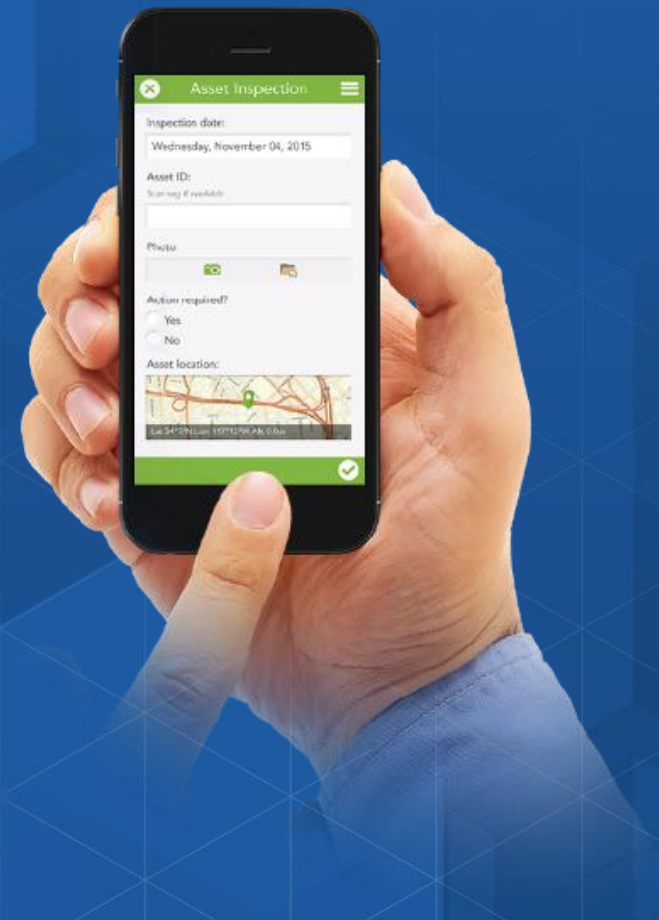


# An Introduction to Survey123 for ArcGIS

Ismael Chivite (ichivite@esri.com)

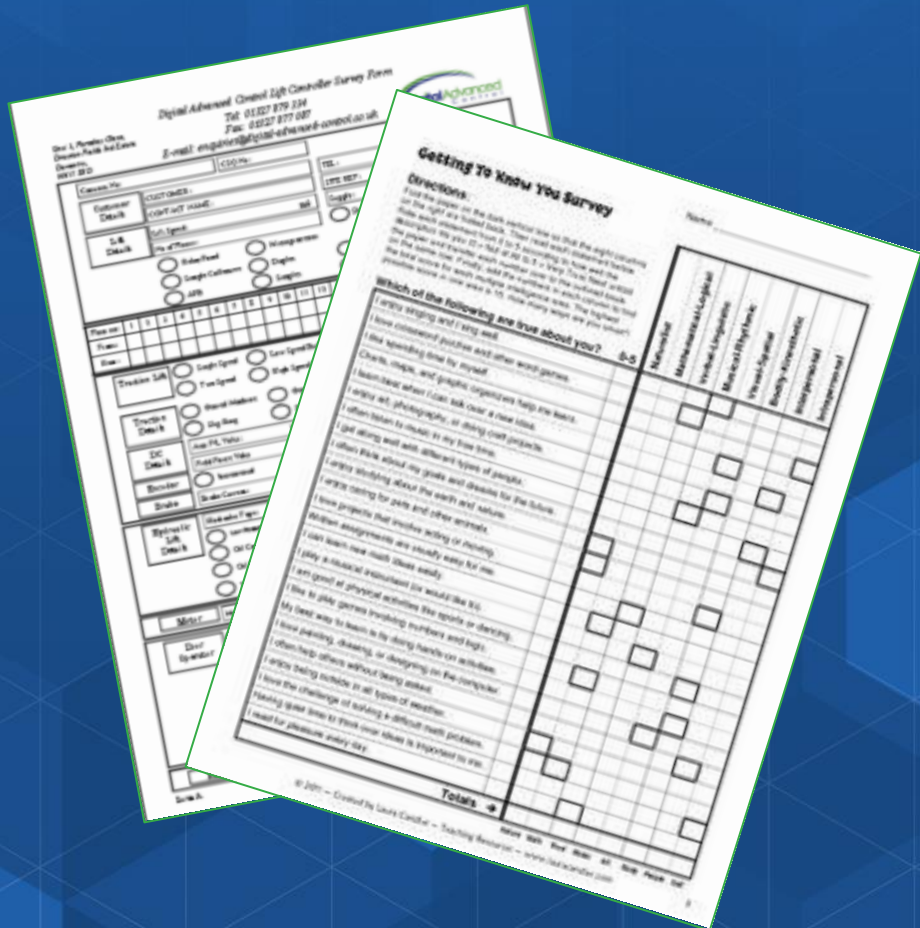


@esriSurvey123

Esri South East UC 2018, Charlotte

# Forms

a printed or typed document with blank spaces for insertion of required information



# Many Industries

- Public Safety
- Utilities
- Transportation
- Forestry
- Government
- Health
- Emergency Management

# Many Needs

- Inspections
- Asset Inventories
- Interviews
- Incident Reports
- Damage Assessments

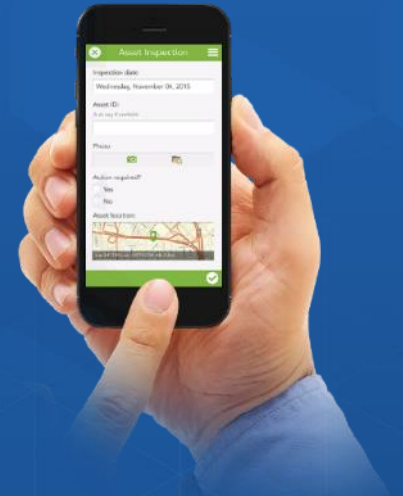
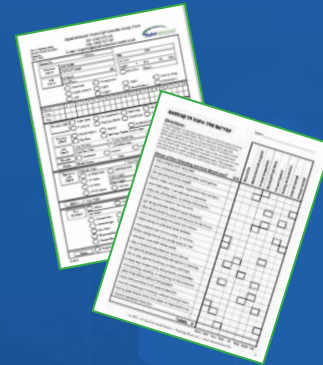
# Smart Forms for ArcGIS

Easily convert paper forms into Digital Smart ArcGIS Forms



# Why Smart Forms in ArcGIS?

- **Reduce Errors**
  - During Data Capture
  - Transcribing data from paper to digital
- **Boost Field Data Capture productivity**
  - Precompute responses
  - Associate photos with alphanumeric data
- **Data: From the field to the office in Real Time**
- **All data captured is georeferenced**







## 1- Ask Questions

(Design & Publish)



## 2- Get Answers

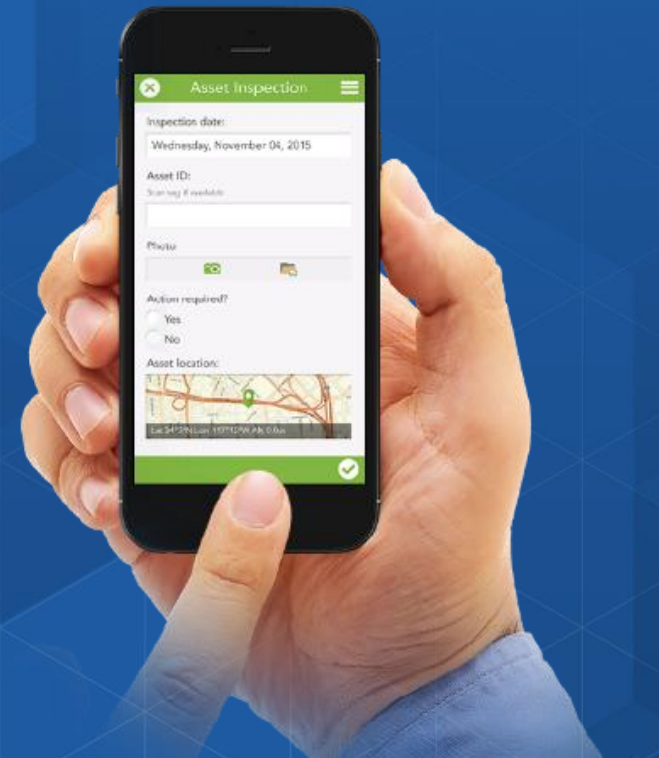
(Capture Data)



## 3- Make Decisions

(View & Analyze)

# Demo



- 1) Author a survey
- 2) Capture data on the web and the Survey123 field app
- 3) Interpret results



## 1- Ask Questions

(Design & Publish)



## 2- Get Answers

(Capture Data)



## 3- Make Decisions

(View & Analyze)

# 1- Ask Questions (Tools for authoring your surveys)



- **Survey123 Web Designer:**

- Build smart forms graphically right from your web browser
- Very easy to get started.
- Ideal for simple forms

- **Survey123 Connect:**

- A downloadable desktop tool. Works in combination with Microsoft Excel.
- Requires learning and familiarity with XLSForms specification
- Complete smart form capabilities



# 1- Ask Questions (Publishing and Sharing)



- **Publishing**

- Survey123 Smart Forms are published into ArcGIS
  - Forms are a new type of item
  - Feature layers (new or existing) store captured data
- ArcGIS Online and ArcGIS Enterprise support

- **Sharing**

- Survey123 leverages the ArcGIS security model: Named Users and Groups
- You can define distinct security rules to:
  - Field Users: Submit data to your survey
  - Stakeholders: View the results of your survey



## 1- Ask Questions

(Design & Publish)



## 2- Get Answers

(Capture Data)



## 3- Make Decisions

(View & Analyze)

## 2- Get Answers



- **Survey123 WebForms**

- Capture data from a web browser. Can be embedded within a web site.
- Nothing to install.
- Online only. Add new data only.

- **Survey123 Field App**

- Available for download (Google Play,iOS, Windows, Mac)
- Leverage device sensors (external GPS, camera etc)
- Can work Online and Offline
- Can add new data and update existing features.



## 1- Ask Questions

(Design & Publish)



## 2- Get Answers

(Capture Data)



## 3- Make Decisions

(View & Analyze)

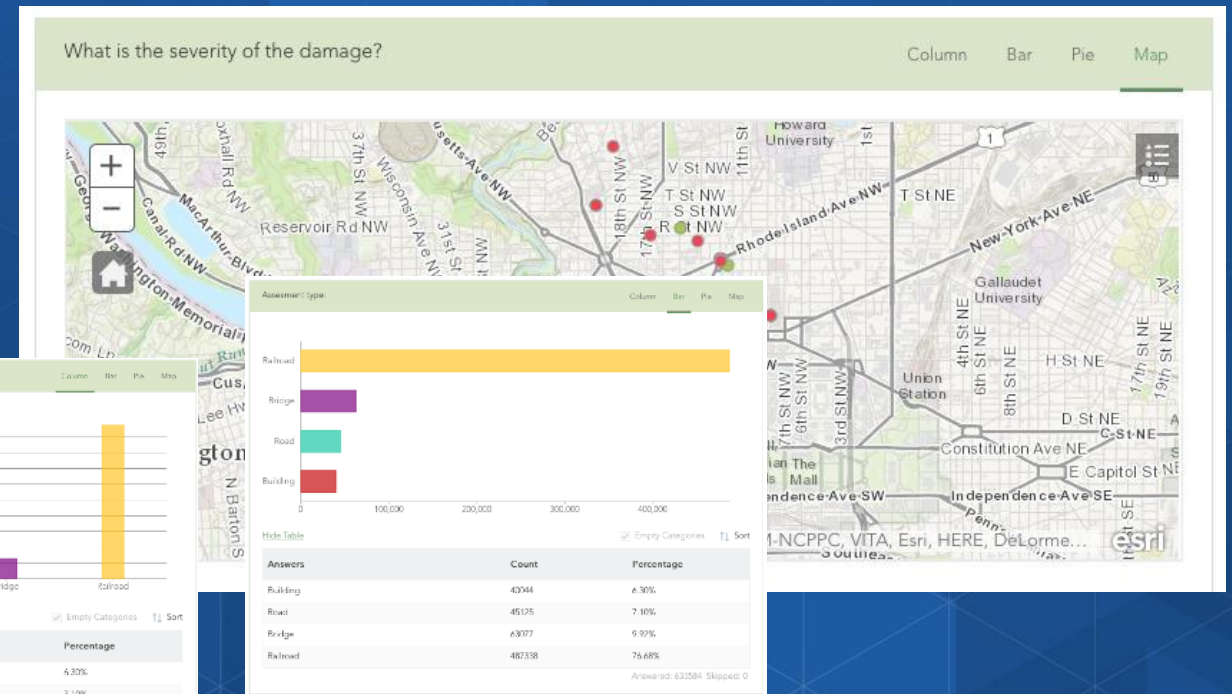
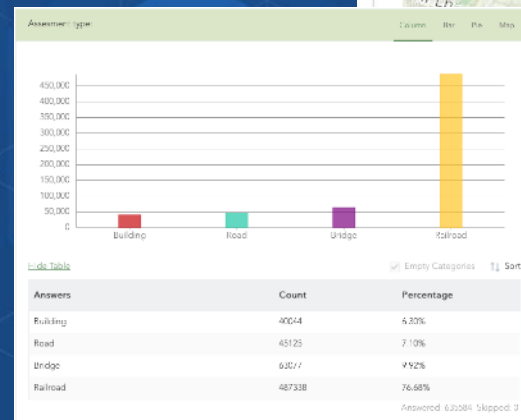
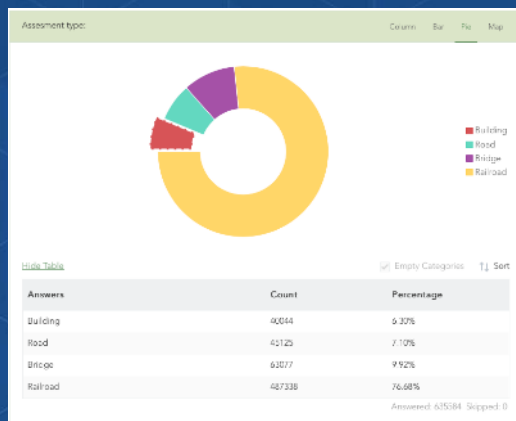


# 3- Make Decisions

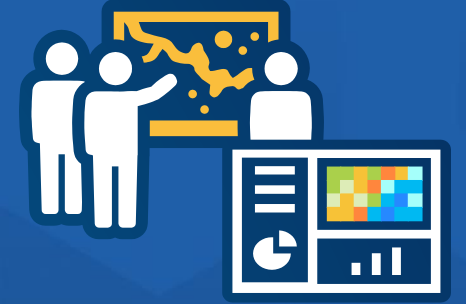


- Ready to use Reporting tools

- Understand data submission patterns
- Create detailed survey reports
- Aggregate survey data
- Selectively download data



# 3- Make Decisions





- **Real-Time data collection**
  - Survey123 submitted data is immediately available for visualization and analysis
  - All data stored in ArcGIS Feature Services

- **Multiple Uses of data**




ArcGIS ▾ Features Plans Gallery Map Scene Help

Sign In  

## Survey123 for ArcGIS

Home Create Surveys Get Answers Analyze Results Community Download

Search Survey123 for ArcGIS 

Tutorials ▾

**Guided tour**

[Create an ArcGIS organization](#)

[Create a group](#)

[Create your first survey](#)

[Style your survey](#)

[Publish your survey](#)

XLS Forms ◀

Additional Help ◀

### Guided tour

Surveys, forms, polls, and questionnaires are really all the same thing: a list of questions. Questions, however, are one of the most powerful ways of gathering information for making decisions and taking action.

Survey123 for ArcGIS is a lightweight, easy-to-use, yet powerful data gathering solution that makes creating, sharing, and analyzing surveys almost effortless.

In this guided tour, you'll create and publish a survey, use the survey, and view results from the survey. Finally, you'll both duplicate and delete a survey from within Survey123 Connect.

### Create and publish a survey

To create and publish a survey, you must [download](#) and install Survey123 Connect on your desktop computer (Windows, Mac, or Linux). Then complete the following steps:


- 1 Start Survey123 Connect.

In this topic

- [Create and publish a survey](#)
- [Use a survey](#)
- [View results](#)
- [Duplicate and delete a survey](#)

# Survey123 User Forum in GeoNet

Overview Activity Content People Reports Calendar



**Welcome to the Survey123 for ArcGIS Group**

Here, you can find the latest information on Survey123 for ArcGIS, ask questions, and participate in discussions.

**About Survey123 for ArcGIS**

Surveys, forms, polls and questionnaires are really just the same thing: a list of questions. Questions, however, are one of the most powerful ways of gathering information for making decisions and taking action.

Survey123 for ArcGIS is a simple, yet powerful data gathering solution that makes creating, sharing and analyzing surveys possible in just three steps.

**Getting Support**

Use this GeoNet place to get technical support. You can also contact Esri Technical Support directly over the phone or through [support.esri.com](http://support.esri.com). Check the [Blog](#) contents, the [XLSForm help](#), and the [product page](#) to learn more. If you have a question, simply ask the Survey123 for ArcGIS community. If you have

**Browse Content**


**Start Discussion**

**Share File**

**Create Document**

**Getting started**

This 4 minute tutorial shows you the basics of Survey123 for ArcGIS: what is does, how you can create your own surveys, use them in the field to collect information and analyze the results.



1/17 Survey123 for ArcGIS Product Overview

esri

Survey123 for ArcGIS Product Overview

**ASK SURVEY123 FOR ARCGIS**

Type your question

**Ask my question**

**FEATURED CONTENT**

- Getting started with Survey123 for ArcGIS
- International Human Solidarity Day Release (1.10)

All content

**POPULAR CONTENT**

- Critical Update to Survey123 available (1.10.25)
- Survey123 Web App Data does not show sub-group data
- Host survey123 on Enterprise
- Administrators ability to see Survey123 Surveys from staff?
- Understanding Barcode Questions in Survey123 for ArcGIS

All content

**ANSWERED QUESTIONS**

- Host Survey Locally  
John McConalogue 1 day ago

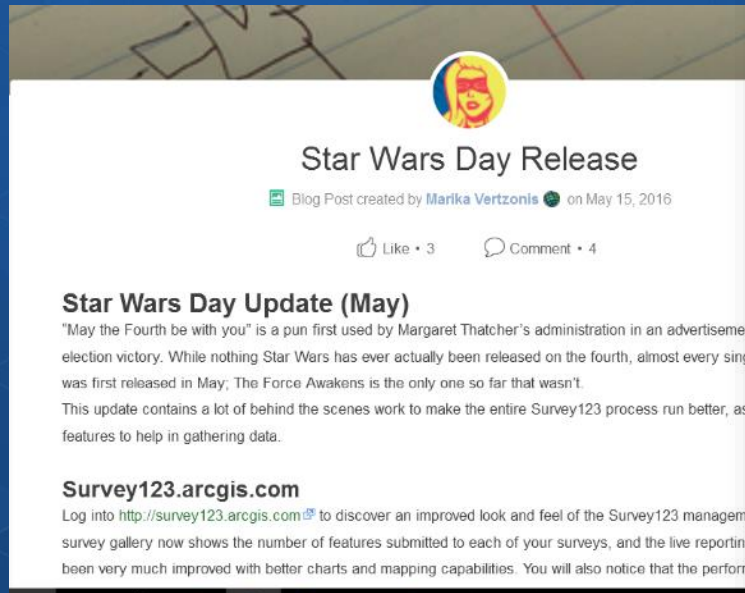
**LATEST BLOG POSTS**

- Updating field types in existing Survey123 Surveys  
Johnathan Hasthorpe 2 days ago
- Taking your maps offline with Tile Package Creator

<https://geonet.esri.com/groups/survey123>



# Survey123 Blog in GeoNet



The screenshot shows a blog post from the Survey123 blog. At the top, there is a profile picture of a woman with red hair and a yellow background. Below it, the title "Star Wars Day Release" is displayed in a large, bold font. Underneath the title, it says "Blog Post created by Marika Vertzonis on May 15, 2016". There are two icons below the date: a thumbs up icon with "Like • 3" and a speech bubble icon with "Comment • 4". The main content of the post is titled "Star Wars Day Update (May)" and contains several paragraphs of text. At the bottom of the post, there is a link to "Survey123.arcgis.com" and a QR code.

## Star Wars Day Release

Blog Post created by Marika Vertzonis on May 15, 2016

Like • 3    Comment • 4


### Star Wars Day Update (May)

"May the Fourth be with you" is a pun first used by Margaret Thatcher's administration in an advertisement for her election victory. While nothing Star Wars has ever actually been released on the fourth, almost every single Star Wars movie has been released in May; The Force Awakens is the only one so far that wasn't.

This update contains a lot of behind the scenes work to make the entire Survey123 process run better, as well as new features to help in gathering data.

[Survey123.arcgis.com](http://survey123.arcgis.com)

Log into <http://survey123.arcgis.com> to discover an improved look and feel of the Survey123 management console. The new survey gallery now shows the number of features submitted to each of your surveys, and the live reporting has been very much improved with better charts and mapping capabilities. You will also notice that the performance of the app has been improved.



## Understanding Barcode Questions in Survey123 for ArcGIS

Posted by Ismael Chivite on May 16, 2016

A barcode is an optical machine-readable representation of data. A lot of things around us have barcodes. You will find them in virtually any packaged item you buy, in the back cover of books and most likely somewhere in the laptop, its power adapter, or the PC you may be using right now.

Typically, barcodes are attached to things using a sticker, or simply printed on them. You can put any data you may want in a barcode, but generally they are used to unequivocally identify the item. Barcodes are designed to encode data in a way that can quickly be scanned using either a barcode scanner, or through the camera of your smartphone.

The canonical use of barcodes with Survey123 for ArcGIS is that where an asset, like a pole, meter, pipe etc has a barcode in it. Field users with Survey123 would scan this barcode to quickly bring the unique identifier and other asset information into the Survey. In this way, room for error when capturing the unique identifier of the asset is removed, not to mention that capturing the data is very quick. In this photo, you can see a field user leveraging Survey123 barcode scanning capabilities to support sign inspections. If you look close enough, you will be able to see that the pole and the sign have both a sticker with a barcode. The barcodes include information about the unique ID of the asset, ensuring data integrity and simplifying the completion of the Survey. Many thanks to Gary Bowles, GIS Database Administrator at Seneca Resources Corporation for the photo and his continuous feedback on Survey123 for ArcGIS.



Photo courtesy of Seneca Resources Corporation

### Types of barcodes

There are multiple flavors of barcodes, which we can organize into two categories: linear and 2D (matrix) barcodes.

The original barcodes were all linear. They were invented in the 1960's, popularized in the 1970's and still the most commonly used today. Here is a linear barcode representing the value 036000291452.



Two-dimensional barcodes can encode more information. A popular one these days is the QR code, which you may have already used from your smartphone, may be to quickly access a web site, or to download a mobile app.



There are actually lots of different types of barcodes, even for each of these two categories. Choosing one type or the other will depend on what type of data you want to encode (not all types support international characters for example), the size of the data, the amount of space you have for the sticker, etc.

<https://geonet.esri.com/groups/survey123/blog>

# YouTube Survey123 Playlist ArcGIS Channel

YouTube

Search

Upload

Survey123 for ArcGIS Help Sign In

## How It Works

Survey123 for ArcGIS is a simple and intuitive form-centric data gathering solution that makes creating, sharing, and analyzing surveys possible in just three easy steps:

- 1 Ask Questions**  
Design surveys in a spreadsheet. Use Survey123 Connect to upload your surveys to ArcGIS.
- 2 Get the Answers**  
Enable your workforce with the Survey123 for ArcGIS mobile app to capture answers in the field.
- 3 Make the Best Decisions**  
Analyze answers from the field in ArcGIS to support decision making.

Survey123  
ArcGIS • 1/17 videos

- 1 Survey123 for ArcGIS Product Overview ArcGIS
- 2 Survey123 for ArcGIS XLSForm Tutorial 1 of 5 Creating and Publishing Surveys ArcGIS
- 3
- 4
- 5
- 6



<https://survey123.arcgis.com/videos>