



Survey123 for ArcGIS

A Damage Assessment Tool



Today's Discussion

- What is Survey123 and why use it
- How Survey123 Works
- Downloading the app and surveys
- Integration With WebEOC
- Coming Enhancements
- Demo/Exercise
- Questions/Help Time



What is Survey123?

Long:

ArcGIS Survey123 is a complete, form-centric solution for creating, sharing and analyzing surveys. Use it to create smart forms with skip logic, defaults, and support for multiple languages. Collect data via web or mobile devices, even when disconnected from the Internet. Analyze results quickly, and upload data securely for further analysis.



What is Survey123?

Short:

A really useful app that allows you to collect and analyze data input from various field users.



Why Use Survey123

Setup and design of surveys is easy with a drag and drop interface on the Survey123 website!

A screenshot of the ArcGIS Survey123 web application interface. The top navigation bar includes 'ArcGIS Survey123', 'My Surveys', and 'Help'. The main header shows 'Untitled survey' and tabs for 'Overview', 'Design' (which is active), 'Collaborate', 'Analyze', 'Data', and 'Settings'. Below the header, there are icons for 'Add', 'Edit', 'Appearance', and 'Options'. The main workspace is divided into a left pane for editing and a right pane for selecting question types. The left pane shows a 'Survey title not set' field, a 'Description content for the survey' text area, an 'Untitled question 1' with an input field, and a 'Submit' button. The right pane lists various question types: Singleline Text, Multiline Text, Single Choice, Single Choice Grid, Multiple Choice, Dropdown, Rating, Likert Scale, Ranking, Number, Date, Time, Date and Time, Signature, Image, File Upload, Address, Map, Email, Website, Note, Group, and Page. At the bottom, there are 'Save', 'Preview', and 'Publish' buttons.



Why Use Survey123

Or design and setup can be as personalized as you want using XLSForms

type	name	label	relevant	calculation	choice_filter	repeat
select_one	region	Choose Your Region	Yes			
select_one	agency	Choose Your County/Tribe	Yes		region=\${region}	
select_one	municipality	Choose Your Municipality	Yes		region=\${region} and agency=\${agency}	
hidden	incidentid	IncidentID				
select_one	label	Incident/Disaster Type				
geopoint	location	Location of Damage	Yes			
text	address	Address of Damage				
select_one	program_assessment_type	Which Program Assessment Type				
note		Individual Assistance				
select_one	level_of_damage_assessed	Level of Damage Assessed	$\{program_assessment_type\} = 'Individual\ Assistance'$			
select_one	cause_of_iraccessibility	Why Inaccessible?	$\{program_assessment_type\} = 'Individual\ Assistance'$			
select_one	ia_owner_or_renter	Owner or Renter?	$\{program_assessment_type\} = 'Individual\ Assistance'$			
select_one	type_of_dwelling	Type of Dwelling?	$\{program_assessment_type\} = 'Individual\ Assistance'$			
select_one	yes_no_unl_home_occupied_6_month	Primary Residence?	$\{program_assessment_type\} = 'Individual\ Assistance'$			
select_one	yes_no_unl_low_income	Low Income?	$\{program_assessment_type\} = 'Individual\ Assistance'$			
select_one	yes_no_unl_insured	Insured?	$\{program_assessment_type\} = 'Individual\ Assistance'$			
select_one	yes_no_unl_utilities_functional	Utilities Functional?	$\{program_assessment_type\} = 'Individual\ Assistance'$			
select_one	water_location	Water Location	$\{program_assessment_type\} = 'Individual\ Assistance'$ and $\{label\} = 'Severe\ Weather - Flooding'$			
text	depth_basement	Depth of Water in Basement	$\{program_assessment_type\} = 'Individual\ Assistance'$ and $\{water_location\} = 'Basement'$			
text	depth_crawl_space	Depth of Water in Crawl Space	$\{program_assessment_type\} = 'Individual\ Assistance'$ and $\{water_location\} = 'Crawl\ Space'$			
text	depth_living_area	Depth of Water in Living Area	$\{program_assessment_type\} = 'Individual\ Assistance'$ and $\{water_location\} = 'Living\ Area'$			
integer	ia_damage_cost	Estimated Damage Cost \$	$\{program_assessment_type\} = 'Individual\ Assistance'$			
text	comments	Other/Comments	$\{program_assessment_type\} = 'Individual\ Assistance'$ and $\{type_of_dwelling\} \neq 'Multi-Family'$			
text	multi_family_comments	Comments	$\{program_assessment_type\} = 'Individual\ Assistance'$ and $\{type_of_dwelling\} = 'Multi-Family'$			
note		Public Assistance				
select_one	pa_type_of_assessment	Which type of assessment would you like to submit?	$\{program_assessment_type\} = 'Public\ Assistance'$			
text	pa_comments	Description of Damage	$\{program_assessment_type\} = 'Public\ Assistance'$			
select_one	yes_no_unl_associated_road_damaged	Associated Road Damaged?	$\{program_assessment_type\} = 'Public\ Assistance'$ and $\{pa_type_of_assessment\} = 'Roads\ and\ Bridges\ (C)'$			
text	site_road_name	Site or Road Name	$\{program_assessment_type\} = 'Public\ Assistance'$ and $\{pa_type_of_assessment\} = 'Roads\ and\ Bridges\ (C)'$			
integer	pa_cost_of_repair	Site Repair Estimate \$	$\{program_assessment_type\} = 'Public\ Assistance'$			

Relevant
This gives you the ability to skip questions or make additional questions appear based on the response to a previous question. A question is made relevant by meeting the conditions in the relevant field (e.g., $\{name\} = 'value'$).



Why Use Survey123

Super easy to use by field crews

TRAINEDamageAssessmentPubli
c

Choose Your Region *

East Central
 Northeast
 Northwest
 Southeast
 Southwest

Choose Your County/Tribe *

Choose Your Municipality

Incident/Disaster Type *

Location of Damage *
(circle at top right full when GPS activated)

TRAINEDamageAssessmentPubli
c

Address of Damage
(e.g House number and street name)

Which Program Assessment Type *

Individual Assistance
 Public Assistance

Take a Photo
Capture using camera or upload from device

Image 1 Name (please populate with some text if you add an image)

Take Photo 2
Capture using camera or upload from device



Why Use Survey123

Get instant access to responses

TRAINING Damage Assessment

MarathonCountyGIS, Esri Canada, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS | Sources: Esri, U.S. Census Bureau

Powered by Esri

Damage Estimate

\$3,528,800

- 1234 random st
Damage Estimate: \$25,000
Damage Extent: Major
- 43 N Main
Damage Estimate: \$25,000
Damage Extent: Minor
- 1123 Main Street
Damage Estimate: \$250,000
Damage Extent: Destroyed
- Damage Estimate: \$160,000
Damage Extent: Major
- Damage Estimate: \$160,000
Damage Extent: Destroyed
- Damage Estimate: \$160,000
Damage Extent: Destroyed
- 940 Pine Needle Dr, Chippewa Falls WI 54729
Damage Estimate: \$285,000
Damage Extent: Destroyed
- 940 Pine Needle Dr, Chippewa Falls, WI
Damage Estimate: \$275,000
Damage Extent: Major
- 2400 Wright St
Damage Estimate: \$52,000
Damage Extent: Major
- 600 oak st
Damage Estimate: \$800
Damage Extent: Affected
- 500 main st
Damage Estimate: \$50,000
Damage Extent: Major

Destroyed

10

Major

23

Minor

10

Affected

6

Inaccessible

0

TRAINING Residential Buildings
TRAINING Commercial Buildings
TRAINING Public Facilities



How Survey123 Works

TRAINDamageAssessmentPubli

Choose Your Region *

Choose Your County/Tribe *

Choose Your Municipality

Incident/Disaster Type *

Location of Damage *

(circle at top right full when GPS activated)

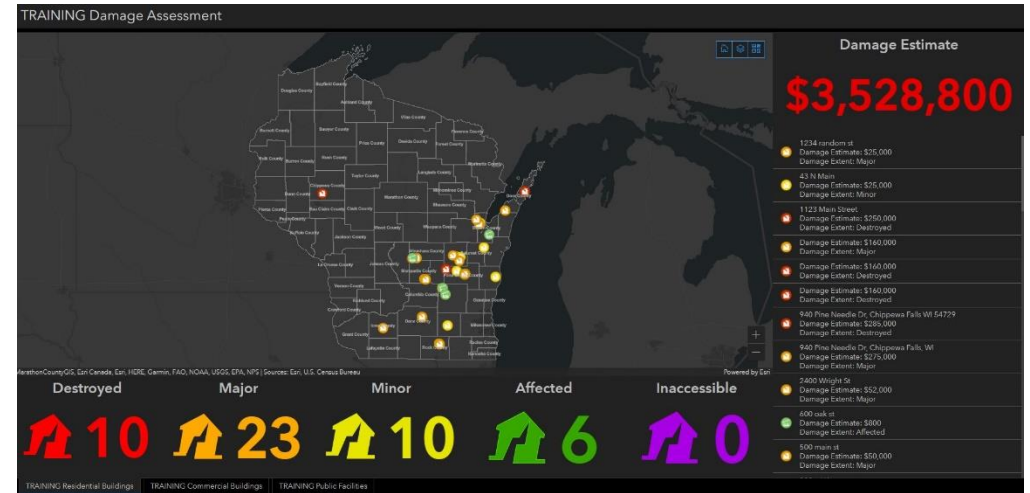
43°8'N 89°20'W ± 16.8 m

Survey123 Field App



ArcGIS Online Feature Service

GIS Dashboards & Other Applications



Damage Assessment

Data on this board displays in all incidents.

Region	County/Tribe	Municipality	Address	IA Damage Level	Assessment Type	PA Category	PA Cost (\$)	Incident Type	Last Updated	Status	Attachment
West Central	Chippewa County	City of Stanley	215 East 2nd Avenue Stanley, WI 54726	Major	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 16:40:09	Active	%
West Central	Chippewa County	City of Stanley	215 East 2nd Avenue Stanley, WI 54726	Destroyed	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 16:38:42	Active	%
West Central	Chippewa County	City of Stanley	214 E 2nd Ave	Destroyed	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 16:08:12	Active	%
West Central	Chippewa County	City of Stanley	211 East Maple Street Stanley, WI	Major	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 16:04:24	Active	%
West Central	Chippewa County	City of Stanley	143 1st Avenue Stanley, WI 54766	Major	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 16:03:00	Active	%
West Central	Chippewa County	City of Stanley	243 2nd Ave	Affected	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 16:01:30	Active	%
West Central	Chippewa County	City of Stanley	237 E 2nd Ave	Minor	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 16:00:06	Active	%
West Central	Chippewa County	City of Stanley	224 E 2nd Ave	Major	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 15:49:16	Active	%
West Central	Chippewa County	City of Stanley	214 E 2nd Ave	Major	Public Assistance	Utilities (F)	0	Severe Weather - Tornado	01/05/2022 15:37:36	Active	%
West Central	Chippewa County	City of Stanley	209 East Avenue	Major	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 15:36:12	Active	%
West Central	Chippewa County	City of Stanley	205 East 2nd Avenue Stanley, WI 54766	Major	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 14:48:41	Active	%
West Central	Chippewa County	City of Stanley	120 Emery St	Destroyed	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 14:47:14	Active	%
West Central	Chippewa County	City of Stanley	144 East 2nd Avenue Stanley, WI 54760	Major	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 14:45:45	Active	%
West Central	Chippewa County	City of Stanley	138 East 2nd Avenue Stanley, WI 54766	Major	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 14:42:54	Active	%
West Central	Chippewa County	City of Stanley	229 3rd Ave	Major	Individual Assistance		0	Severe Weather - Tornado	01/05/2022 14:38:08	Active	%

WebEOC Damage Assessment Board



Filling Out and Submitting a Survey

Open in browser



Open in the Survey123 field app





Filling Out and Submitting a Survey

2:09

TRAINDamageAssessmentPublic

Choose Your Municipality

Incident/Disaster Type *

Location of Damage *
(circle at top right full when GPS activated)

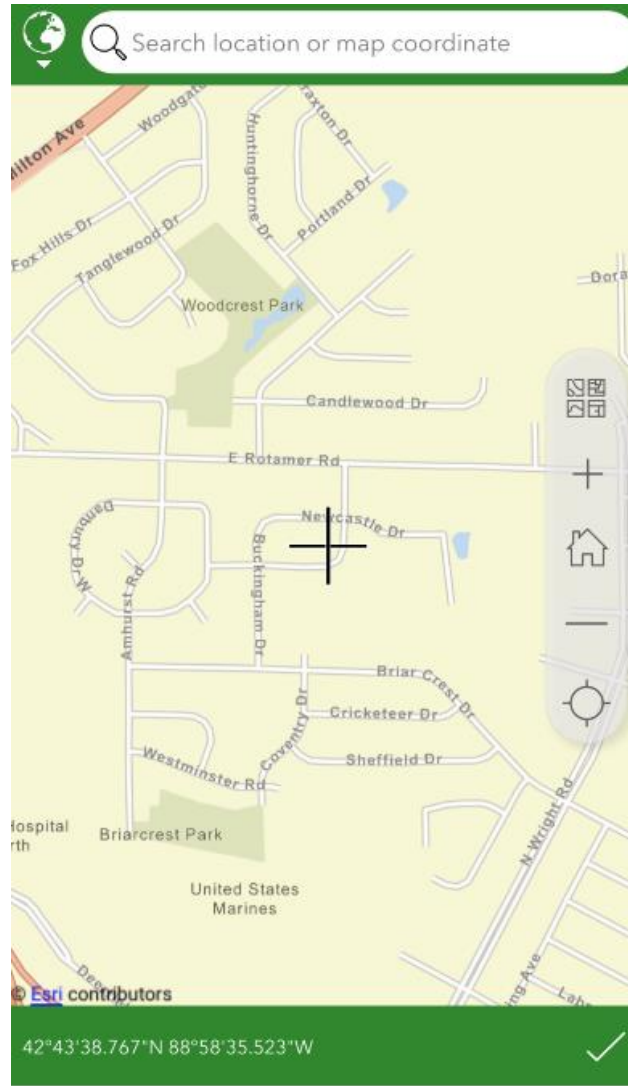
42°43'N 88°59'W ± 7.4 m

Address of Damage
(e.g House number and street name)

Which Program Assessment Type *

- Individual Assistance
- Public Assistance

✓



TRAINDamageAssessmentPublic

Image 3 Name

Take Photo 4
Capture using camera or upload from device

Image 4 Name

Take Photo 5 (last photo option)
Capture using camera or upload from device

Image 5 Name

Assessment Date and Time

Wednesday, May 1... 3:52 PM

✓



Finding Your Data in WebEOC

LIVE DEMO



Survey123 Data With Your GIS

- GIS REST endpoint available for use by your GIS department/staff
- Data can be used to join other information about that property (ownership, assessed value, etc.)
- Have your GIS team contact me for a link to the GIS feature service



GIS Demonstration

LIVE DEMO



Downloading Survey123

**Search for Survey123 in your App Store
(Google Play Store or iOS App Store)**





Downloading the Damage Assessment Survey

Use the QR Code



Or type this URL into the web browser on your device

<https://arcg.is/158y5m>



Exercise/Q&A Session
