In this exercise you will work with ArcMap and ArcGIS Online (AGOL) to create an information product specific to a Public Works solution. You will publish the data to your ArcGIS Online (AGOL) Organization from ArcMap, and then use AGOL to build an editable web map, and an editing application from a template. You will learn how to edit the data using the application, then see the edits in the web map. This exercise requires that ArcGIS Desktop 10.1 be installed on your computer. If you have a mobile device, you can use the ArcGIS application for your platform to edit the data.

You will play the role of a member of the Public Works staff. Using ArcMap, you are to prepare a map document showing the locations of street furniture assets maintained by your department. These assets include trash bins, bus stop shelters, planters, and other furniture. After publishing the street furniture features, you will craft a web map, and share it with your group. You will create an editing application for the desktop, and access the web map with a mobile device such as an iPad.

Steps to this exercise include the following:

- Open a map in ArcMap.
- Publish features to your ArcGIS Online Organization.
- Create a web map from your newly published data.
- Create a web application from the web map.
- Configure the web app.
- Share the map and app with your organization and group.
- Use the web app to create and edit some features.
- Optionally, use a mobile device to open the web map and edit some features.

☐ Step 1 – Locate CityStreetFurnitureManagement.mxd in the Exercise06 folder and open it in ArcMap. Note the map uses the Imagery basemap, and contains our Public Works Street Furniture Asset layer.
Step 2 – Publish your map to your ArcGIS Online Organization.

- Sign in to your AGOL Organization from the **File** menu, if needed, as in Exercise 3.

- After filling in your user name and password, click **Sign In**.
• From the **File** menu, move the mouse over the **Share As** option and select the fly-out for **Service**...

![Image of the File menu with Share As option selected]

• Select **Publish a service**. Click **Next**.

![Image of the Share as Service window with Publish a service option selected]
• Make sure that the connection points to **My Hosted Services** (your organization name). You can keep the default name or change it. Click **Continue**.

• You will now see the **Service Editor** dialog open. In the left panel, click **Capabilities**.

• Check on (enable) **Feature Access**. Check off (disable) **Tiled Mapping**.
Click on **Feature Access**. Note in the dialog, that *Create*, *Delete*, *Query*, and *Update* are all checked on. This allows users to edit the data in the resulting service.

![Feature Access](image)

Click **Sharing**. Share your map with your organization, but NOT the public. If you have a group you would like to share the map with, you can do that as well.

![Sharing](image)

Optional: After you finish with Step 2, if you would like, you could use the skills you have learned to create a *Public Works* group in ArcGIS Online, and share the map with it. There is an icon in the *Exercise06* folder called *publicworks.jpg* that you can use for the group icon.

Click **Analyze**. When the analysis is complete, you can click the **Minimize** button, just to the right of the **Publish** button, so you can see the analysis results.

![Analyze](image)

In the **Prepare** window, you will see an error message indicating *Basemap layers cannot be published directly to a service*. This is because the image basemap already exists on AGOL. Right click on the message, and select **Remove Layer**.

![Prepare](image)
• When the analysis is done, click **Analyze** again to see that the error is gone. Ignore the warnings. Click the **Publish** button.

![Image of ArcGIS Online Exercise 06](image1.png)

• You will see a dialog showing the publication process, and one stating the service has been published. Close ArcMap, but **DO NOT SAVE** the map document.

![Image of ArcGIS Online Exercise 06](image2.png)

☐ **Step 3 – Review the service in a webmap.**

• From your browser, log in to your organization, if you have not done so already. Find your feature service which you just published. Click on the service’s name.
You will see the service details. Note again that the layer is available to be downloaded with the fly-out menu. Click Edit, to open the details sheet for the service.

Scroll down the window to the Properties section. Note the editing options. Here you can disable editing of the features, set edit options, and/or enable edit tracking. Make sure that your service is editable. The check box for Enable editing should be checked on. If you made a change, click Save. Otherwise, click Cancel.

Click Open, and open the service in the map viewer.
- Zoom in to the intersection, as indicated below.

☐ Step 4 – Change the basemap, save and share your web map.

- On the top panel, click the **Basemap** button.

- Select the **Imagery** basemap.
• Note the new basemap. Click the Save button, and select Save to save your web map.

• Give your map a name, tags, and summary, similar to what’s below. Click Save Map.

• Return to the My Content page by selecting the My Content button.
Using the checkboxes on the left, select your web map, feature service, and service definition. Click the **Share** button.

![Share button and options](image)

Share your map with your organization, and one or two groups. If you would like, use the skills you have learned, to create a *Public Works* group. Browse to the *Exercise06* folder and use *publicworks.jpg* for your icon. Click **OK**.

![Share settings](image)

☐ **Step 5 – Create an Editing Application.**

- Re-open your web map by selecting it in My Content, and then opening it in the map viewer.

![Re-open web map](image)
Crew 45 Editing Web Map

- On the top bar, select **Share**.

- In this dialog select **Make a Web Application**.
• There are many templates you can use to create information products that you can publish into your organization, or download for customization. Click on **Publish** below the *Basic Viewer* and select **Publish**.

![Publish screenshot](image1)

• Fill out the details, similar to below, and click **Save & Publish**.

![Save & Publish screenshot](image2)
In the Share dialog read the explanation of what you have done, and what to do next. We will now configure the application to create a simple editing interface. Select “go to the item now”.

First, we will select an image for the application’s item. Click Edit.

Click on the image of the map.
• Use the **Choose File** button to browse to the *Exercise06* folder and **Open** the *crew-at-work.jpg*. This will make it the icon for the application.

![Upload Thumbnail dialog](image)

• In the *Upload Thumbnail* dialog, click **OK**.

![Upload Thumbnail dialog with OK button highlighted](image)

• When you click the **Save** button on the application settings page you will see your new icon.

![Application settings page with Save button highlighted](image)

• Now, we will set some options for the application interface. Click the **Configure App** button.

![Configure App button highlighted](image)
• In this screen we will configure some options to simplify the application. Set the Color Scheme to Blue, using the drop-down menu. Under Menu Items, uncheck the boxes for Details, Time Slider, Print, Layer List, Basemaps, Share, Elevation, and Show Elevation Difference.

• Scroll the General Settings panel down so you can see the row of buttons at the bottom. Click Save. Next, close the window by clicking Cancel.
As you did in a prior step, click the **Share** button, and share the application with the Organization, and a group, such as *Public Works*.

- **Step 6 – Use the Editing Application.**
  - Select **Open**, and **View Application**.
- Note the minimal interface. This web application will be used solely for editing. Click the Editor button.

- In the Editor panel, select **Bus Shelter**, and then select a location on the map as shown, near the northeast corner of the building on the sidewalk. Your crew is installing a new bus shelter here.
• Using the dialog, fill in the data as shown. For date fields, use the date picker button to the right of the field. For fields with a domain associated, you can use the value picker to the right of the field to use the pre-defined values. While installing the Bus Shelter, you have taken a picture of it. Click **Choose File** to select a photo to be attached to the feature.

![Street Furniture dialog](image1)

• Browse to the *Exercise06* folder and **Open** *Shelter_81376.jpg*.

• Close the dialog with the “X” in the upper right.

![Street Furniture dialog with file attached](image2)
• The new feature is added to the feature service, and appears on the map.

☐ Step 7 – Access the web map from a mobile device.

• If you brought a Smart Phone or Tablet to this workshop, you can now consume your new Web Map in the Esri Application for your device.

• Hopefully, you installed the Esri Application prior to the workshop. But, if not, you can download it fairly quickly. Search for *Esri* or *ArcGIS*.
  
i. iPhone – Apple App Store
  
ii. Android – Google Play
  
iii. Windows Phone 7 – Marketplace

• Launch the Esri Application and login to ArcGIS Online, as needed.

• Select My Maps and browse to your Street Furniture Management Web Map. If it is in a folder, you’ll need to open the folder.
• Once the map loads, on the iPhone you should have a small wrench that leads to the edit option, while on the Android you should see a pencil.

Choose the appropriate tool and edit some points on the map.

☐ Exercise End.