Configuring Election Outreach
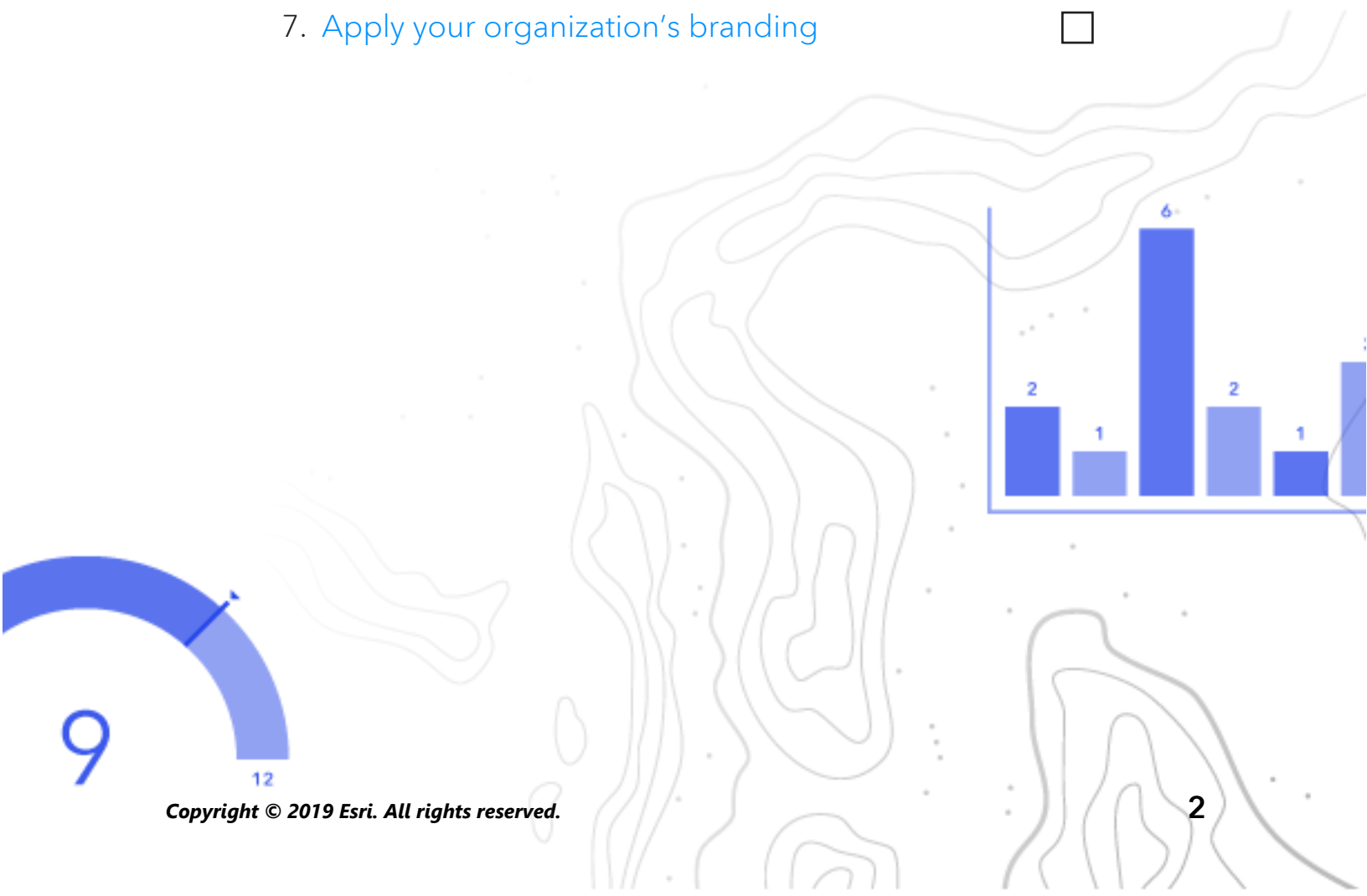
Configuring the Election Outreach solution template.

Task checklist

TASK	COMPLETE
1. Deploy the Election Outreach solution template	☐
2. Manage election data	☐
3. Modify elected offices	☐
4. Share Election Day polling place wait times	☐
5. Share voting center wait times	☐
6. Hide election wait times	
7. Apply your organization's branding	☐

Overview

State and local governments strive to improve voter participation through open communication and a sense of collaboration. Helping people find where they need to vote is inherently location based and accessing voting locations is an important aspect of election outreach.

The Election Outreach solution template includes a collection of maps and apps that can be used by elections staff to educate voters and increase voter participation. This collection of maps and apps provides a modern way for the general public to obtain information about current elected officials and locate voting centers or Election Day polling places. The Election Outreach solution apps use geographic data typically managed by state and local election agencies. Election Outreach includes Election Data Management, which is a configuration of ArcGIS Pro used to maintain an inventory of electoral districts, precincts, voting centers, and polling places used by the Election Outreach apps.

In this guide, you will learn how to configure the Election Outreach solution template by deploying the solution templates, using the Election Data Management ArcGIS Pro project, branding and configuring the My Elected Representative, Election Polling Places, and Voting Centers apps, and sharing election wait times with voters.

Build skills in these areas

- Deploying ArcGIS solution templates
- Revising feature layer domains and views
- Configuring web apps
- Sharing election wait times

What you need

- ArcGIS Pro 2.2 or later
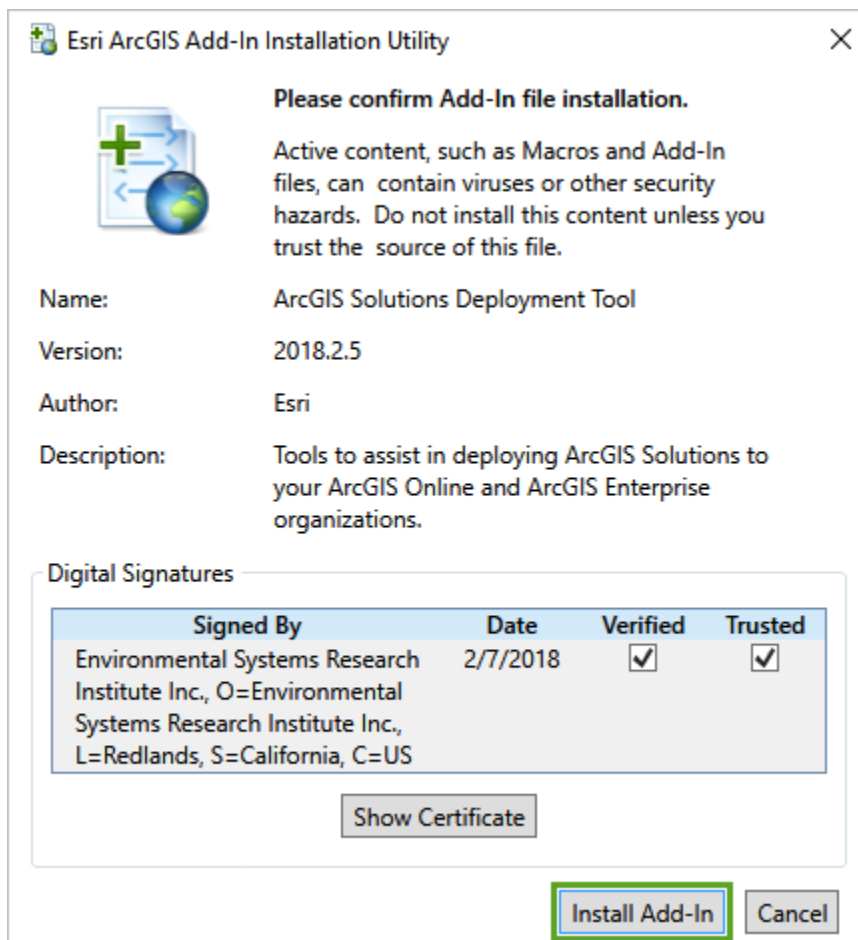- ArcGIS Online

1. Deploy the ArcGIS solution template

First, you'll install the ArcGIS Solution Deployment Tool Add-In and deploy the Election Outreach solution template.

Install the ArcGIS Solutions deployment tool

1. Download the ArcGIS Solutions Deployment zip file.

   The Esri Downloads page opens. Note, you may need to sign in first.

2. If necessary, close ArcGIS Pro before installing the add-in.
3. Browse to the folder to which you downloaded the zip file and extract its contents.
4. Double-click **SolutionDeployment.esriAddinX** to run the installer.
5. Click **Install Add-In**. After the installation is complete, click **OK**.

Now that you've downloaded the add-in, you can deploy ArcGIS solution templates to your ArcGIS organization using ArcGIS Pro.

Deploy solution template

Next, you'll create a new ArcGIS Pro project and deploy the Election Outreach solution template to your ArcGIS organization.

1. Open ArcGIS Pro. If necessary, sign in to your ArcGIS organization.

   Note:

   If you don't have ArcGIS Pro, you can sign up for an ArcGIS free trial.

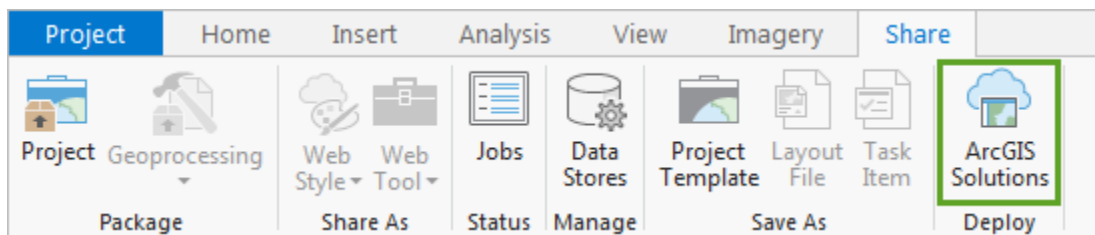   The start page appears. The 10 most recent projects you've worked on are listed.

2. From **New**, choose **Map**.
3. In the **Create a New Project** pane, change **Name** to *Deploy Solutions* and click **OK**.

   The project opens with a blank map.

   Note:

   If you already created a Deploy Solutions project, open the project.

4. On the **Share** tab, in the **Deploy** group, click **ArcGIS Solutions**.

   The ArcGIS Solutions Deployment Tool opens in the **Tasks** pane. Tasks are sets of preconfigured steps that guide you through a workflow. The first task is to sign in to your organization. You've already done that, so you can skip it.

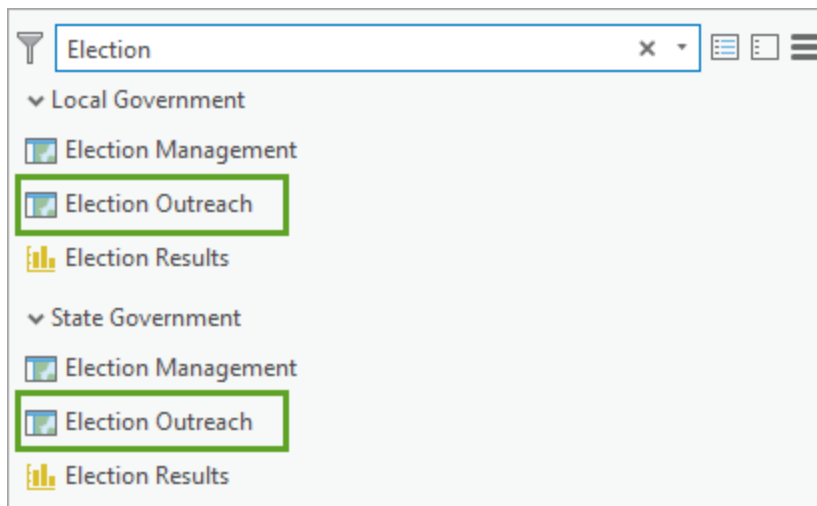5. Double-click the **Deploy an ArcGIS Solution** task.

This task contains a directory of available solution templates. The solution templates are organized by industry. You can also search for solution templates.

6. In the **Deploy an ArcGIS Solution** task pane search bar, type *Election* and press **Enter**.
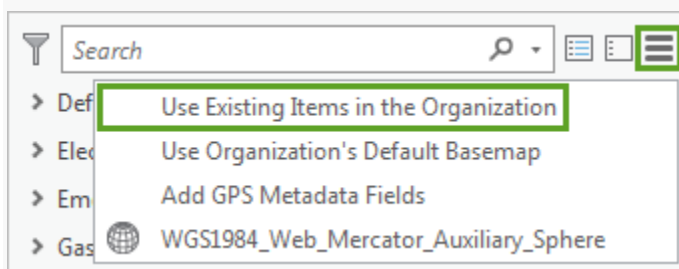
    The search returns multiple results. You'll deploy the Election Outreach solution template.

7. Under **Local Government**, select **Election Outreach**.

Note:

If you see a check mark next to any of the solution templates, it means the solution template has been deployed in your organization. To deploy the solution templates, click the **Options** button and ensure that **Use Existing Items in the Organization** is not checked.

8. For **Output Folder**, type *Election Outreach*.
9. Click **Deploy**.

    The solution template deploys to your ArcGIS organization.

10. Click **Finish**.

    The **Tasks** pane returns to the list of tasks.

11. Save the project.
12. Close ArcGIS Pro.

In this task, you downloaded and installed the ArcGIS Solution Deployment tool and deployed the Election Outreach solution in your ArcGIS organization. Election Outreach includes Election Data Management, My Elected Representative, Election Polling Places, and Voting Centers.

In the next task, you will use Election Data Management to manage your election data.

2. Manage election data

Election Data Management includes defined tasks and instructions to load authoritative election data into the feature layers used by the Election Outreach apps, maintain key characteristics, and manage election data through election cycles. Use the instructions in the Election Data Management tasks to load the Election Outreach feature layers with election data as well as to manage that data through election cycles.

1. In a browser, sign in to your ArcGIS organization.

   Note:

   If you don't have an organizational account, you can sign up for an ArcGIS free trial.
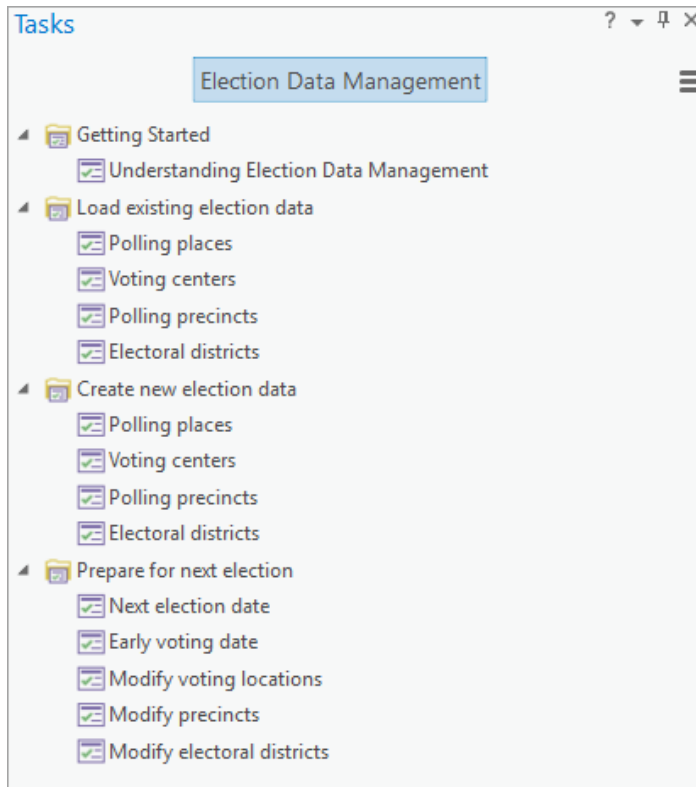
2. At the top of the site, click **Content**.
3. On the **My Content** tab, type *Election Data Management* in the search box.
4. Under **Item Type**, click **Maps**.
5. Click the item title **Election Data Management** to open the item.
6. Click **Open in ArcGIS Pro**.

   The Election Data Management project opens in ArcGIS Pro.

7. In the **Catalog** pane, expand **Tasks** and **Election Data Management**.
8. Expand task group to view the Election Data Management tasks.

   Tip:

   Click each group task heading and task to view a description at the bottom of the **Tasks** pane.

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9. Under **Getting Started**, select **Understanding Election Data Management and** click the **Open Task** arrow ➡ to open the task (you can also double-click the task name).

   Review the introductory text to become familiar with the Election Outreach feature layers and workflow. The additional tasks include step-by-step instructions to load existing data, create new data, and prepare for the next election.

   Each task group includes instructional steps to populate key attributes used in the Election Outreach apps. Depending on your starting point, you can begin with different tasks. For example, if you have existing election data you want to import into the Election Outreach feature layers, begin with the Load existing election data tasks.

3. Modify elected offices

My Elected Representative is a configuration of Web AppBuilder for ArcGIS used by the general public to determine who represents them in local, state, and federal elected offices. My Elected Representative includes several elected office layers including Mayor, County Clerk, Governor, and United State Senate. The elected

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offices available in the app can be configured. For example, a city can deploy My Elected Representative and configure only local elected offices.

Configure elected office domain values

Review the ElectionGeography feature layer elected offices and identify an elected office your organization may want to add to My Elected Representative.

1. Sign in to your ArcGIS organization.
2. At the top of the site, click **Content**.
3. On the **My Content** tab, under **Folders**, type *Election Outreach* in the search box.
4. Click the **Election Outreach** folder.
5. Under **Item Type**, click **Layers**.
6. On the right side of the page, click the **ElectionGeography** feature layer.
7. On the item page, click the **Data** tab.
8. Click **Fields**.
9. Select **Electoral Districts** from the **Layer** drop-down menu.
10. Click the **Elected Office** display name.

    In the **List of Values (Domain)** section, review the existing categories and identify those that are not applicable and those that are missing.

11. Click **Edit** next to **List of Values (Domain)**.
12. Optionally click the **Delete** button 🗑 to remove a category from the list, and click **Save**.
13. Click **Add**.
14. Type the new elected office name into the **Displayed Value** and **Stored Value** text boxes.
15. Repeat steps 12-14 to add the remaining elected offices.
16. Optionally drag the elected office names to a new location in the list to reorder them.
17. Click **Save**.

    Add or delete the same elected office or offices to the ElectionGeography_public feature layer view.

18. If necessary, sign in to your ArcGIS organization.
19. At the top of the site, click **Content**.
20. On the **My Content** tab type *Election Data Management* in the search box.
21. Under **Item Type**, click **Maps**.
22. Click the item title **Election Data Management** to open the item.
23. Click **Open in ArcGIS Pro**.

    The Election Data Management project opens in ArcGIS Pro.

24. On the **Share** tab, in the **Deploy** group, click **ArcGIS Solutions**.
25. Double-click **Configure an ArcGIS Solution** task.
26. In the Configure an ArcGIS Solution step, click **Next Step**.
27. In the Add Fields step, click **Skip**.
28. In the Modify Domains step, click **Browse** next to the **Input Layer or Table** parameter.

   The **Input Layer or Table** dialog box appears.

29. Under **Portal**, click **My Content**.
30. Double-click the **Election Outreach** folder.
31. Double-click the ElectionGeography_public feature layer view.
32. Click **Electoral Districts**, and click **OK**.
33. In the **Field** parameter, click the drop-down arrow and choose **Elected Office**.
34. In the **Domain** section, type a new category in the **Code** text box and the **Description** text box. Repeat this step until all the domains that apply to your organization have been added.
35. Optionally delete a domain by hovering to the left of the domain you want to delete and clicking remove ❌.
36. Optionally reposition the elected office by right-clicking to the left of the domain you want to move and selecting **Move Up** or **Move Down**.
37. Once you have finished adding or removing domains, click **Run**.
38. Click **Finish**.
39. Close Election Data Management and save your changes.

Configure elected offices in the My Elected Representative web map

In this task, you will configure the My Elected Representative web map to display the elected offices you want to display in the My Elected Representative app.

1. If necessary, sign in to your ArcGIS organization.
2. At the top of the site, click **Content**.
3. On the **My Content** tab, under **Folders**, type *Election Outreach* in the search box.
4. Type *My Elected Representative* in the search box.
5. Under **Item Type**, click **Maps**.
6. Click the item title **My Elected Representative** to open the item.
7. Click **Open in Map Viewer**.

   The map **Contents** lists several preconfigured elected office map layers ranging from Mayor to President of the United States. Each layer is filtered using the Elected Office field on the Electoral Districts feature layer.

8. To remove an unneeded elected office layer, click **More Options** ···, and click **Remove**.

9. To add a new layer, click **More Options** > **Copy**.

   A new layer appears at the top of the **Contents** layer list.

10. To update the new layer's name, click **More Options** > **Rename**. Type the elected office name in the text box. Click **OK**.

11. Click the **Filter** button 🔽 on the new layer. Click the **Edit** tab on the dialog box.

   An existing filter query displays Elected Office is Value. You will modify the query to display the desired elected office. The drop-down menu displays the values you configured in a previous task.

12. Select the appropriate elected office domain value from the drop-down menu. Click **Apply Filter**.

13. Optionally drag the layer to a new location in the **Contents** layer list.

   Tip:

   You can also configure existing layers using the steps above. Modify the name and filter of an existing layer to match your configuration needs.

14. Click **Save** > **Save** to save your changes in the web map.

Configure elected offices in the My Elected Representative app

1. If necessary, sign in to your ArcGIS organization.
2. Click **Home** > **Contents**.
3. Type *My Elected Representative* in the search box.
4. Under **Item Type**, click **Apps**.
5. Click the item title **My Elected Representative** to open the item.
6. Click **Edit Application**.
7. Click the **Widget** tab.
8. Click **Set the widgets in this controller.**
9. Click **Configure this widget** ✏️ on the Find My Elected Representative widget.
10. Select the **Search Settings** tab.
11. Click **Set** on **Select search layer(s)** to configure the layers searched in the app.

   The **Select search layer(s)** dialog box configures the layers searched in the app.

12. Ensure that the check box is selected next to each of the layers available.
13. Click **OK.**
14. Click **Save** to save the Web AppBuilder for ArcGIS configuration.

4. Share Election Day polling place wait times on the map
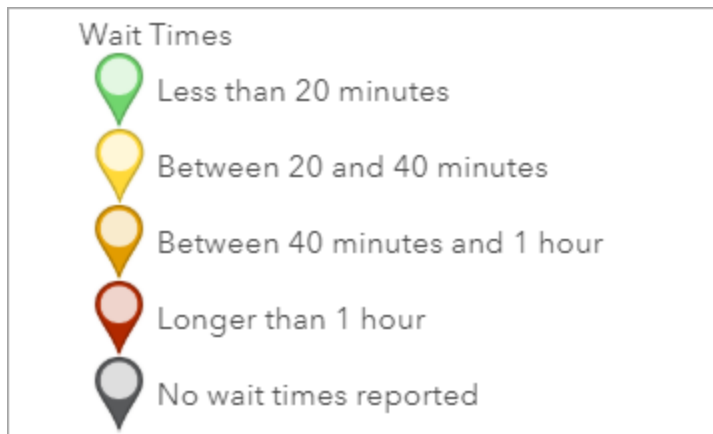
Share Election Day wait times in Election Polling Places

Many states divide communities into geographic areas and assign registered voters to designated polling places based on their residential address. On Election Day, ballots are cast at these designated polling places and then tabulated to determine the winner of a political contest or proposal. Election Polling Places is a configuration of Web AppBuilder for ArcGIS that can be used by voters to locate their polling place where ballots can be cast on Election Day.

When paired with Election Management, Election Polling Places can display Election Day wait times so that voters can make an informed decision about when to vote. The Election Polling Places web map includes a Polling Place Wait Times layer that displays the current wait time. To share wait times in the Election Polling Places app, you'll use the included Polling Place Wait Times map layer.

1. If necessary, sign in to your ArcGIS organization.
2. At the top of the site, click **Content.**
3. On the **My Content** tab, type Election Polling Places in the search box.
4. Under the **Item Type**, click **Maps.**
5. Click the item title **Election Polling Places** to open the item.
6. Click **Open in Map Viewer**.
7. Uncheck the **Polling Places** layer (do not remove).
8. Check the **Polling Place Wait Times** layer.

The map now displays the most recently reported wait time symbolized by the length of the wait reported. When an election is completed and you want to remove the wait times symbol, turn on the Polling Places layer, and turn off the Polling Place Wait Times layer.

9. Click **Save** > **Save**.
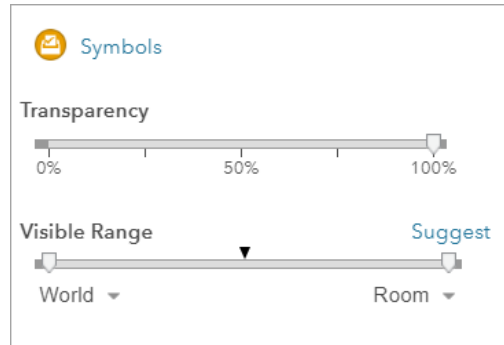
5. Share voting center wait times on the map

Share voting center wait times

Voting centers are an alternative to traditional, neighborhood-based precincts. When a jurisdiction opts to use voting centers, voters may cast their ballots at any voting center in the jurisdiction, regardless of their residential address. Voting Centers is a configuration of Web AppBuilder for ArcGIS that- can be used by voters to locate the nearest voting center where ballots can be cast in person or by mail.

When paired with Election Management, Voting Centers can display election wait times so that voters can make an informed decision about when to vote. The Voting Centers web map includes a Voting Center Wait Times layer that displays the current wait time. To share wait times in the Voting Centers app, you'll use the included Voting Center Wait Times map layer.

1. If necessary, sign in to your ArcGIS organization.
2. At the top of the site, click **Content.**
3. On the **My Content** tab type *Voting Centers* in the search box.
4. Under the **Item Type**, click **Maps.**
5. Click the item title **Voting Centers** to open the item.
6. Click **Open in Map Viewer.**
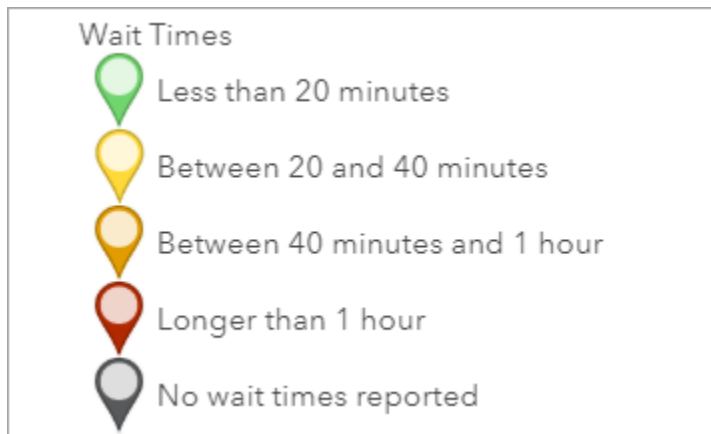7. Uncheck the **Voting Centers** layer (do not remove).

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1. Click **Change Style** .
2. Under **Select a drawing style > Location (Single Symbol)**, click **Options**.
3. Use the **Transparency** slider to set the transparency level to 100%.

4. Click **OK**.
5. Click **Done**.

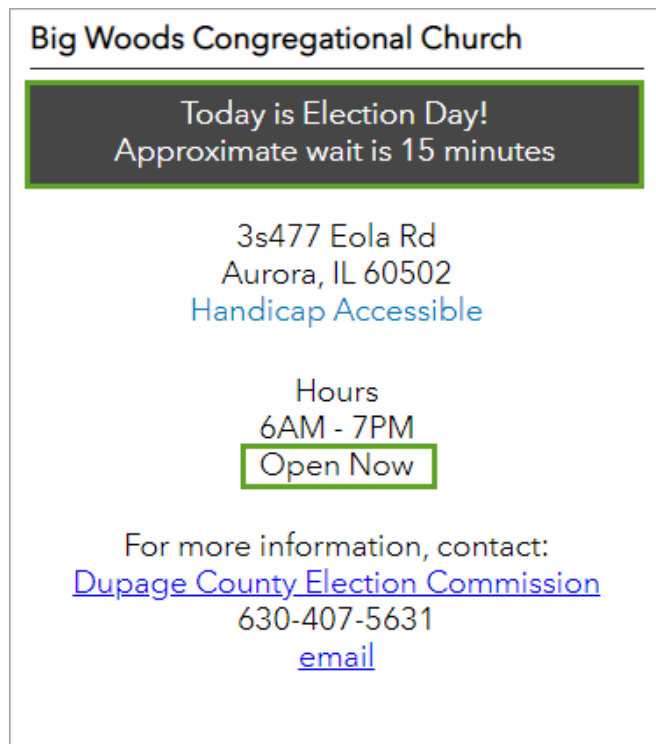8. Check the **Voting Center Wait Times** layer.

The map now displays the most recently reported wait time symbolized by the length of the wait reported. When an election is completed and you want to remove the wait times symbols, turn on the Voting Centers layer and set its transparency to 0%, and turn off the Voting Center Wait Times layer.

9. Click **Save > Save** to save your changes on the web map.

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6. Hide election wait times

On Election Day, the Election Polling Places app automatically displays current information such as the most recently reported wait time and the location's operational status.

Big Woods Congregational Church

Today is Election Day!
Approximate wait is 15 minutes

3s477 Eola Rd
Aurora, IL 60502
Handicap Accessible

Hours
6AM - 7PM
Open Now

For more information, contact:
Dupage County Election Commission
630-407-5631
email

In some cases, your organization might use the Election Management solution to track election wait times without sharing those wait times in the Election Polling Places app. Optionally, you can remove the wait times information.

Remove wait times from Election Polling Places

1. If necessary, sign in to your ArcGIS organization.
2. At the top of the site, click **Content.**
3. On the **My Content** tab, type *Election Polling Places* in the search box.
4. Under the **Item Type**, click **Maps.**
5. Click the item title **Election Polling Places** to open the item.
6. Click **Open in Map Viewer**.
7. On the Polling Places layer, click **More Options** > **Configure Pop-up**.
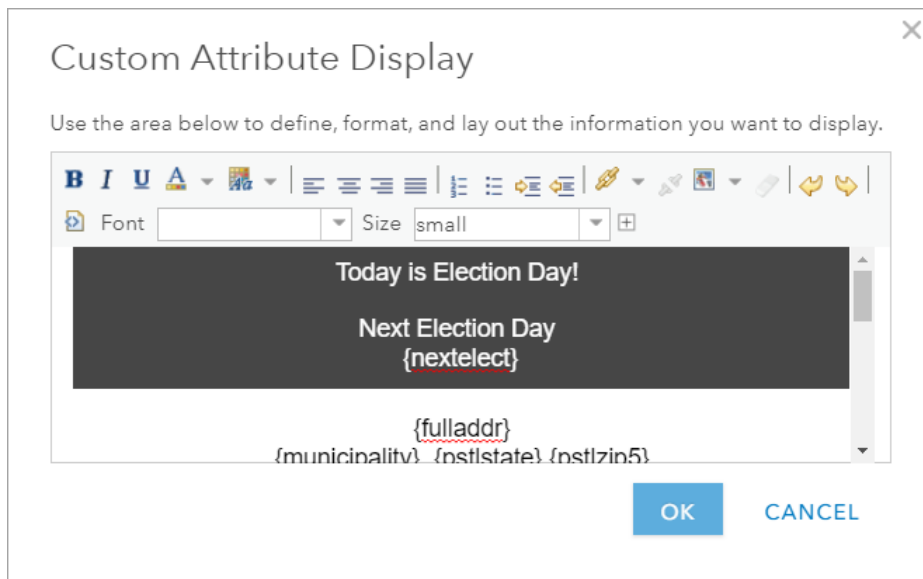8. Click the **Configure** button.

CONFIGURE

The Custom Attribute Display window appears.

> Tip:
>
> Click the View HTML Source [icon] button. Copy and save all the HTML syntax into a text editor. This will make it easier to restore wait times or discard changes. From a text editor, you can copy and paste the original HTML syntax into the Custom Attribute Display after clicking the View HTML Source button.

9. Delete **{expression/expr0}** from the pop-up. Make sure the entire line is removed. The result looks like this:

10. Click **OK** to close the Custom Attribute Display.
11. Click **OK** to finish configuring the pop-up.
12. Click **Save** > **Save** to save your changes to the web map.

On Election Day, the pop-up now does not display wait times but continues to display current information such as the *Today is Election Day* message and operational status.

Big Woods Congregational Church

Today is Election Day!

3s477 Eola Rd
Aurora, IL 60502
Handicap Accessible

Hours
6AM - 7PM
Open Now

For more information, contact:
Dupage County Election Commission
630-407-5631
email

Remove wait times from Voting Centers

A voting center can be open on Election Day as well as for a period prior to Election Day. When a voting center is open and active, the Voting Center app automatically displays current information such as the most recently reported wait time and the location's operational status.

Benedictine University - Rice Center

This voting center is open now to
Nov 9 2019!
Approximate wait is 16 minutes

5700 College Rd
Lisle, IL 60532
Handicap Accessible

Hours

Thursday	6AM - 7PM Open
Friday	6AM - 7PM
Saturday	Closed
Sunday	Closed
Monday	6AM - 7PM
Tuesday	6AM - 7PM
Wednesday	6AM - 7PM

In some cases, your organization might use the Election Management solution to track election wait times without sharing those wait times in the Voting Centers app. Optionally, you can remove the wait times information.

1. If necessary, sign in to your ArcGIS organization.
2. At the top of the site, click **Content.**
3. On the **My Content** tab, type *Election Polling Places* in the search box.
4. Under the **Item Type**, click **Maps**.
5. Click the item title **Election Polling Places** to open the item.
6. Click **Open in Map Viewer**.
7. On the Polling Places layer, click **More Options** > **Configure Pop-up**.
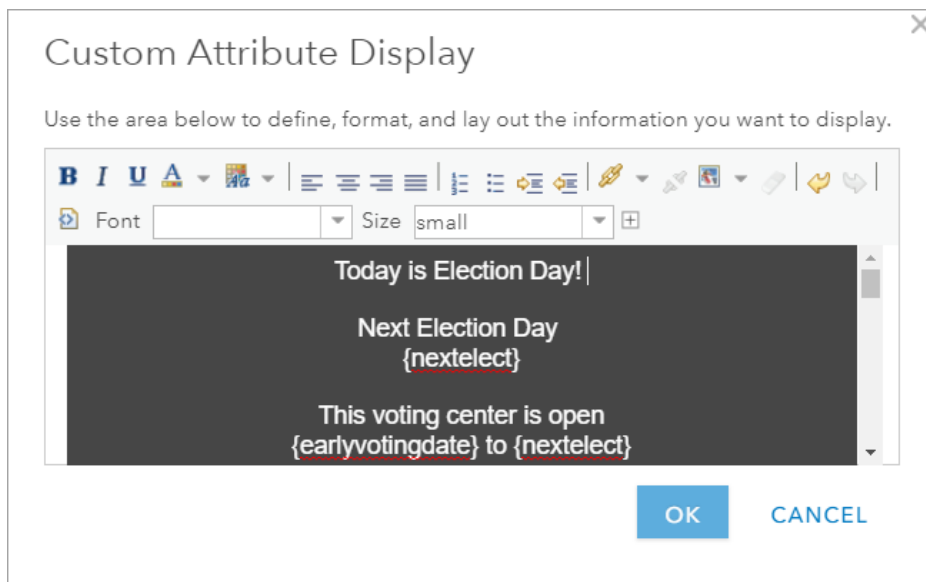8. Click the **Configure** button.

The Custom Attribute Display window appears. Because voting centers can be open on Election Day only or over a period of time, you will remove wait times from two places in the pop-up configuration.
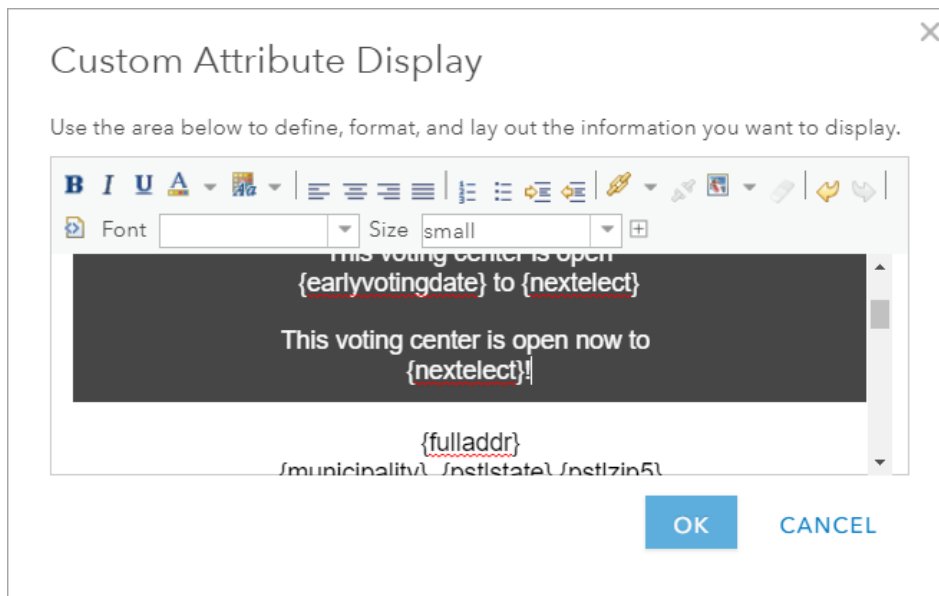
9. Delete **{expression/expr0}** from the pop-up. Make sure the entire line is removed. The result looks like this:

10. Scroll until **{expression/expr8}** is visible.
11. Delete **{expression/expr8}** from the pop-up. Make sure the entire line is removed. The result looks like this:

Custom Attribute Display

Use the area below to define, format, and lay out the information you want to display.

This voting center is open
{earlyvotingdate} to {nextelect}

This voting center is open now to
{nextelect}!!

{fulladdr}
{municipality}, {pstlstate} {pstlzip5}

OK   CANCEL

12. Click **OK** to close the Custom Attribute Display.
13. Click **OK** to finish configuring the pop-up.
14. Click **Save** > **Save** to save your changes to the web map.

When a voting center is open and active, the pop-up now does not display wait times but continues to display current information such as the *This voting center is open message* and operational status.

Benedictine University - Rice Center

This voting center is open now to
November 7, 2019!

5700 College Rd
Lisle, IL 60532
Handicap Accessible

Hours

Thursday	6AM - 7PM Open
Friday	6AM - 7PM
Saturday	Closed
Sunday	Closed
Monday	6AM - 7PM
Tuesday	6AM - 7PM
Wednesday	6AM - 7PM

7. Apply your organization's branding

In this task, you will brand the My Elected Representative, Election Polling Places, and Voting Center apps with your organization's unique colors and share election wait times with voters.

Brand and configure the Election Outreach apps

1. If necessary, sign in to your ArcGIS organization.
2. At the top of the site, click **Content.**
3. On the **My Content** tab type *My Elected Representative* in the search box.
4. Under the **Item Type**, click **Apps**.
5. Click the item title **My Elected Representative** to open the item.
6. Click **Edit Application**.
7. Brand the My Elected Representative app with unique colors.
   1. Select the **Theme** tab.
   2. In the **Style** section, select the **Set Custom Color** button, and click **Custom.**
   3. Select a color or click **Custom** to enter an RGB or hex value. Click **OK**.
8. Configure the app title and other text elements.
   1. Select the **Attribute** tab.
   2. In the **Branding** section, modify the app title and subtitle. Click the ⒜ button to use the rich text editor.
   3. Select the **Widget** tab.
   4. Click **Set the widgets in this controller.**
   5. Click **Configure this widget** 🖉 on the About widget. Use the rich text editor to modify the About text.
   6. Click **OK**.
9. Click **Save** to save the Web AppBuilder for ArcGIS configuration.
10. Repeat the above steps for the Election Polling Places and Voting Center apps.

> Tip:
>
> The Election Polling Places and Voting Center pop-up configurations include a banner to display current information (see screen shots above). Use the **Custom Attribute Display** to edit the HTML source, replacing the hex value #464646 with your organization's hex value color.

In this guide, you learned how to configure the Election Outreach solution template to meet your organization's needs by adding new elected offices and configuring them

in the My Elected Representative app and branding and sharing election wait times in both the Election Polling Places and Voting Centers apps.

Additional resources

- State & Local Government solutions

- Location Intelligence for Elections

- Redistricting Tools