
The Web GIS Paradigm



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

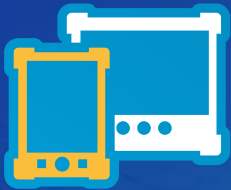
Workshop workflow



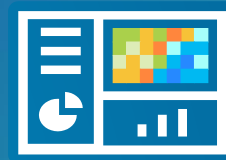
1- Collect data
Using Survey123



2-Map data
Using ArcGIS Online



4 - Create Story Map



3- Create
Dashboard



Analyze data
Using ArcGIS Online

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.



What is the Walkability of this Location?

Map data © OpenStreetMap contributors, CC-BY-SA

What is the Walkability of this location?

- Pedestrian Friendly
- Pedestrian Unfriendly

234

Last update: a few seconds ago

Category	Percentage
Pedestrian Friendly	69.23%
Pedestrian Unfriendly	30.34%
Null	0.43%

Last update: a few seconds ago

Category	Percentage
Excellent for Pedestrians	28.63%
Good for Pedestrians	33.33%
Neutral	11.54%
Not ideal for Pedestrians	18.38%
Horrible for Pedestrians	8.12%

Last update: a few seconds ago

Operations Dashboard for ArcGIS

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

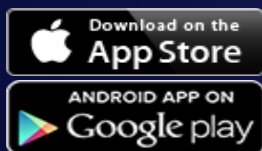
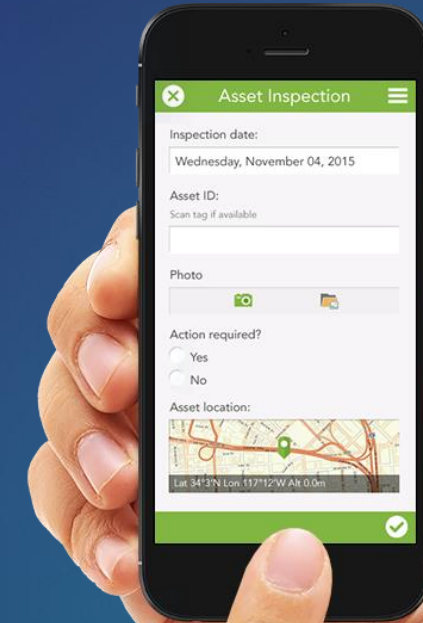
Survey123 for ArcGIS



Form-centric field data collection

Leverages Smart forms

Analyze results immediately



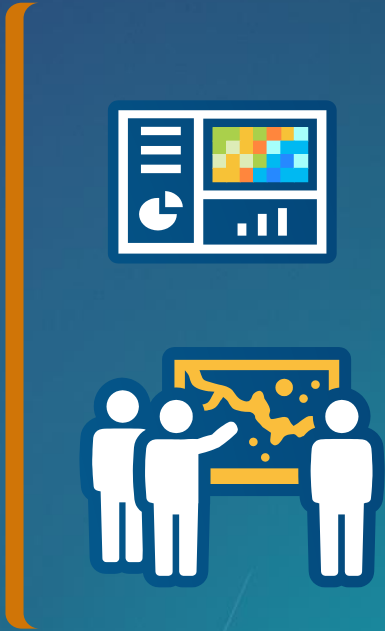
Survey123 workflow



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



Create a New Survey

Using the web designer


- Get started quickly
- Best for simple surveys
- Author your survey graphically



Get Started

Using Survey123 Connect

- Using a desktop application
- Full smart form capabilities
- Author through XLSForms (spreadsheet)



Get Started

2. Create map

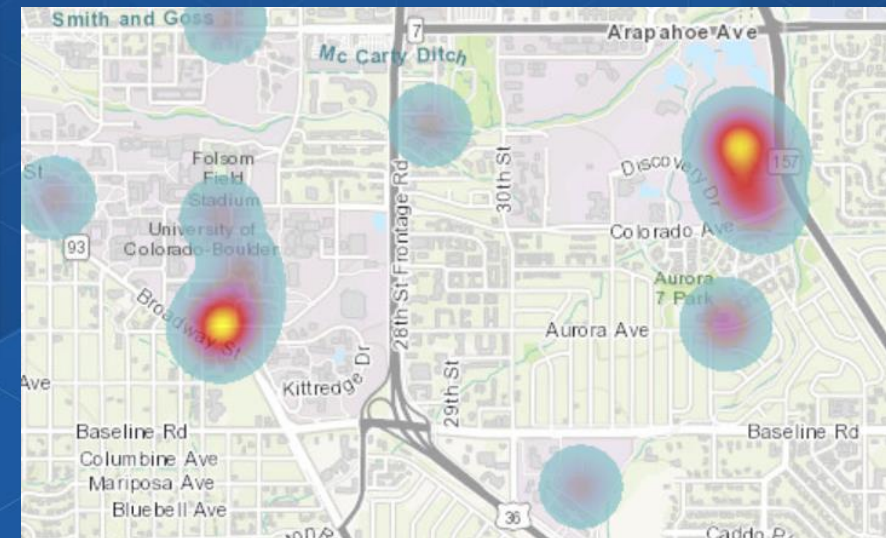
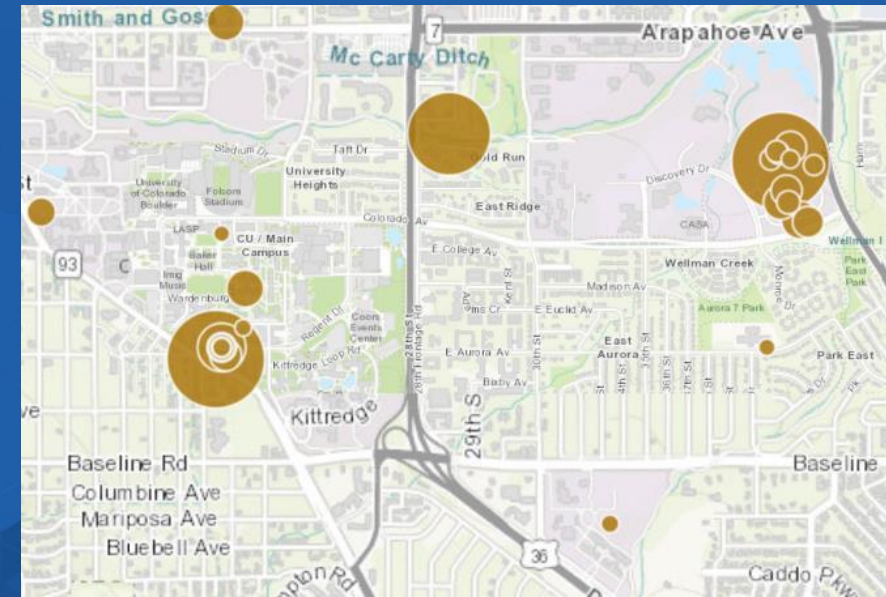
[2a]. Open feature layer (hosted) > fill in metadata.

[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.

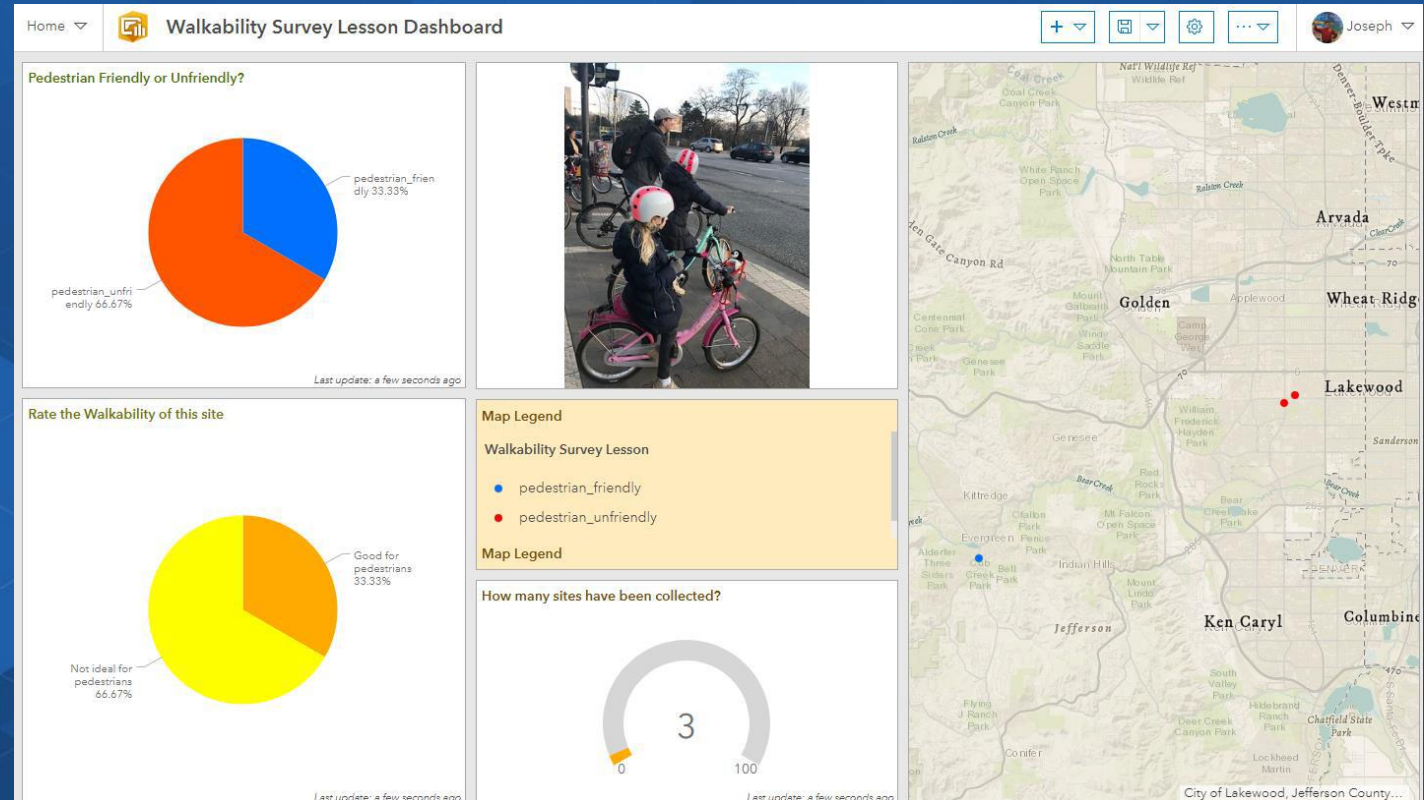


3. Create Dashboard

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.

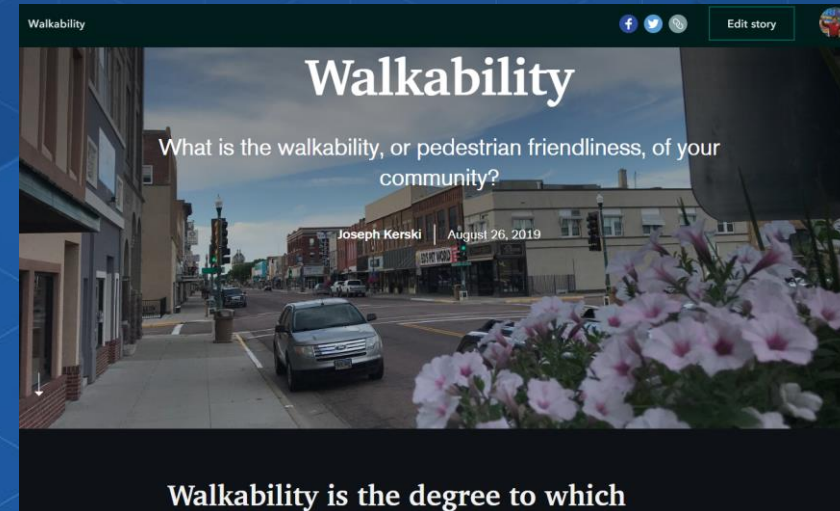
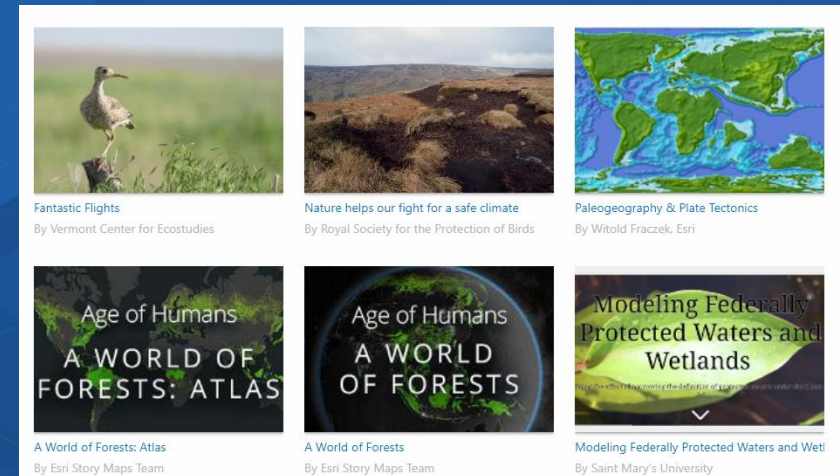


4. Create Story Map

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

[html?id=856da9aeb6944e3da2384](https://www.arcgis.com/home/item.html?id=856da9aeb6944e3da2384906c7139dea)

[906c7139dea](https://www.arcgis.com/home/item.html?id=856da9aeb6944e3da2384906c7139dea)

The screenshot shows a web interface for a GIS story map. At the top, the title reads "Happy GIS Day! Can You Name the Top 10 Most Beautiful Ports of the World?". Below the title is a navigation bar with tabs labeled "Start Here", "Port #1", "Port #2", "Port #3", "Port #4", "Port #5", "Port #6", "Port #7", "Port #8", and a hamburger menu icon. The main content area is split into two panels. The left panel contains a survey form with the following text: "prize. The deadline to complete the survey is **November 13th**. Winners will be announced during the **GIS Day Celebration on November 14th**. Thanks for participating and enjoy!". Below this is a question: "What is your name or your team's name?*" with a subtext: "First and Last Name (If you are working as a team, please include at least one of the team member's name)". There is an empty text input field. Below that is another question: "What is the name of Port #1" with a radio button and the text "Tacoma". The right panel shows a map of the world with numerous colored dots representing ports. A legend titled "LEGEND" and "Ports of the World" is overlaid on the map, showing four categories: "Large port" (red dot), "Medium port" (orange dot), "Small port" (blue dot), and "Very small port" (yellow dot). The map also features navigation controls (plus, home, minus) and a "POWERED BY" logo for Esri, HERE, Garmin, NGA, USGS, and Esri.

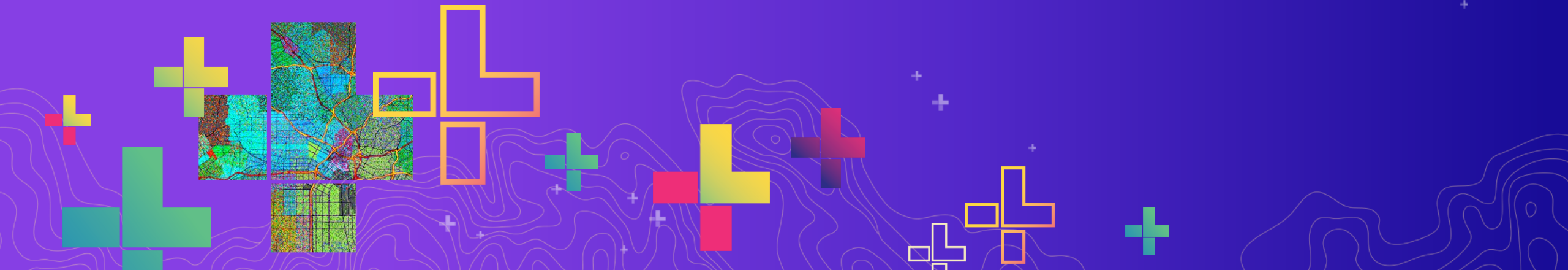
This Lesson

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).

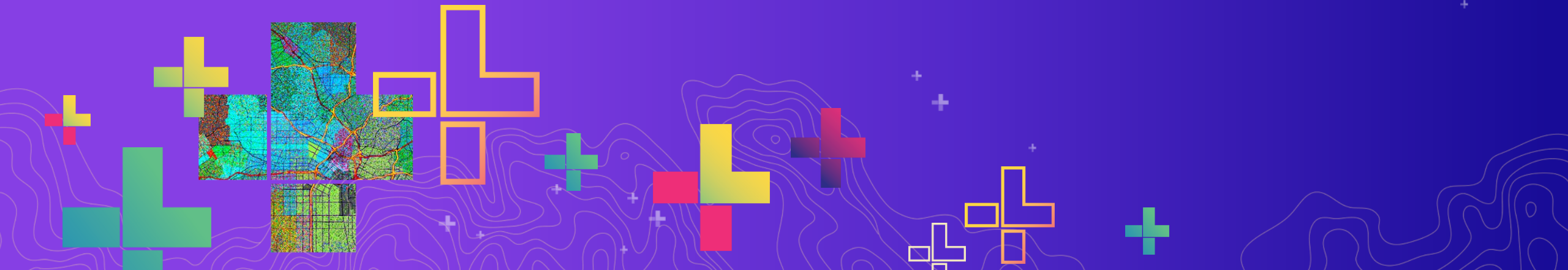
Survey123 for ArcGIS. <http://survey123.arcgis.com>

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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