

# Exercise

## Explore Bicycle Incidents Using Open Data

### Section 2 Exercise 1

March 29, 2021



# Explore Bicycle Incidents Using Open Data

### Instructions

Use this guide and ArcGIS Online to reproduce the results of the exercise on your own.

*Note: ArcGIS Online is a dynamic mapping system. The version that you will be using for this course may be slightly different from the screen shots you see in the course materials.*

### Time to complete

Approximately 45 minutes

### Technical note

To take advantage of the web-based technologies available in ArcGIS Online, use the latest version of Google Chrome, Mozilla Firefox, Apple Safari, or Microsoft Edge. Other browsers may not display your maps and apps correctly.

## Introduction

As you know, geo apps require an underlying web map (<https://bit.ly/1qERGr4>), and the web map relies on one or more web layers (<https://bit.ly/2MSX2dP>). As always, good apps and maps are all about the data. Verifying the data is the first step in making a geo app or performing any analysis.



In this exercise, you will learn how to find and explore open data and create a web layer. You will use an open data site and build a basic web app from your search results.

In this section's lecture, Melissa discussed the Open Data DC site and data from Washington, D.C.'s Vision Zero Initiative. The Vision Zero Initiative crowdsources locations of perceived risks by pedestrians, bikers, and car drivers. The government hopes to use to this data to improve safety on Washington, D.C.'s streets. The crowdsourced data is verified and made public through the government's open data portal for anyone to access.

### Part I - Guided

The exercises in Sections 2 through 6 are split into two parts: Guided, which provides step-by-step instructions; and Do-It-Yourself, which allows you to explore further and build your own geo apps.

In the Guided part of this exercise, your goal is to create a web app that shares locations that people feel are unsafe as they bicycle through Washington, D.C.

First, you will find a dataset to use.

#### Step 1: Find an applicable raw dataset

You will start by searching for open data to use, in this case, on Open Data DC's site.

- a In your favorite web browser, go to <https://opendata.dc.gov>.

On this site, the Washington, D.C., government has shared open data that you can browse, visualize on a map, filter, and download.

- b In the search field, type **bicycle safety** and press Enter.



The search results give you a lot of information about available datasets, including titles, who shared the dataset, descriptions, number of features, and ways to filter the results.

- c In the results, find the Vision Zero Safety dataset shared by DCGISopendata.

### Data

#### Vision Zero Safety

City of Washington, DC | DCGISopendata

The Vision Zero **Safety** data comes from a web-based application developed to allow the public to communicate the real and perceived dangers along the roadway from the perspective of...

Type: Feature Layer  
Last Updated: June 25, 2019

Rows: 5,590  
Tags: vision zero, ddot, transportation, **safety**, dc, dc gover...

d Click the title (Vision Zero Safety) to review the dataset.

The features shown are the reported safety incidents or places of concern among people walking, bicycling, and driving in Washington, D.C.

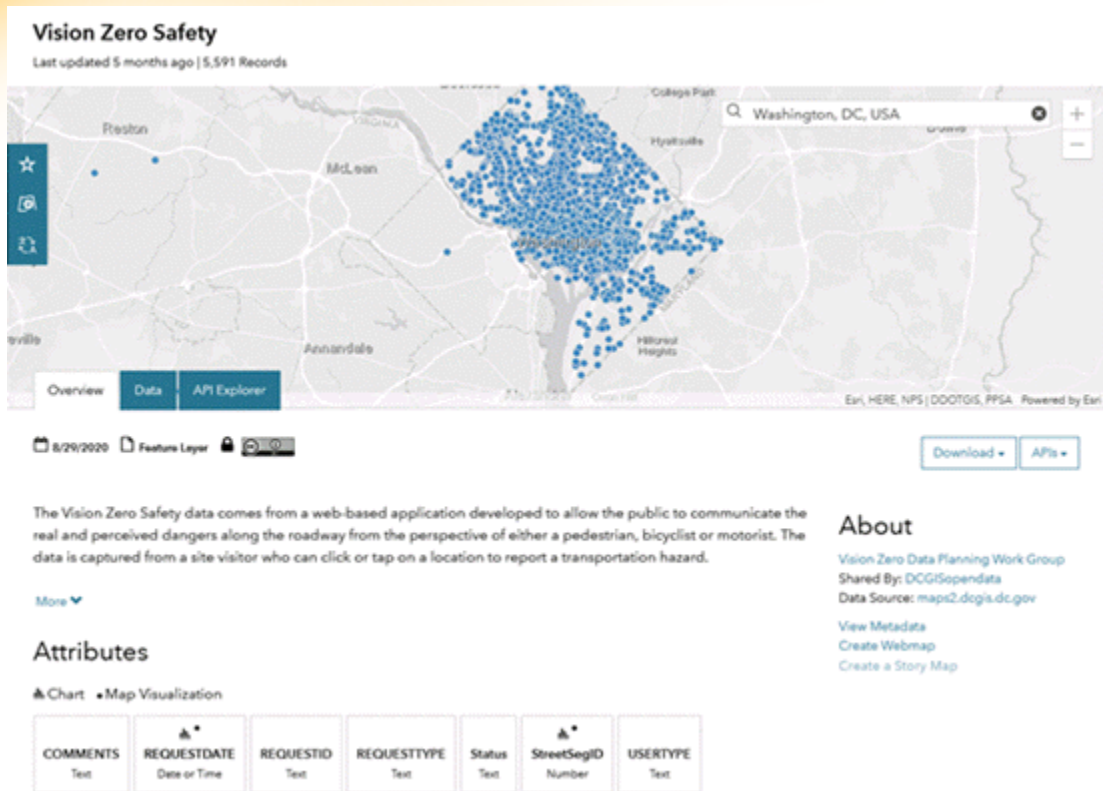
e At the top right of the map, in the Search Data And Map field, type **Washington, DC, USA** and press Enter.

The map will zoom to the area around Washington, D.C.

On the page, you can see the main components:

- At the top of the page: The data extent map visualization
- In the center of the page: An Overview tab with attribute field information
- In the right panel: The download and streaming options and additional metadata

## Do-It-Yourself Geo Apps MOOC



f At the top right, click the Zoom In button and continue to zoom in several times to view individual features.

You can pan, zoom, and click point features to retrieve information from pop-up windows.

g Click a couple of point features of your choice and read the pop-up information.



As you scroll down the page, you will see the Overview tab with descriptions of the data and attributes. Next, you will look at the data itself.

h Close any pop-ups in the map.

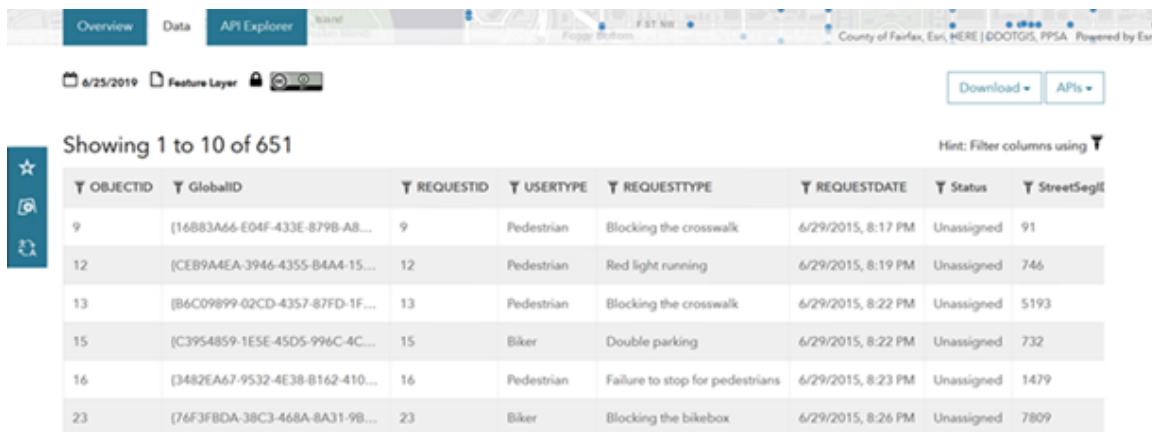


## Step 2: Explore features in the dataset

Before downloading the data, you will explore the features to see what is included.

- Click the Data tab to view the table data.

*Note: The table only shows the features that are visible in the map at the top, so the number of table rows you see will vary from the graphic below. The table may take a minute or so to load, depending on your connection.*

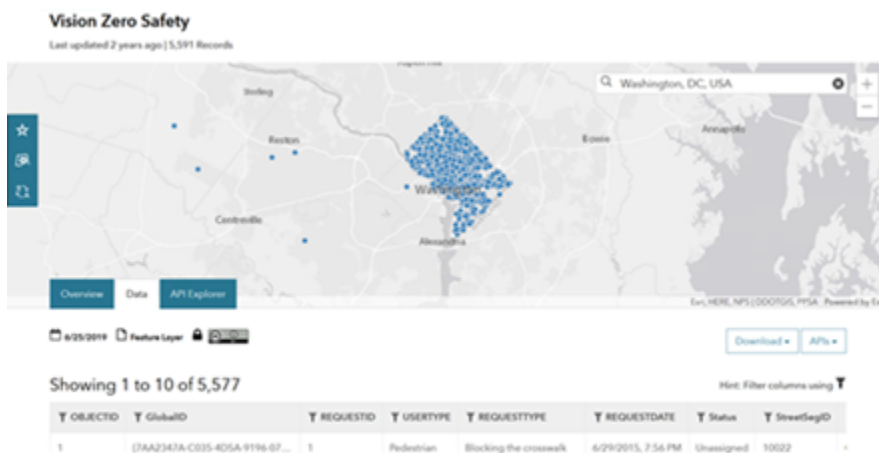


The screenshot shows the 'Vision Zero Safety' application. At the top, there's a map of Washington, DC, with a search bar set to 'Washington, DC, USA'. Below the map is a table of features. The table has columns: OBJECTID, GlobalID, REQUESTID, USERTYPE, REQUESTTYPE, REQUESTDATE, Status, and StreetSegID. The table shows 10 rows of data, with the first row having OBJECTID 9 and GlobalID (16883A66-E04F-433E-879B-A8...). The table is titled 'Showing 1 to 10 of 651'.

OBJECTID	GlobalID	REQUESTID	USERTYPE	REQUESTTYPE	REQUESTDATE	Status	StreetSegID
9	(16883A66-E04F-433E-879B-A8...)	9	Pedestrian	Blocking the crosswalk	6/29/2015, 8:17 PM	Unassigned	91
12	(CEB9A4EA-3946-4355-B4A4-15...)	12	Pedestrian	Red light running	6/29/2015, 8:19 PM	Unassigned	746
13	(B6C09899-02CD-4357-87FD-1F...)	13	Pedestrian	Blocking the crosswalk	6/29/2015, 8:22 PM	Unassigned	5193
15	(C3954859-1E5E-45D5-996C-4C...)	15	Biker	Double parking	6/29/2015, 8:22 PM	Unassigned	732
16	(3482EA67-9532-4E38-B162-410...)	16	Pedestrian	Failure to stop for pedestrians	6/29/2015, 8:23 PM	Unassigned	1479
23	(76F3FBDA-38C3-468A-8A31-9B...)	23	Biker	Blocking the bikebox	6/29/2015, 8:26 PM	Unassigned	7809

The table contains each feature, as a table row; and each feature's attributes, as fields in the table. A feature is a representation of a real-world object in the form of a point, line, or polygon. The attributes are specific pieces of information about the feature.

- In the map, use the Zoom Out button to zoom out until the map shows the features in and near Washington.



The screenshot shows the 'Vision Zero Safety' application. At the top, there's a map of Washington, DC, with a search bar set to 'Washington, DC, USA'. Below the map is a table of features. The table has columns: OBJECTID, GlobalID, REQUESTID, USERTYPE, REQUESTTYPE, REQUESTDATE, Status, and StreetSegID. The table shows 10 rows of data, with the first row having OBJECTID 1 and GlobalID (7AA2347A-C035-4D5A-9196-07...). The table is titled 'Showing 1 to 10 of 5,577'.

OBJECTID	GlobalID	REQUESTID	USERTYPE	REQUESTTYPE	REQUESTDATE	Status	StreetSegID
1	(7AA2347A-C035-4D5A-9196-07...)	1	Pedestrian	Blocking the crosswalk	6/29/2015, 7:56 PM	Unassigned	10022

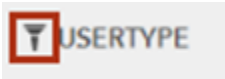
- c In the table, scroll down to view the different features, and page through the dataset using the buttons below the table.
- d Use the horizontal scroll bar below the table or your arrow keys to scroll to the right to view the information populating the different attribute fields in this dataset.

You have access to the entire attribute table in this view. However, you will use the filtering tools to narrow the dataset to only the features that interest you.

### Step 3: Filter the data

Your goal is to create a web app that shares locations in Washington, D.C. that people feel are unsafe as they bicycle through the area. Therefore, you will filter the dataset on reports from bicyclists.

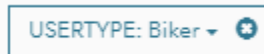
- a At the top of the table, in the USERTYPE table header, click the Filter button.



A filter for USERTYPE appears above the table.



- b Click the filter down arrow, check the Biker box, and then press Enter.



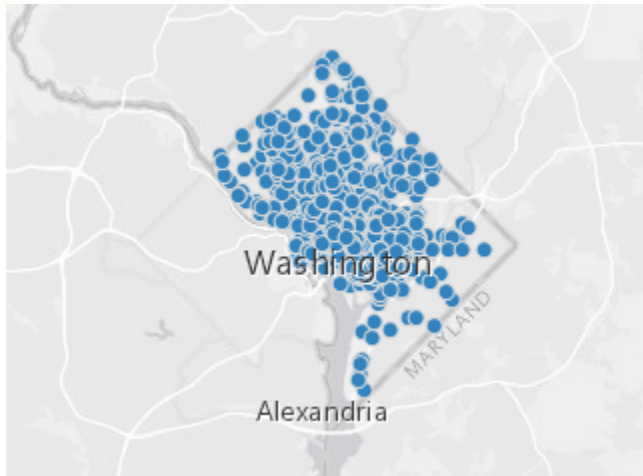
The table records are filtered to show only those features whose Usertype is equal to Biker.

At this point, you have isolated a subset of the data and would like to export this subset. You can apply more advanced symbolization and analysis tools in either ArcGIS Online or ArcGIS Desktop. For this exercise, you will use ArcGIS Online.

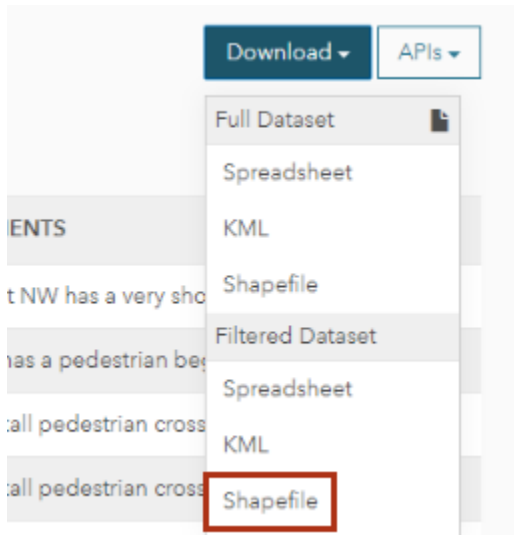
### Step 4: Export the data

You will download the dataset as a shapefile, which is a vector data storage format for storing the location, shape, and attributes of geographic features. A shapefile is stored in a set of related files and contains one feature class.

- a Verify that the map is zoomed out so that all of the features in Washington, D.C., are within the map extent.



- b At the bottom right of the map, click Download, and from the Filtered Dataset section, choose Shapefile.



The subset will be downloaded as a zipped file.

It may take a few minutes for the file to be assembled and to appear in your downloads folder.

- c Save the Vision\_Zero\_Safety file to a location on your computer.  
Now you are ready to upload the file from your computer to ArcGIS Online.



*Note: If you do not have local storage capabilities on the computer or device you are using, you can save the file to a location on the web or in the cloud and still access it from ArcGIS Online. This exercise will list the steps for uploading the file from your computer.*

- d Leave the Open Data DC browser open for a future step.

### Step 5: Publish a hosted feature layer

To display the data in a web map, the shapefile you downloaded needs to be published as a feature layer.

*Ready to take the next step?*



Make sure that you have completed step 1 of *Section 1 Exercise 1: Find Amenities in Denver, CO*. You'll need to use your provided course ArcGIS credentials to complete all the exercises in this course.

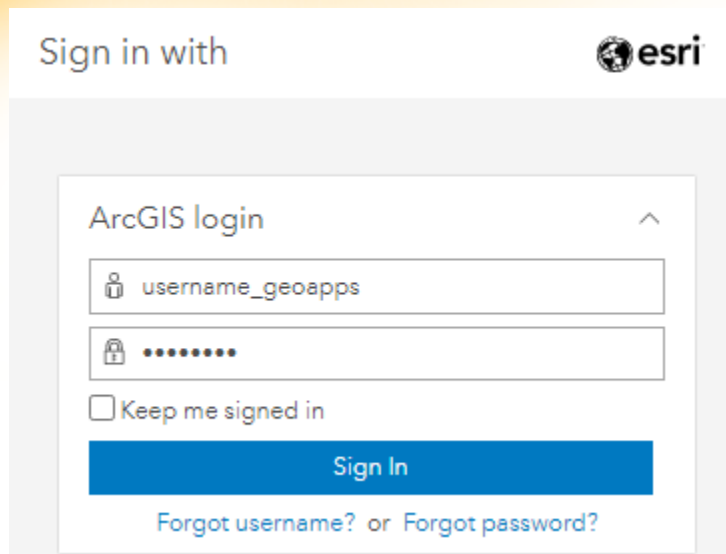
- a Open a new private (or incognito) web browser tab or window.


We recommend that you open a private or incognito browser window whenever you need to work in ArcGIS Online to help prevent conflicts with your accounts.

- b Go to [arcgis.com](https://arcgis.com) and click Sign In.


- c Sign in to ArcGIS Online using your course ArcGIS credentials.


*Note: Step 1 of the Section 1 Exercise 1 PDF explains how to determine your course ArcGIS credentials (user name and password). If you have trouble signing in, go to the Help tab in the MOOC platform.*



Sign in with 

ArcGIS login

 username\_geoapps

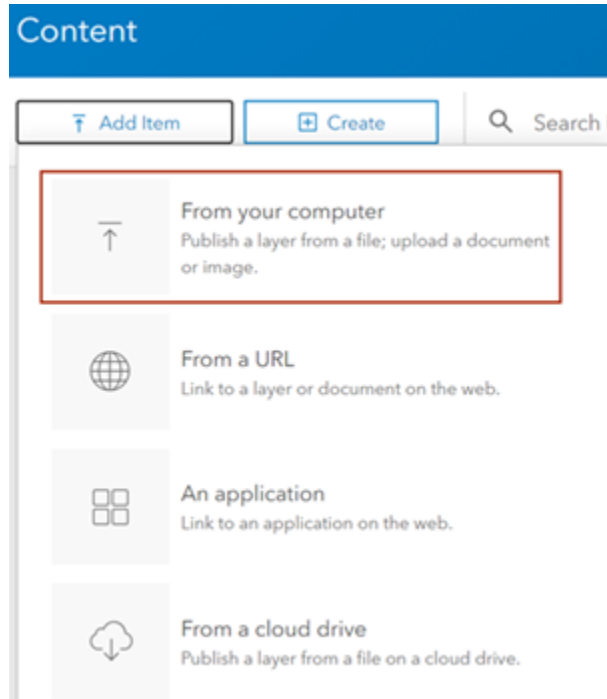
 .....

☐ Keep me signed in

[Sign In](#)

[Forgot username?](#) or [Forgot password?](#)

- d At the top of the window, click Content.
- e At the top left, click Add Item and choose From Your Computer.



- f In the dialog window that opens, click Choose File, select the zipped shapefile you downloaded, and then click Open.

*Note: You do not need to unzip the file.*

- g Ensure that the Publish This File As A Hosted Layer box is checked.

*Note: If you do not see this box, the ArcGIS Online account you are using may not have the necessary permissions. Make sure that you are using your provided course ArcGIS credentials (see step 1 of Section 1 Exercise 1: Find Amenities in Denver, CO).*

A hosted feature layer is the ArcGIS Online equivalent of a shapefile or feature class. In this case, the features are the locations that bicyclists are concerned about and the associated attribute information. When you publish this data as a hosted feature layer, you have access to the data on any browser in ArcGIS Online.

- h In the Title field, replace -shp with an underscore and your name at the end, so that the item will have a unique name.
- i Add relevant tags, such as **biker safety** and **Washington DC**, pressing Enter after typing each tag.

### Add an item from your computer

File:

Vision\_Zero\_Safety-shp.zip

Contents

Shapefile ▼

☒ Publish this file as a hosted layer.

Title:

Vision\_Zero\_Safety\_JohnStudent

Categories:

+ Assign Category ▼

Tags:

biker safety × Washington D.C. ×

Add tags

Add Item

Cancel

- j Click Add Item.


*Note: It may take a few minutes to finish publishing your hosted feature layer.*

You are redirected to the item page for the new item. When the progress indicator stops, the service has been created.

### Step 6: Add a feature layer to the map

*Note: Due to changes planned for the ArcGIS Online April 2021 update, the interface shown in screen shots may differ from what you see on-screen.*

You are ready to add your feature layer to a map.

- a At the top right, click the App Launcher button .


- b From the gallery of apps displayed, click Map Viewer.

*Note: If you do not see Map Viewer, click Map Viewer Beta.*

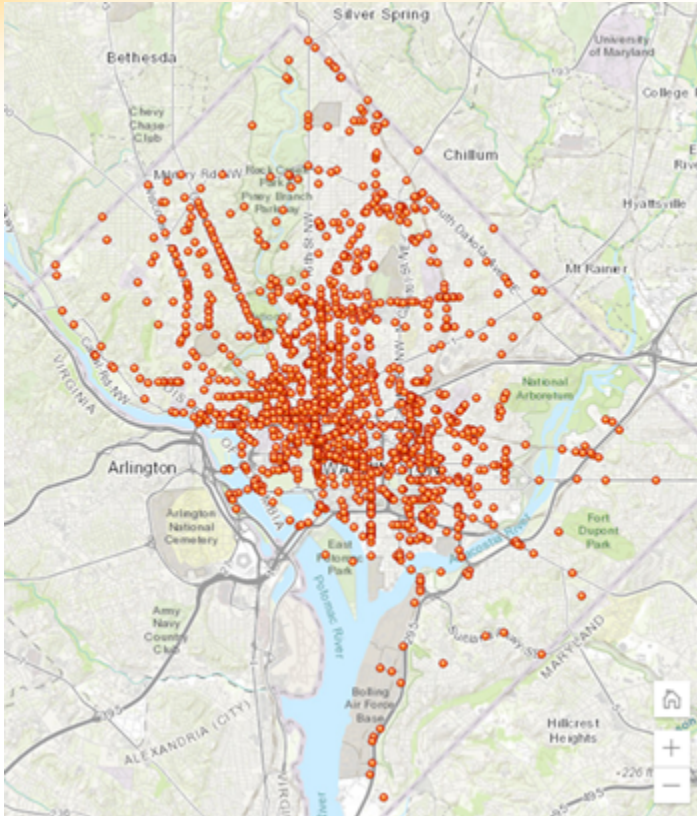
- c If necessary, on either the Map Viewer Is Out Of Beta or the Welcome To Map Viewer Beta message, click OK.

- d On the left, under Layers, click Add Layer.

- e Next to your Vision Zero Safety layer, click the Add button .

- f At the top of the Add Layer pane, click the back button  to return to the Layers pane.

Your data is added to the web map.



*Note: If your map is zoomed out to include other countries or continents, zoom back in to the Washington, D.C., region, as shown in the graphic.*

Next, you will update the point symbolization to provide more meaning.

### Step 7: Symbolize the data

You will symbolize the data based on the request type.

- a On the Settings toolbar on the right, click Styles.
- b In the Styles pane, under Choose Attributes, click + Field.
- c In the Add Fields window, click REQUESTTYP, and then click Add.



**Add fields**

COMMENTS	i
GLOBALID	i
REQUESTDAT	i
REQUESTID	i
<input checked="" type="checkbox"/> REQUESTTYP	i
STATUS	i
STREETSEGI	i
USERTYPE	i

**Add** Cancel

You should see the colors of the features on the map change. The features are now symbolized based on the type of request made. Feel free to explore the different drawing type options.

### REQUESTTYP

- Other Biking Issue
- Speeding
- Double parking
- Other Driving Issue
- Red light running
- Blocking the bikebox
- Cyclist behavior
- Poor visibility
- Stop sign running
- Failure to stop for pedestrians
- Other

d At the bottom of the Styles pane, click Done.

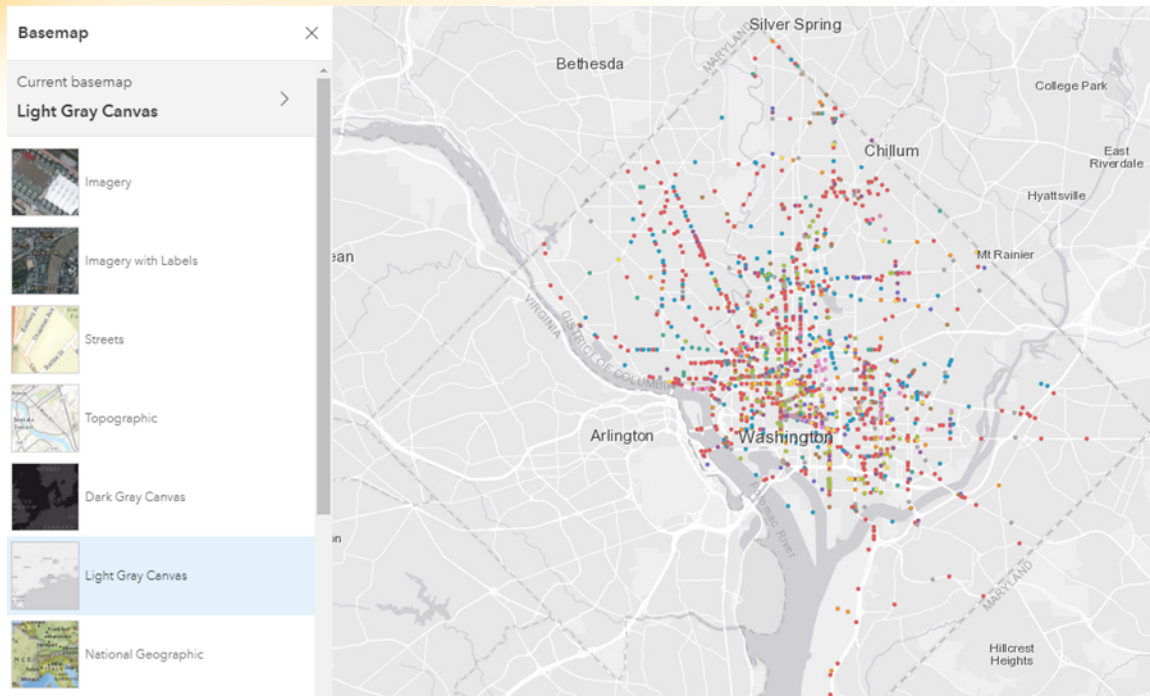
Next, you will change the basemap to help make the new symbolization clearer.

### Step 8: Change the basemap

The bicyclist-concern data is what is referred to as an operational layer. The other layer in the map is the basemap, a noneditable layer that provides background, or reference information, in your map. Operational layers are drawn on top of the basemap and are the layers that you interact with. Operational layers can be symbolized, edited, and configured so that information is displayed in a pop-up window when clicked. You will change the basemap to make your operational layer stand out more.

a On the Contents toolbar on the left, click Basemap.

b Choose Light Gray Canvas.





The points stand out more against the light gray background.

Now that your map looks appealing, you will improve its functionality. You will change the pop-up windows so that when users interact with the map, they see only the most relevant information.

### Step 9: Modify the information pop-up windows

You will configure the pop-up windows to show only information about the request type, date, status, and comments. To make the information in the pop-up windows easier to understand, you will also configure the attributes to change the display name for each attribute field.

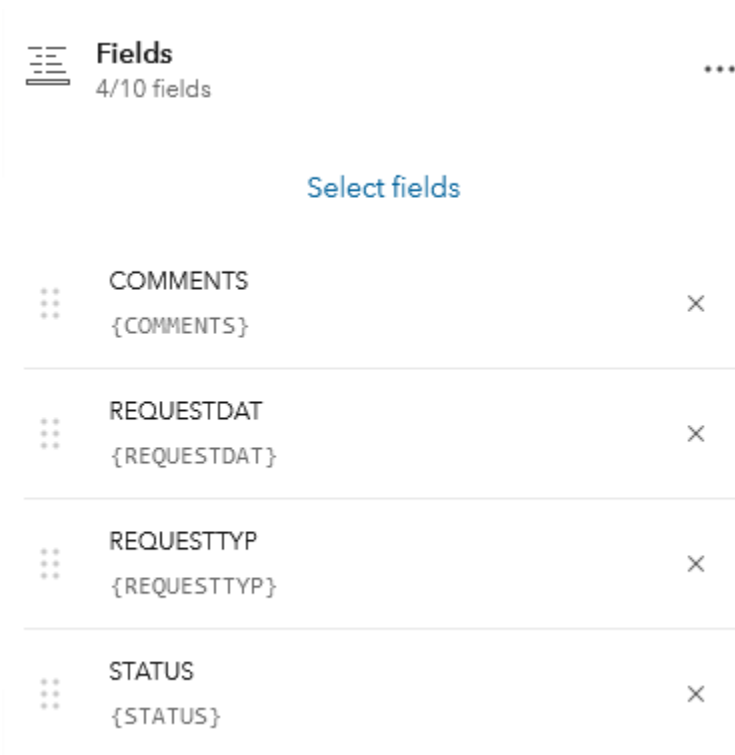
- a On the Contents toolbar on the left, click Layers.
- b On the Settings toolbar on the right, click Configure Pop-ups.
- c Under Title, click the Edit button .
- d Change the pop-up title to **Vision Zero Safety** and click OK.
- e In the Fields section, click the Expand button .

The fields section allows you to choose which fields to display.

In this case, you want to show only a subset of the attribute fields. Clicking the X next to a field disables that field—it will not appear in the pop-up window.

- f Click the X to the right of every field **except** for COMMENTS, REQUESTDAT, REQUESTTYP, and STATUS.

The Fields section should now list four fields, as shown in the following graphic.





The names of these fields have been standardized to make data processing more efficient. However, you want the information in your pop-up windows to be easy to understand and read, so you will change the display names.

- g On the Settings toolbar on the right, click Configure Fields.

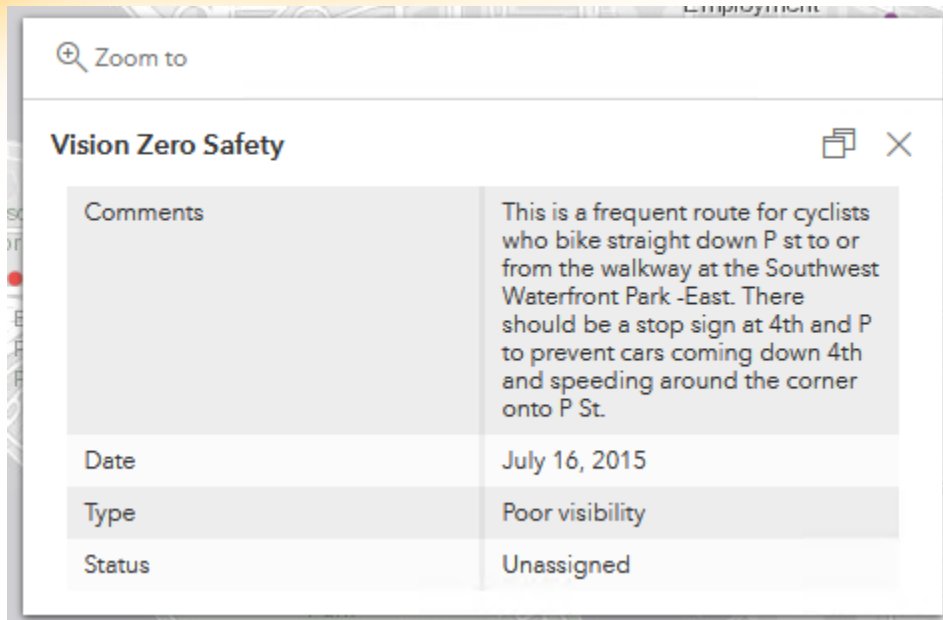
- h For the following fields, click the name of the field, type the desired display name (as shown below), and then click Done:

Field	Display Name
COMMENTS	<b>Comments</b>
REQUESTDAT	<b>Date</b>
REQUESTTYP	<b>Type</b>
STATUS	<b>Status</b>

FID {FID}	
Comments {COMMENTS}	abc
GLOBALID {GLOBALID}	abc
OBJECTID {OBJECTID}	int
Date {REQUESTDAT}	
REQUESTID {REQUESTID}	abc
Type {REQUESTTYP}	abc
Status {STATUS}	abc
STREETSEGI {STREETSEGI}	int
USERTYPE {USERTYPE}	abc

- i If necessary, click a point on the map to verify that the pop-up window reflects your changes.






Next, you will make a geo app. Your geo app will combine this map with text and multimedia to inform others about bicycle safety. To create the app, you must first save the map.

### Step 10: Save and share your web map

You will save your map, providing tags and a summary.

- a On the Contents toolbar on the left, click Save.
- b In the Save Map dialog box, type an appropriate title and summary, as well as relevant tags to help users find your app in ArcGIS Online.



## Save map ×

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Title

Tags

biker safety × Washington DC × [Add tag\(s\)](#)

Summary

Map showing open data on cyclist concerns in Washington, DC.

**c** Click Save Map.


If you want to share your map, especially with non-GIS users, you should share the contents of your map as a web app. You can choose from many different types of apps, including instant apps, configurable apps, dashboards, and stories. For this exercise, you will share your information using ArcGIS StoryMaps.

In addition to discussing open data, the lectures for this lesson also talked about [ArcGIS StoryMaps](https://bit.ly/1X8Bkl4) (<https://bit.ly/1X8Bkl4>). ArcGIS StoryMaps lets you combine maps with narrative text, images, and multimedia content to tell your story. It is another type of web app that you configure using an interactive builder, without coding.


**d** On the Contents toolbar on the left, click Share Map.


The Share window appears, which allows you to share your app with the public, your organization, or groups that you own or belong to.


## Share



### Set sharing level

☒  **Owner**  
Owner of the item(s) has access

☐  **Organization**  
All members of your organization have access

☐  **Everyone (public)**  
People outside your organization have access

### Set group sharing

You don't have any groups to share to yet.

Save

Cancel

By default, layers in ArcGIS Online are private. When you published the layer that you exported from the open data site, sharing was set to private. If you were to share this web map, ArcGIS Online would detect that the underlying layer in the map did not have the same sharing settings as the other layers and would prompt you to update them. If you did not update the sharing settings, then, when a user opened the app with the private layer in it, the user would be asked for the layer owner's user name and password. Therefore, for this exercise, you will *not* share your web map.

 Click Cancel.

The following table describes how layers, web maps, and web apps can be shared in ArcGIS Online.

Groups you belong to	Sharing with specific groups restricts access to a smaller, more focused set of people. Members of the group can be from the same organization or from different organizations.
Your organization	Sharing with your organization means that only members of your organization can access your item.
Everyone (public)	Sharing with everyone makes your item public; anyone who has access to ArcGIS Online, including anonymous users, can find and use your item.

For more information about sharing, see ArcGIS Online Help: [Share items](https://bit.ly/1lwRKdn) (<https://bit.ly/1lwRKdn>).

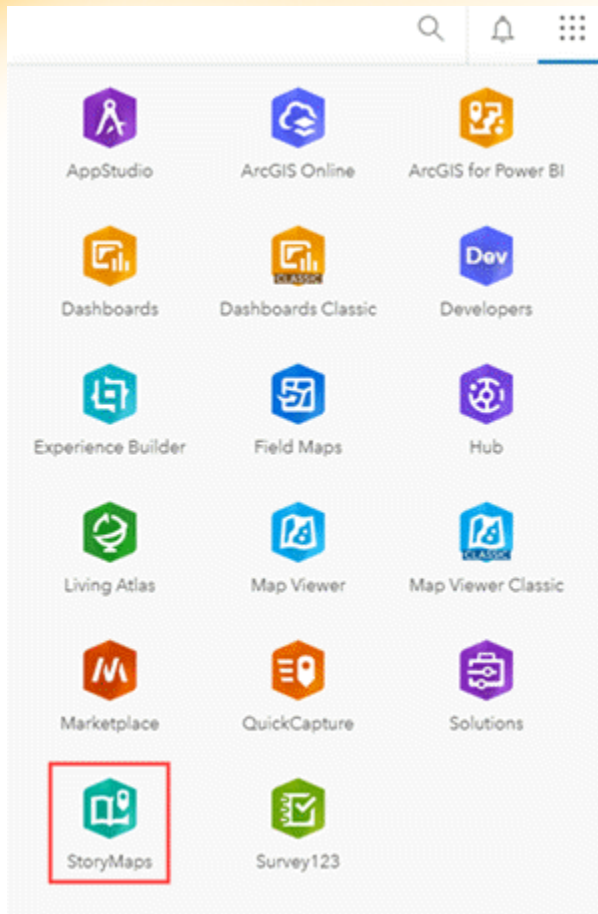
Next, you will create a web app from your map.

### Step 11: Create a story

For this exercise, you will use ArcGIS StoryMaps to create a story. ArcGIS StoryMaps provides a framework to which you can add text, photos, videos, web maps, and web scenes to create impactful stories that are easy to share with others. You will create a story not only to share the Vision Zero Safety map you created, but also to provide visually appealing supporting elements so that your audience more completely understands the information.

- a At the top right, click the App Launcher button and choose StoryMaps.

*Note: The app icons may appear in a different order than what is shown in the graphic.*



The ArcGIS StoryMaps page opens.

*Note: A desktop, laptop, or tablet with a minimum resolution of 960 pixels is required for authoring and editing stories in the story builder. For more information, see [System requirements](https://bit.ly/2lqs8cy) (<https://bit.ly/2lqs8cy>) for ArcGIS StoryMaps.*

- b** In the center of the screen, click Start a Story.





## Create your first story

Bring together maps, photos, videos, and text to craft a narrative that informs and inspires

Start a story

*Note: If this is not the first story that you have created using this account, you will see a New Story option. You will click New Story, and then choose Start From Scratch. Either New Story or Start A Story will launch the story builder.*

The ArcGIS StoryMaps story builder launches.

- c Click Title Your Story and type **Vision Zero Safety**.
- d Next, change the subtitle line to **Bicycle Commuter Incidents in Washington, D.C.**

# Vision Zero Safety


Bicycle Commuter Incidents in Washington, D.C.

Student | Draft

Next, you will begin adding content to your story.

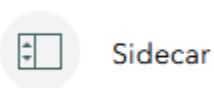
## Step 12: Add a sidecar

In this step, you will add a sidecar to your story. Sidecar blocks are a combination of media and story narrative that fill the display, creating an immersive experience in your stories.

- a Scroll down the page, if necessary, and click the Add Content Block button  to begin adding content to your story.

You will see all of the options available for adding content to your story. In this case, you want to add a map, but you would also like to include supporting material, such as photos and text, to enhance your story. Therefore, you will add a sidecar.

- b Click Sidecar.

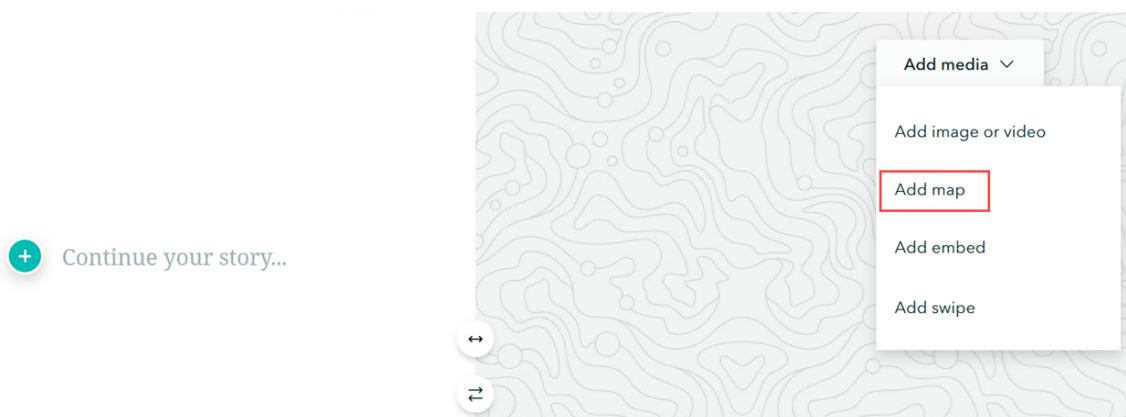


*Note: An informational tour describing the sidecar is displayed the first time you choose it. You can click through the arrows to learn more and then click Got It, or you can click Skip to dismiss the information.*

- c In the Change Layout window, choose Docked Panel and click Done.

Now you will add content to the empty sidecar.

- d At the top right, click the Add Media down arrow and choose Add Map.



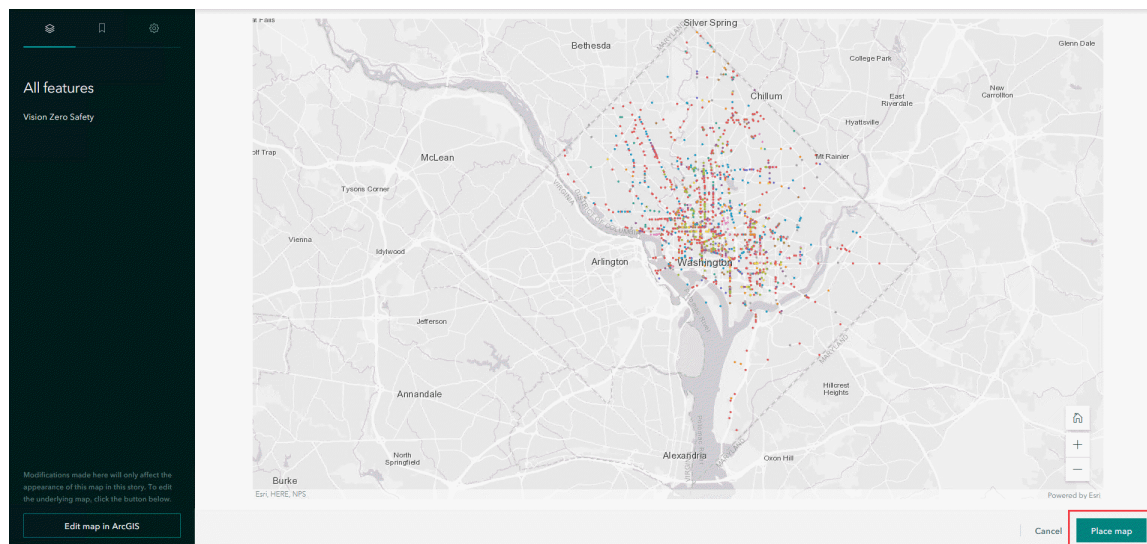
You will see your web maps displayed under My Maps. In the story builder, you can choose to add an existing web map or you can create a new express map. Express maps are simple, lightweight maps that you create in the story builder. You can draw features, such as points, lines, arrows, or areas, directly on the map. You may choose to explore express maps in the

Do-It-Yourself part of the exercise. For now, you will choose the web map you already created.


- e Click the Vision Zero Safety map.

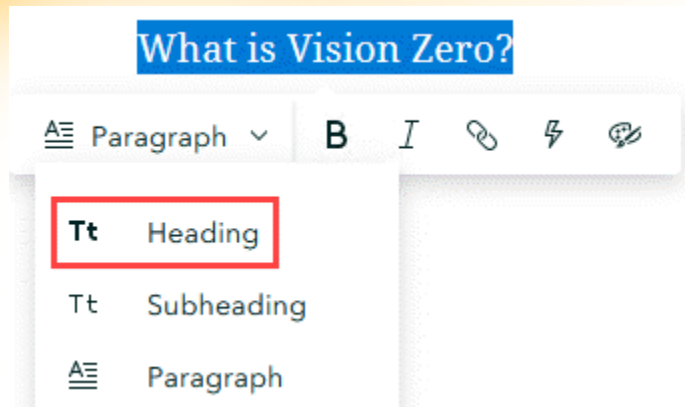
You can configure the map layers, bookmarks, and options using the tabs in the upper left, or you can choose to edit the web map itself by clicking Edit Map In ArcGIS in the lower left before placing it in your story.

- f Under All Features, click the name of the layer, change the name to **Vision Zero Safety**, and then press Enter.
- g At the bottom right, click Place Map to add the map to the story.



Your web map appears in the story. Now you will add content to the narrative panel.

- h In the narrative panel on the left, click the Add Content Block button  and choose Text from the list of displayed options.
- i Type **What is Vision Zero?**
- j Highlight the text, click Paragraph, and choose Heading.



k Press Enter.

l Type the following sentence:

**Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, equitable mobility for all.**

You will add another heading.

m Press Enter and type **Bicycle Commuter Incidents in Washington, D.C.**

n Following the steps above, apply the heading formatting to this text.

o Press Enter and type a description of the data in your map so that the public has a better understanding of where the data came from and what the map is conveying.

You can type something similar to the paragraph that follows, or you can use your own words.

**The map on the right displays a subset of Washington, D.C.'s Vision Zero Safety data, which is sourced from a web-based application that allows the public to communicate dangers along a roadway from the perspective of a pedestrian, bicyclist, or motorist. This subset of data shows the type, date, and status of the incident, as well as comments from the perspective of bicyclists.**

### What is Vision Zero?

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, equitable mobility for all.

### Bicycle Commuter Incidents in Washington, D.C.

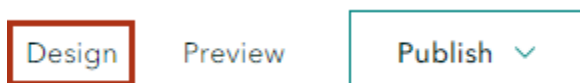
The map on the right displays a subset of Washington, D.C.'s Vision Zero Safety data, which is sourced from a web-based application that allows the public to communicate dangers along a roadway from the perspective of a pedestrian, bicyclist, or motorist. This subset of data shows the type, date, and status of the incident, as well as comments from the perspective of bicyclists.

You have added text content blocks to the narrative panel in the sidecar. In addition to text, you can add media and maps to the narrative panel. Adding more content blocks may be something that you explore in the Do-It-Yourself section of this exercise.

## Step 13: Design your story

In this step, you will continue to design your story. You will change the story cover, set a theme, and add a hyperlink to text.

- a At the top right, click Design to open the Design panel.



You can click the various options in the Design panel to see how each option changes the story. You will change the cover layout and the theme.

- b For Cover, choose the Side-By-Side option.

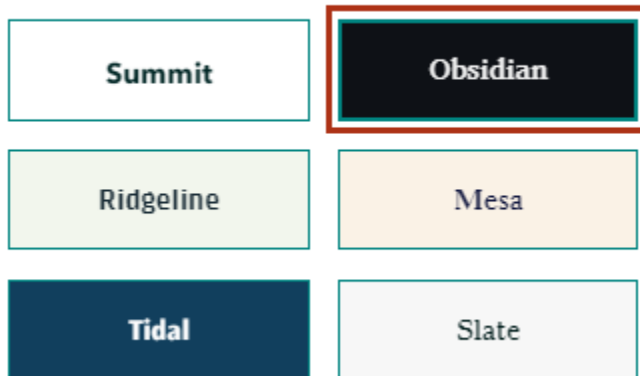
### Cover





- c For Theme, choose Obsidian.

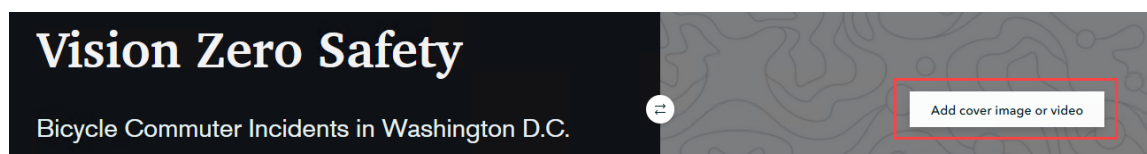
### Theme



- d Close the Design Panel.  
e Scroll up to the story cover.

Notice how the cover layout has changed: you now see the title on the left and a place for an image or video on the right. You will add an open source photograph from Unsplash to enhance the cover of your story. Unsplash offers free high-resolution photos.

- f Open a separate browser tab and go to [www.unsplash.com](https://www.unsplash.com).  
g In the search field, type **bicycle commute** and press Enter.  
h Click an image that you think will visually enhance your story.  
i Download the image to the same folder in which you saved the Vision Zero Safety dataset.  
j If you see a pop-up window with photograph credit information, click the Copy To Clipboard button to copy the "Photo By <Photographer name> on Unsplash" text.  
k In your web browser, return to your Vision Zero Safety story, and on the right, click Add Cover Image or Video.



- l Click Browse Your Files and browse to the location of the Unsplash image.

m Select the image file and click Open.

n Click Add.

You will add an attribution to give credit to the photographer.

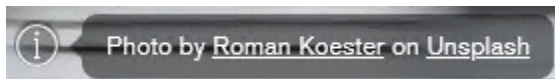
o Near the top of the image, click the Options button.



p In the Attribution field, paste the photograph credits you copied from Unsplash.

q Click Save.


An icon now appears in the top left of your image. Clicking this icon shows the attribution you just added.



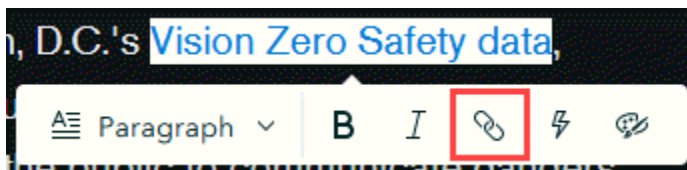
Feel free to add or embed additional images to the text you have written in the narrative panel of the story. If you add additional photos, be sure to include an attribution for each photo. ArcGIS StoryMaps also has drag-and-drop functionality, so you can easily move media around to assess the best place for each element within your story.

Your audience may like to learn more about the Vision Zero Safety dataset you used to build your web map. You will provide a link to the data within the text.

r Return to the Open Data DC browser tab that you left open and copy the URL from the website.

s Return to your Vision Zero Safety story and, in the last paragraph that you added to your story, highlight the words "Vision Zero Safety data" and choose the Link button .

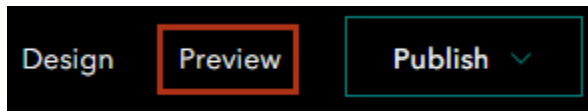
*Note: If the text you typed is slightly different, highlight the text you would like to be linked to the Open Data DC website.*



t Paste the link that you copied into the URL field and press Enter.

The link will not open in edit mode. To check that the link works, you must preview your story.

- u At the top right, click Preview.



- v Locate and click the link you added.

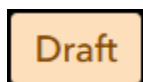
A new tab will open to the Open Data DC website.

- w Close the Open Data DC tab.
- x After you are done previewing, at the top right, click Edit Story to return to edit mode.

You could continue to configure the story, but you will have the chance to create your own story and experiment with the functionality of ArcGIS StoryMaps in the Do-It-Yourself section of this exercise.

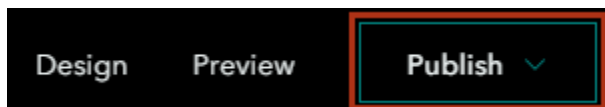
### Step 14: Publish your story

Your story is automatically saved as a draft as you make changes. In the upper left, next to the story name, you will notice a Draft badge.



The draft version of your story is only visible to you. Publishing (<https://bit.ly/39MTYwb>) your story allows others to see it. In addition to making your story visible to others, publishing your story allows you to discard any unpublished changes.

- a In the upper right, click Publish.



You have the option to publish your story privately, to your organization, or to the public. You will keep the default setting of Private, so that only you can view the story.

- b Click Publish Story.

Your published story opens. You can continue to edit a story after publishing.

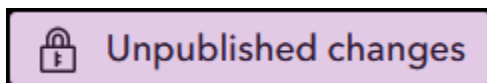
- c In the upper right, click Edit Story.

In the upper left, next to the story name, there is now a Published badge.



- d Make a change in your story, such as modifying the title.

Your story is automatically saved, and there is now an Unpublished Changes badge.



Because you have published your story, you can return to the published version, discarding any changes that were automatically saved.

- e In the upper right, click the More Actions button.



- f Choose Discard Unpublished Changes, and then click Yes, Discard Changes.

Your story returns to the previously published version.

The published story is available as an item in your ArcGIS Online content.



Clicking the item from your list of content items will take you to the item page, where you can update the metadata and view or continue to configure the story.

- g After you finish, close all the open browser windows.

This concludes Part I of the exercise. Please continue to Part II - Do-It-Yourself to apply what you have learned, follow your own interests, and explore. Resources for learning more are included at the end of the section.

### Part II - Do-It-Yourself

The Do-It-Yourself part of the exercise contains optional goals for applying what you learned in the Guided part, but with less instruction. Use your creativity and have fun building your own geo apps! Helpful resources and samples are listed in the Learning Resources section at the end.

Even if you choose not to complete a Do-It-Yourself project, we ask that you read through this section so that you can find and learn from your fellow students' work.

#### Leverage user-community data, or create a story

In the Guided part of the exercise, you created a geo app without using any code. In the Do-It-Yourself part of the exercise, you have two options; feel free to choose either or both options.

##### **Option 1. Talk to your organization about creating an open data portal**

It's easy to set up a customized website and select the authoritative data that you want to share—allowing anyone to search, view, and download your data in multiple formats. If you or your organization has data that you think is useful and that you want to share, begin a conversation about open data portals. Use [this ArcGIS Hub link](https://bit.ly/2wjDoRt) (<https://bit.ly/2wjDoRt>) to start. You will need an organizational ArcGIS Online subscription outside of this class. Let us know in the forum what happens!

##### **Option 2. Build your own geo app**

First, find data. You can search for content on the [ArcGIS Hub page](https://bit.ly/2XNWeiA) (<https://bit.ly/2XNWeiA>), the ArcGIS Living Atlas of the World [content page](https://bit.ly/2L1S2BX) (<https://bit.ly/2L1S2BX>), or from any other data source that you are interested in. Second, create an engaging app using any of the instant apps, such as [ArcGIS StoryMaps](https://bit.ly/2uZDmO5) (<https://bit.ly/2uZDmO5>). For inspiration, visit [Explore stories](https://bit.ly/2kcjupf) (<https://bit.ly/2kcjupf>) to view featured albums.

#### Share your work with the class



Both students and instructors want to see what you did in the Do-It-Yourself part of the exercise. When you finish your geo app or discussion about open data with your organization, please tell us about your experience in the forums:

1. If you created an app, share it with Everyone (Public).
2. After sharing, test your app in a new incognito browser window that you are not signed in to.
3. Create a new forum post.
  - If you created an app, add the link to the app in the body of your post. The link can be a shortened link from the Share dialog box or the full URL copied from the web browser when viewing the app. Include a sentence that describes what your app does.
  - If you spoke with your organization about open data, describe what happened and what you learned.
4. Give the post a meaningful title and add the hashtag **#DIYSection2**. This hashtag allows students and instructors to find what you shared. Here is an example of an appropriate post title: App to Find the Best Beaches in Florida #DIYSection2.

Have fun experimenting, but please do not share maps or apps from the Guided part of the exercise—only share work from the Do-It-Yourself part.

### Find the work of other students

Now that you have shared your work in the forum, go find and review the work of other students. Feedback from the MOOC community helps everyone learn and improve.

1. In the forums, search by the hashtag **#DIYSection2**.
2. Read other students' posts, and check out their geo apps.
3. Give any helpful feedback or ask questions by replying to the forum post.

### Learning Resources

Nice work! You have learned how geo apps can be used to analyze open data: you searched for and obtained open data from an online source; used the data in a story web app; and, hopefully, completed one of the Do-It-Yourself stretch goals.

Here are some more resources to help you continue learning:

[ArcGIS Open Data program](https://bit.ly/16HBwCl) (<https://bit.ly/16HBwCl>)

[ArcGIS Hub search](https://bit.ly/2Mmmcpf) (<https://bit.ly/2Mmmcpf>)

[ArcGIS StoryMaps overview](https://bit.ly/2uZDmO5) (<https://bit.ly/2uZDmO5>)

[Data.gov \(US government open data\)](https://bit.ly/1HtmqgK) (<https://bit.ly/1HtmqgK>)

[The latest ArcGIS StoryMaps blog posts](https://bit.ly/2MZCLne) (<https://bit.ly/2MZCLne>)

More Esri training:

Training seminar: [ArcGIS App Strategies](https://bit.ly/2L2OK1d) (<https://bit.ly/2L2OK1d>)

Instructor-led course: [Creating Story Maps with ArcGIS](https://bit.ly/2BmpjYY) (<https://bit.ly/2BmpjYY>)