



**HEALTH
GEO LAB
COLLABORATIVE**

Supporting countries to use geospatial data and technologies to achieve SDG 3

Starter kit - Esri's Story Maps

Version 2 (18.10.2019)



In collaboration with and with the support of:



esri

Revision History

Revision	Revision Date	Comment	By
1.0	03 September 2018	Document created	Alexander Campbell Julia Levermann Izay Pantanilla
2.0	18 October 2019	Addition of information regarding the new ArcGIS StoryMaps product and the ArcGIS Experience Builder Beta	Alexander Campbell

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Purpose and audience

The purpose of this document is to guide new users on how to use Esri's Story Maps online application to combine maps with narrative text, images, and multimedia content to create compelling, user-friendly online presentation of the story they want to tell.

The audience for this document is any individual who wants to communicate her/his story with maps.

Abbreviations

ADB	Asian Development Bank
AeHIN	Asia eHealth Information Network
AGOL	ArcGIS Online
Esri	Environmental Systems Research Institute
GIS	Geographic Information System
HGLC	Health GeoLab Collaborative
WHO	World Health Organization

1. Background

The Health GeoLab Collaborative (HGLC)¹ is a collective of institutions and individuals sharing the same vision - for low- and middle-income countries in Asia and the Pacific to fully benefit from the power of geospatial data and technologies to reach the health-related SDG 3 - and ready to engage their respective skills, experience, and resources to achieve it.

The HGLC has been established and builds on the work done as well as the network and documents developed through the activities of the AeHIN GIS Lab over the 2016-2017 period.

The HGLC uses the 4Ts (Training, Tooling, Testing and Teaming) approach to strengthen in-country capacity. The present starter kit has been developed as part of this approach and with the objective to be used by the largest number of users possible.

This starter kit is a living document made to evolve based on the inputs received from the users. Please therefore don't hesitate to contact us at info@healthgeolab.net if you have any suggestions for improvement.

Should you use this document as part of your activities and would like to have your organization recognized as one of document's users, please contact us at the email address provided above.

2. Introduction

Through the partnership established with Esri, the HGLC not only has the capacity to lend licenses to eligible institutions for a period of up to 6 months² but can also provide access to highly discounted software bundles to Ministries of Health in countries.

While Esri provides access to a large number of GIS solutions, the present kit focuses on one of its suite of tools, Story Maps. Esri Story Maps³ allow users to combine maps with narrative text, images, and multimedia content to create compelling, user-friendly web apps.

3. Story Map Versions

As of July 2019, a new ArcGIS StoryMaps product has been released. Esri is also working on the development of an additional application, ArcGIS Experience Builder, to enable users to create compelling web apps without doing any coding. More information is provided in sections at the end of this document.

¹ <http://healthgeolab.net>

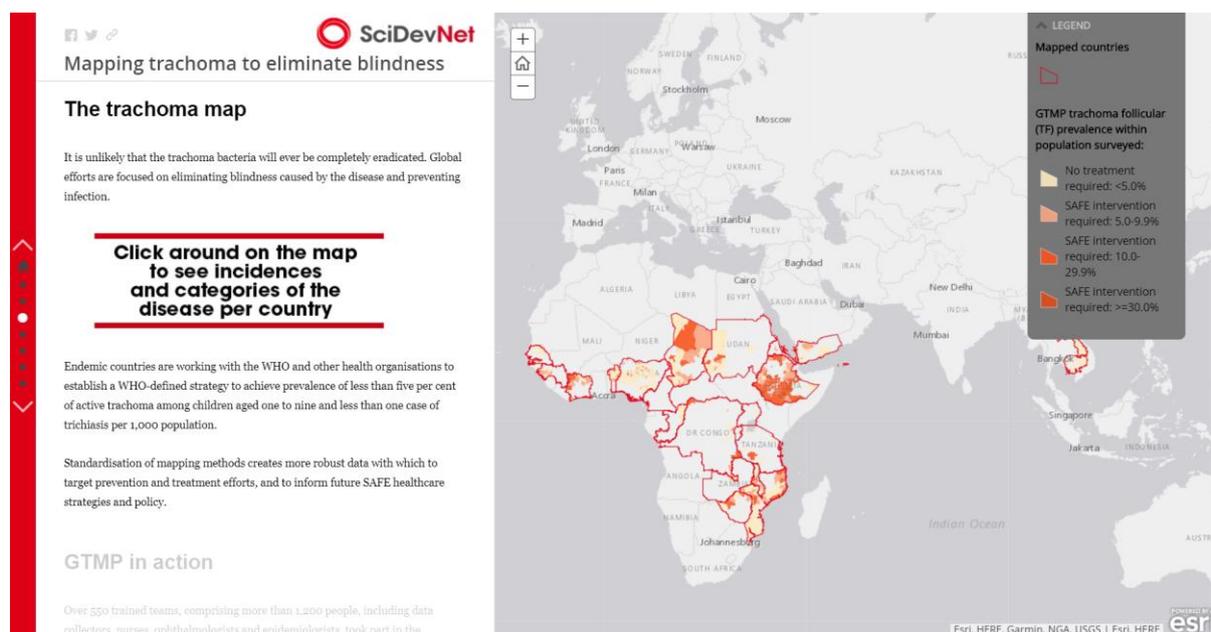
² <https://healthgeolab.net/resources/access-to-proprietary-geospatial-technology/>

³ <https://storymaps-classic.arcgis.com/en/>

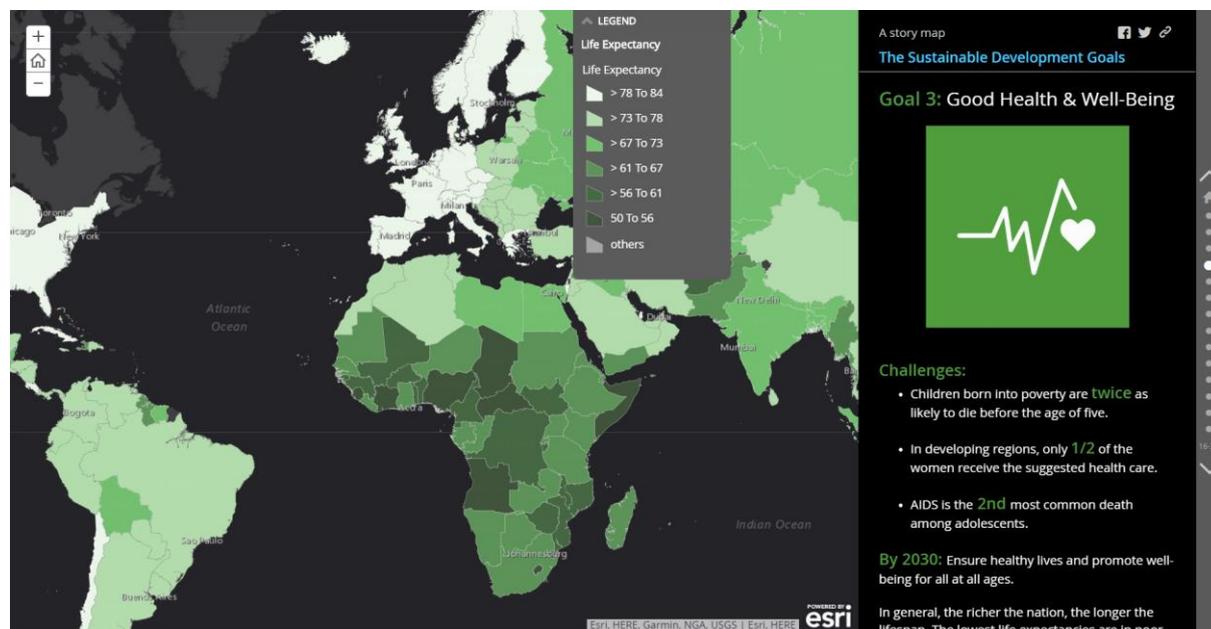
4. What are Esri Story Maps?

Story Maps use geography as a means of organizing and presenting information. They tell the story of a place, event, issue, trend, or pattern in a geographic context. They combine interactive maps with other rich content—text, photos, illustrations, video, and audio—within intuitive user experiences. While many story maps are designed for general, nontechnical audiences, some story maps can also serve highly specialized audiences. They use the tools of GIS, and often present the results of spatial analysis, but do not require their users to have any special knowledge or skills in GIS.

Esri Story Maps have made it possible for anyone to build a compelling, professional story with media and interactive maps on the web.



Example 1: Mapping trachoma to eliminate blindness



Example 2: The Sustainable Development Goals

Why choose Story Maps?

- Story Maps let you combine authoritative maps with text, images, and multimedia
- Many apps and configurations to choose from
- Story Maps are hosted by Esri – no need to self-host (or update) the app – just configure and share
- Story Maps are responsive – fit the form factor of your device
- Story Maps can be embedded into websites, blogs, and other story maps
- Story Maps use builders – guide you through the process of authoring the story map

What makes a good story map?

- Connects with the audience
- Brings viewers into the story
- Creates interest, emotion
- User experience supports the story
- Uses great maps and media
- Is optimized, performs well
- Tells a story simply

The *Rohingya Refugee Emergency at a Glance Story Map*⁴ gives you a good introduction on what you can do with Story Maps. This interactive map shows how one of the largest and fastest-growing refugee crises in decades unfolded in Bangladesh, and the response by UNHCR and its partners.

5. What do you need?

Please note that you need the following in order to be able to create a story map:

- An idea and thinking...
- Multimedia content, such as images and videos,
- Web Map(s),
- Story Map app template,
- An ArcGIS Online account. Please refer to the ArcGIS Online starter kit for more information on this platform⁵,
- An Internet connection.

6. Story Map Creation Workflow

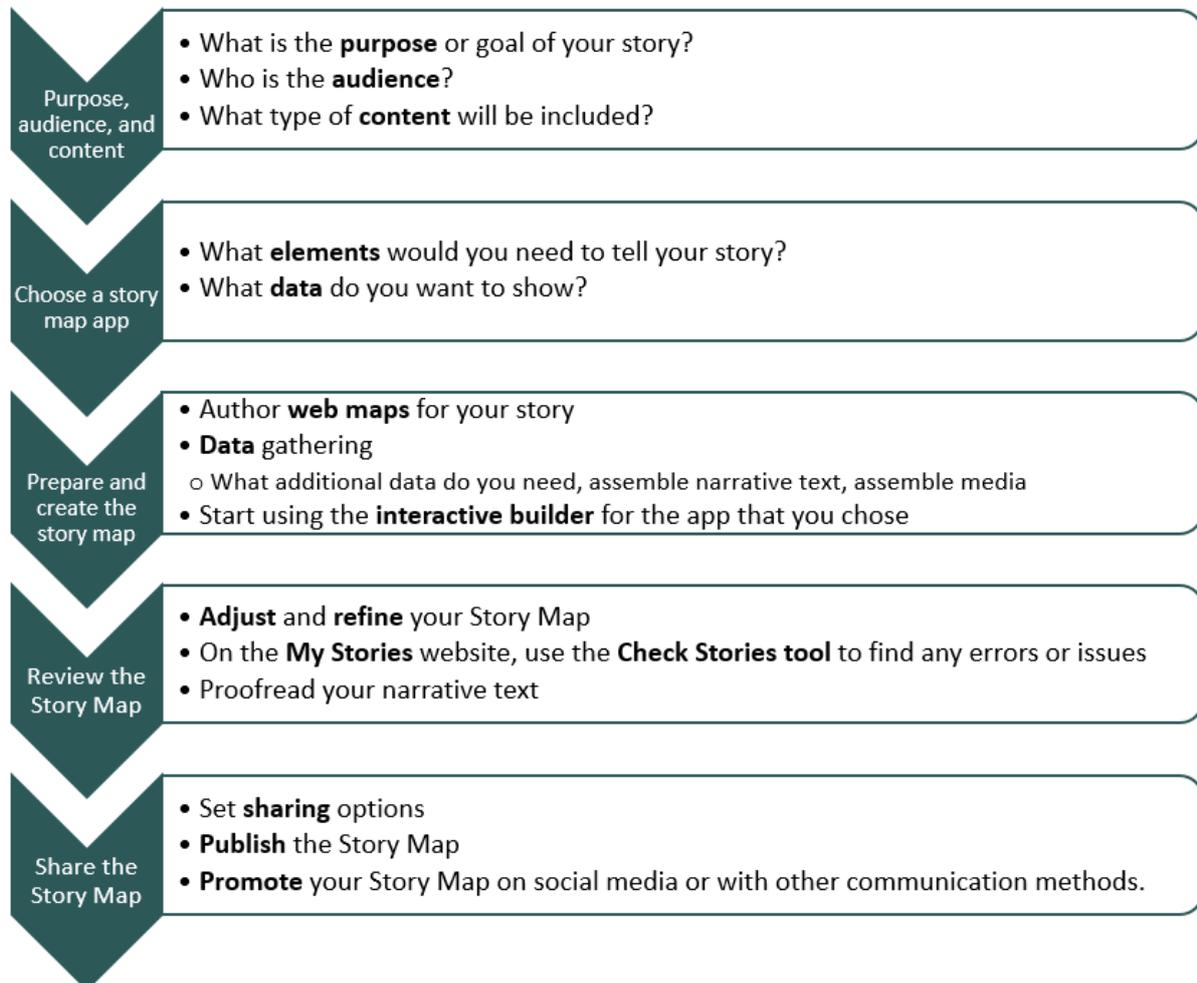
The Esri Story Map application templates come in a variety of flavors. Each app lets you deliver a specific user experience to your audience. There are apps for map-based tours, collections of points of interest, in-depth narratives, presenting multiple maps, and more.

⁴ <https://unhcr.maps.arcgis.com/apps/Cascade/index.html?appid=5fdca0f47f1a46498002f39894fcd26f>

⁵ http://www.healthgeolab.net/DOCUMENTS/HGLC_AGOL_starter_kit.pdf

The *Story Map Tour*⁶, for instance, is great for sets of places with photos and short captions. If you have longer text, the *Story Map Journal*⁷ might be better. If you want your audience to be able to compare different maps, the *Story Map Series*⁸ makes the most sense. For a long, less structured narrative that people read like a web page, use the *Story Map Cascade*⁹.

Using the workflow below will help you to create an efficient and elegant story map.



6.1 Purpose, Audience, and Content

When choosing a Story Map app, you should determine what story you are trying to tell. After you decide on the story that you want to tell, think about how you can make it as clear and simple as possible. The best Story Maps usually focus on one aspect of a single subject of interest, rather than attempting to present a wider range of issues and subjects.

⁶ <https://storymaps.arcgis.com/en/app-list/map-tour/>

⁷ <https://storymaps.arcgis.com/en/app-list/map-journal/>

⁸ <https://storymaps.arcgis.com/en/app-list/map-series/>

⁹ <https://storymaps.arcgis.com/en/app-list/cascade/>

Go to the *Story Maps Gallery*¹⁰ to see some great examples highlighting creative approaches and best practices. You can filter and search the gallery to check out how authors have handled subjects and information that may well be similar to yours. Get a gut feeling for what makes a good story.

6.2 Choose the right Story Map app template

After deciding the purpose, audience, and content for your story, the next step is to choose an appropriate story map app template.

Story Maps are available in a variety of different application templates, depending on what kind of story you want to tell. The following list provides an overview of the story map app templates and their categories. Purpose, audience, content as well as the story you are trying to tell should be the determining factors when choosing the right template.

A Sequence of Place-enabled Photos or Videos



Story Map Tour: Present a set of photos or videos along with captions, linked to an interactive map. It's ideal for walking tours or any sequence of places you'd like users to follow in order.

A Rich Multimedia Narrative



Story Map Journal: Create an in-depth narrative organized into sections presented in a scrolling side panel. As users scroll through the sections in your Map Journal, they see the content associated with each section, such as a map, 3D scene, image, video, etc.



Story Map Cascade: Create a visually and editorially engaging full-screen scrolling experience for your audience blending narrative text, maps, 3D scenes, images, videos, etc. Sections containing text and in-line media can be interspersed with "immersive" sections that fill the screen, including map animations and transition effects.

¹⁰ <https://storymaps.arcgis.com/en/gallery/#s=0>

Presenting a Series of Maps



Story Map Series – Tabbed Layout: Present a series of maps via a set of tabs. There's an optional description panel for presenting text and other content associated with each map.



Story Map Series - Side Accordion Layout: Present a series of maps, and accompanying text and other content for each map, in an expandable panel. Clicking a title selects the map and expands the panel to reveal the text.



Story Map Series - Bulleted Layout: Present a series of maps via numbered bullets, one map per bullet. It's a good choice when you have a large number of maps or locations to present. There's an optional description panel for presenting text and other content associated with each map.

A Curated Set of Places of Interest



Story Map Shortlist: Present a large number of places organized into tabs based on themes, for example, food, hotels, and attractions. As your users navigate around the map, the tabs update to show them just the places in their current map extent.

Comparing Two Maps



Story Map Swipe: Let your users compare two separate web maps or two layers of a single map by sliding a swipe tool back and forth.



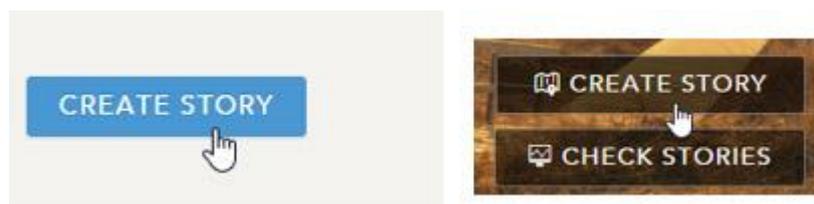
Story Map Spyglass: This app is similar to Swipe but enables your users to peer through one map to another with a spyglass tool.

Presenting One Map

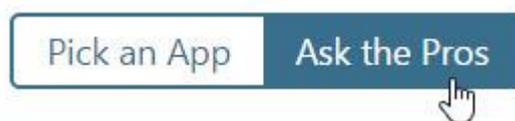


Story Map Basic: Present a map via a very simple user interface. Apart from the title bar and an optional legend, the map fills the screen. Use this app to let your map speak for itself.

If you are having trouble finding the right template, you can ask the Pros! The **Create Story** option offers an easy way to quickly review Story Map options or ask Story Map experts for advice. Create Story can be found in several places; on the main Story Maps home¹¹, and on the Apps page¹². Open any of those locations and look for the **Create Story** button.



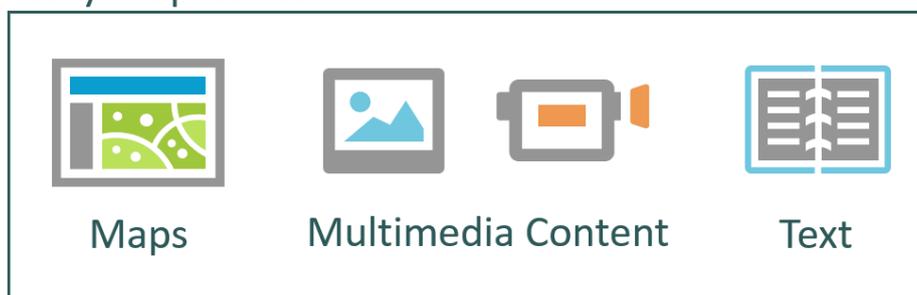
Once you've clicked Create Story, let a wizard guide you to the best choice by clicking **Ask the Pros**.



6.3 Prepare the content for your Story Map

Once you have chosen a Story Map template, the next step is preparing the content you want to use to tell your story.

Story Map Content



¹¹ <https://storymaps-classic.arcgis.com/en/>

¹² <http://storymaps.arcgis.com/en/app-list/>

6.3.1 Maps

One of the key elements of any story map is a map. Here are a few tips and things to consider when using maps in your Story Map.

The web map

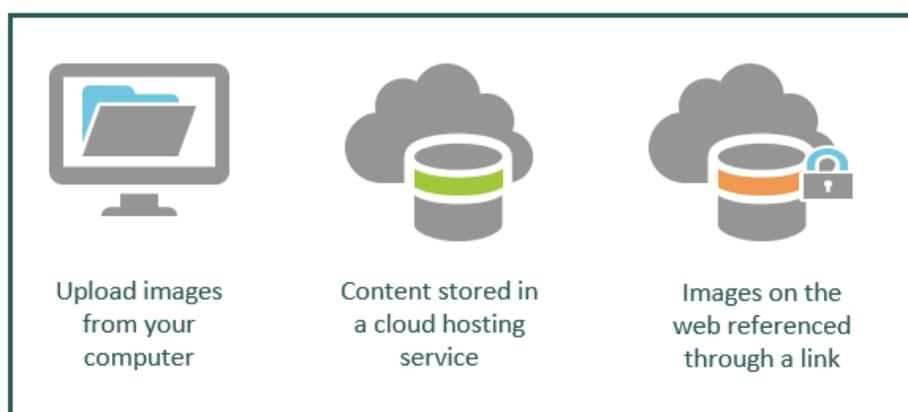
You can use any web map that is shared to your organization, or is publicly shared, depending on how you want to share your Story Map Journal. Choose a map from My Content or others you find by searching your organization or ArcGIS Online.

Make sure your maps are as simple, clear, and user-friendly as possible while incorporating cartography that matches your project. Edit your map to eliminate unnecessary detail. Choose an appropriate basemap; for example, in many cases, a simple gray background map might be better than satellite imagery. Think about what custom pop-ups, legends, and symbology you want to provide to deliver your map's message.

To ensure maps used in your story map are not accidentally removed, it is recommended that you use maps you author (or maps from your organization) and set delete protection for the map item. See *How to prevent accidental deletion*¹³ for more information.

6.3.2 Multimedia Content

Story Maps use photos and images that can be stored in a variety of places. Photos and images you want to use can be stored on your own servers, or using Flickr, Google, and other online repositories. In addition, there are currently five story maps – Story Map Tour, Cascade, Journal, Shortlist, and Series – that enable you to add locally stored photos or images, and host them for use in your story within the story map item.



Why we recommend uploading local images

Uploading local images is the recommended way to add images to your story maps, and there are several good reasons for this.

- Your images are stored with your Story Map, and don't need to be managed as separate items.

¹³ <https://www.esri.com/arcgis-blog/products/arcgis-online/mapping/prevent-accidental-deletion>

- When you upload local images, they are automatically resized and optimized for the web. You don't need to do any of this extra work.
- The images are not publicly accessible if your Story Map is not publicly accessible. So if your story is intended for internal use within your organization, your photos also stay private with the Story Map.
- It's easy!

For more information on adding images, please refer to the blog post *Add images from your local drives to your Story Maps*¹⁴.

5.3.3 Narrative for your Story

Draft your stories in clear language for the intended audience. That means minimal jargon in stories with a broad audience, appropriate terminology in stories for a particular professional audience, and good grammar in all stories. For some stories, you may work with subject matter experts who have deep, specific knowledge about a topic. These contributors will lend credence and authority to your more sophisticated or detailed stories.

Strive for simplicity

Stories are distillations. The more you do to remove nonessential elements, the more likely you are to tell an effective story. Remember that attention spans are short in the digital age. Shorten your text—and then go back and do it again. A person should not have to get to the fifth or sixth section in your story to understand its underlying concepts and mission.

6.4 Build your Story Map

The Get Started with Story Maps lesson¹⁵ will help you in getting started with your first Story Map. The tutorial consists of three lessons, which walk you through the steps of authoring story maps using interactive builders. Each lesson will use a different Story Map app template, allowing you to create story maps that have a look and feel tailored to the story you want to tell.

6.5 Review the Story Map

One or more reviewers, people who pay close attention to details, should review (read) and test (use) all stories before publication to make sure they read and function as expected.

¹⁴ <https://www.esri.com/arcgis-blog/products/arcgis-enterprise/uncategorized/add-images-from-your-local-drives-to-your-story-maps/>

¹⁵ <https://learn.arcgis.com/en/projects/get-started-with-story-maps/>

6.6 Share your Story Map

When you have finished your story map, you simply share it to your audience. You can share your story map publicly or restrict it so it can only be accessed by people in your organization. To promote your story map to your audience: link to it or embed it in your website, write a blog post about it, share it on social media, and so on.

If you would like to further socialize and promote your published stories, you may employ a story map publicist. This person typically sits in your public relations, public affairs, or marketing department and understands how to engage others via social media and the web. Publicists are able to share stories on your organization's Twitter and Facebook feeds and other social media pages and embed or link to stories from your website. These activities are critical for getting good visibility for your team's work and helping your stories reach a wide audience.

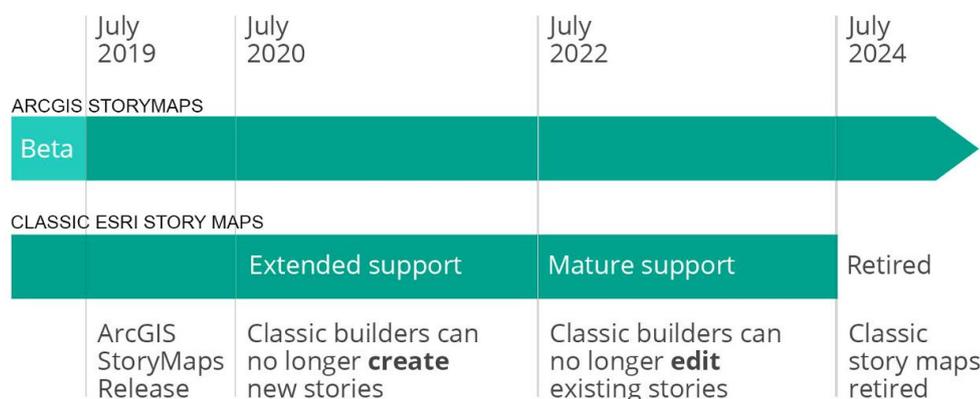
You may also share your stories with @EsriStoryMaps on Twitter so Esri can help in promoting them.

7. ArcGIS StoryMaps (new as of July 2019)

In July 2019, Esri launched ArcGIS StoryMaps – a new, modern platform for telling stories with maps. This means the Esri community now has access to two storytelling tools:

- The new **ArcGIS StoryMaps**
- The classic **Esri Story Maps** templates (as described in sections 1-5 above)

It is important to note that support for the Esri Story Maps templates will be phased out following the timeline below.



To summarize this timeline:

- Authors will still be able to *create* new stories with the classic templates for a full year after the initial release of ArcGIS StoryMaps, until **July 2020**.
- After July 2020, the classic templates will enter a two-year period of **extended support**. During this time, you'll still be able to use the builder to *edit* classic stories you have already created, but won't be able to create new stories with the classic templates.

- After July 2022, the classic templates will enter the **mature support** phase. At this time the *builders will be fully disabled*, but stories you've shared will continue to be accessible to you and your audience.
- After July 2024, the classic templates will be **retired**. However, *this does not mean your stories will become unavailable*. The classic stories you've made and shared will continue to be available after this date, but the classic templates will no longer receive anything but critical maintenance fixes.

Esri has created several useful resources or additional instruction on the new ArcGIS StoryMaps products. These include sites dedicated to transitioning to the new product¹⁶, the future of Story Maps¹⁷, getting started with the new product¹⁸, and the variety of uses of StoryMaps¹⁹.

8. ArcGIS Experience Builder (Beta)

In addition to the new ArcGIS StoryMaps product, Esri has been working on developing another new tool to help users develop modern, design-focused web applications in a code-free environment.

As the next generation of Web AppBuilder for ArcGIS, ArcGIS Experience Builder empowers you to quickly transform your data into compelling web apps. The choices are endless – build mapcentric or nonmapcentric apps and display them on a fixed or scrolling screen and on single or multiple pages.

For additional information about Experience Builder, Esri has an assortment of resources available with more to come as the product development is finalized. From blog posts²⁰ to a product site²¹ to an example application²², Esri hopes to engage users in the development of this new addition to the Esri Geospatial Cloud.

9. Additional Resources

Esri has a dedicated website for Story Maps²³ where you can look at story maps on various topics, learn about the different story map templates and how to create effective story maps, have access to numerous story map resources, and read blogs about story maps.

¹⁶ <https://storymaps.arcgis.com/stories/472a6ddd582b40b58a5a6af2c30a4573>

¹⁷ <https://storymaps.arcgis.com/stories/34a6fea0f4c646809bee510e9f7de1ee>

¹⁸ <https://storymaps.arcgis.com/stories/cea22a609a1d4cccb8d54c650b595bc4>

¹⁹ <https://storymaps.arcgis.com/stories/1b38cf02f39849478d3123dcd9465022>

²⁰ <https://www.esri.com/arcgis-blog/products/experience-builder/announcements/arcgis-experience-builder-beta-is-available-now/>

²¹ <https://www.esri.com/en-us/arcgis/products/arcgis-experience-builder/overview>

²² <https://experience.arcgis.com/stemapp/aa3bec379e374bb184b73c25caeb780f/>

²³ <https://storymaps-classic.arcgis.com/en/>

There are various training materials on story map that you can check out. Some of these materials are accessible for free such as the Telling Stories with GIS Maps web course²⁴, Inform and Engage Your Audience with Esri Story Maps training seminar²⁵, and Get Started with Story Maps tutorial²⁶. Some materials require a training fee such as the Creating Story Maps with ArcGIS instructor-led training²⁷.

²⁴ <https://www.esri.com/training/catalog/57630436851d31e02a43f0e3/telling-stories-with-gis-maps/>

²⁵ <https://www.esri.com/training/catalog/57d876188b3e1ff2376c1539/inform-and-engage-your-audience-with-esri-story-maps/>

²⁶ <https://www.esri.com/training/catalog/57660cbdbb54adb30c94542c/get-started-with-story-maps/>

²⁷ <https://www.esri.com/training/catalog/5887d359378ef44b34da22b2/creating-story-maps-with-arcgis/>