

RAPC

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Planning
Commission

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Virtual

PUBLIC INVOLVEMENT FOR LPA

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VIRTUAL PUBLIC INVOLVEMENT

Final Report

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Purpose

Robust participation from a large diverse section of the public in the planning process is essential to increasing the effectiveness and acceptance of plans and projects. Improving access to public information and input opportunities is essential to ensuring participation from all population groups. To improve access, the Alexandria-Pineville MPO utilized STIC funding to develop a new Community Mapping Survey Tool (CMST) integration methodology and public outreach methodology to collect, analyze and map data on local conditions through enhanced community input via virtual public involvement for strategic planning efforts.

Both methodologies are designed to facilitate closer connection and communication between citizens and governments; helping Louisiana MPOs increase valuable public feedback for strategic planning projects. They also have potential to not only save money, but also catalyze civic innovation, increase transparency, and ensure the ability of systems to work together consistently and effectively to enhance the level of planning programs and services.

Specifically, tasks included:

- Develop GIS Integration Methodology
- Develop Outreach Methodology
- Test Methodologies with appropriate RAPC planning projects.

The timing of this project, commencing March 2020, cannot be overstated considering the impact of the COVID-19 pandemic. Virtual public involvement, for a limited time, would become the only way to engage the public and stakeholders on transportation topics.

GIS Integration Methodology

One area for Louisiana MPOs that has been lacking is public involvement using virtual tools with mapped data feedback. This integration with online and kiosk-based survey tools will increase access and participation to public input opportunities and provide key geographic information systems data for use by planners.

The ESRI platform has nearly infinite capabilities and functionality in assisting planning initiatives. RAPC planning projects, such as the Metropolitan Transportation Plan update, piloted the CMST using online and tablet-based platforms. Both pilot survey platforms were evaluated by measuring response rate, completion rate.

Platform 1: Online survey platform formatted for use on desktop and mobile devices, such as smartphones, tablets, and laptops. Social media, traditional media and email invites will be used to encourage responses for each of the previously specified planning projects.

Platform 2: Tablet-based platform housed in kiosks located at high-traffic public locations throughout the UZA.

Survey & Mapping Tool

ArcGIS Survey123 is a form-centric application for creating, sharing, and analyzing surveys. It allows you to create surveys with advanced logic and support for multiple languages, collect data via the web or mobile devices, analyze results quickly, and perform further analysis with other ArcGIS applications. Survey123 provides a reliable alternative to paper-based data collection with a trustworthy digital solution that can be tailored to fit the needs of any organization's unique environments.

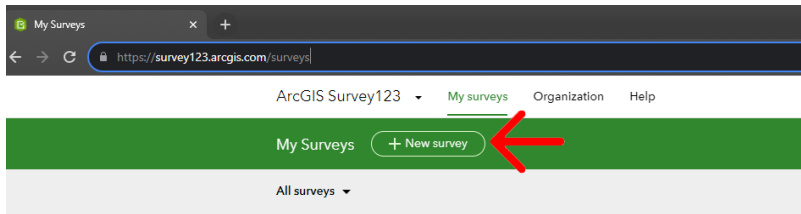
There are two options for building your survey:

1. The Survey123 Web based application – a drag and drop visual survey builder.
2. The Survey123 Connect desktop application – an Excel based builder that allows you more control over custom configurations.

Once your survey has been published, you can utilize the built-in web dashboard to access results, see snapshot analysis of responses, create data reports, and use the data in other applications throughout the ArcGIS ecosystem. The following information assumes that you have a basic understanding of ESRI products and a subscription to an organizational Arcgis Online account. While it is possible to deploy Survey123 within an Enterprise deployment of Arcgis Server, our use was strictly within Arcgis Online. As the ESRI team continues to update and improve their software, the information or instructions below may differ in execution depending on updates to Survey123 from ESRI.

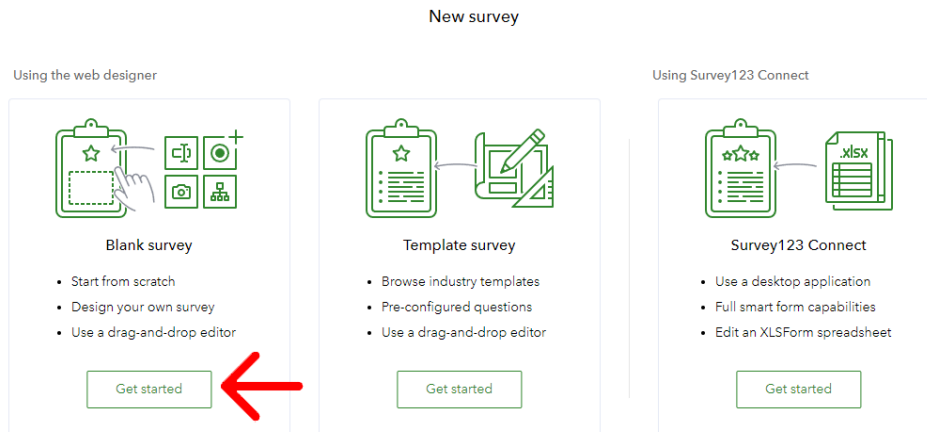
To create a new survey, you must be logged into <https://survey123.arcgis.com/>. On the landing page, you will find a list of your past survey's or, if you've not built a survey, a blank page. Clicking on '+ New Survey' will begin a new project (Figure 1).

Figure 1 | New Survey



The following page will have three options. Blank Survey, Template Survey, and Survey123 Connect. Blank Survey will open a blank canvas to create a new survey. The template survey option gives you a series of pre-configured surveys that help jumpstart the process. These two options are both drag and drop editing. This means, what you see is what you get. The third option, Survey123 Connect is tailored for those who prefer a custom-built survey. You'll need to download a desktop client and have some knowledge of using an XLS Form spreadsheet. For our use, we chose a Blank Survey by clicking the "Get Started" button. The beauty of Survey123 is the ease of accessibility using their online application. We've found that basic surveys are normally easily built and viewed using their online editor vs. the desktop client.

Figure 2 | Get Started

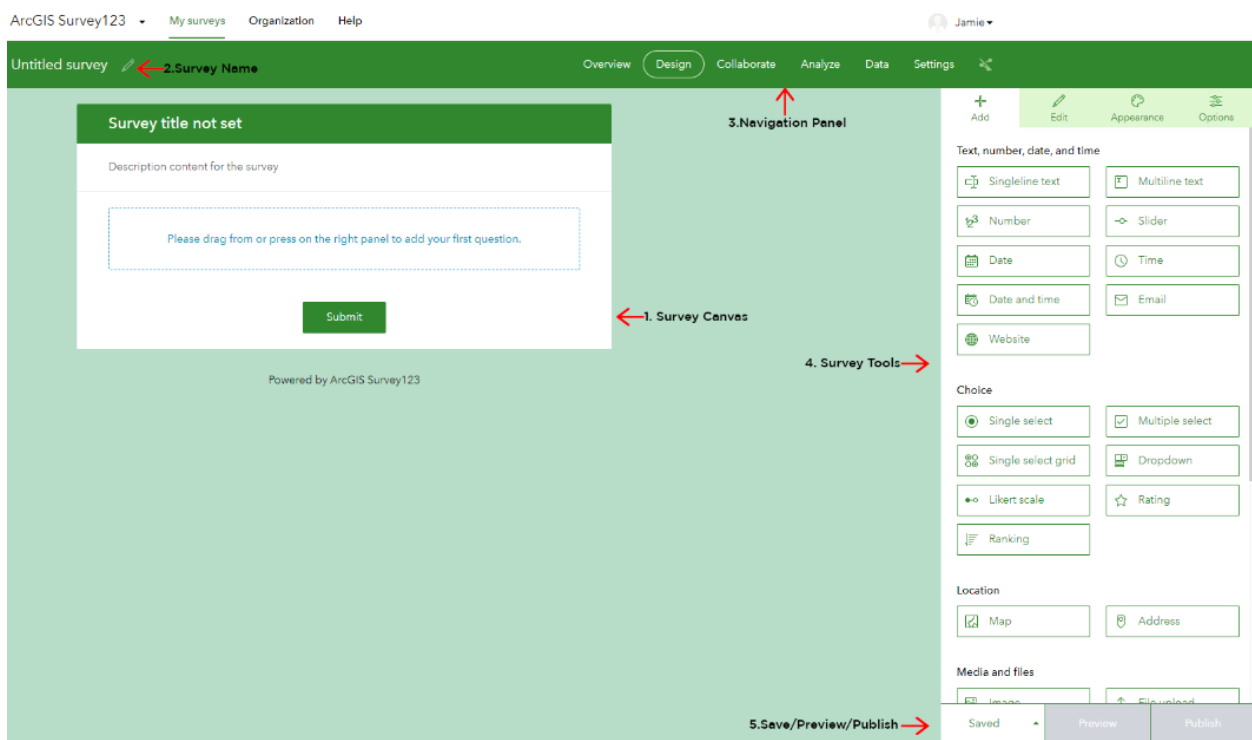


There are several tools/navigation buttons on the page. See below for a breakdown of where each of these are (Figure 3).

1. Survey Canvas - This is a real time view of what your survey will look like. This will update as you edit text, question order, or different modules within the survey.
2. Survey Name - Where you name the save file for your survey. This will be displayed on the front page of Survey123 in your survey list.
3. Navigation Panel - Used to navigate to different pages concerning the survey including the underlying data after the survey is completed by the public, and general settings for the survey.

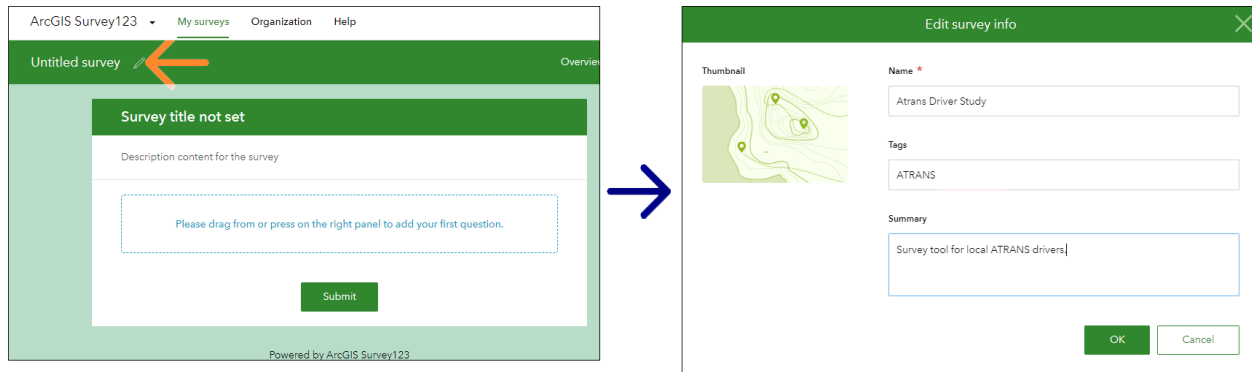
4. Survey Tools- All tools and appearance for your survey.
5. Save/Preview/Publish- Where you can Save, Preview, and Publish your survey to the public.

Figure 3 | Navigation



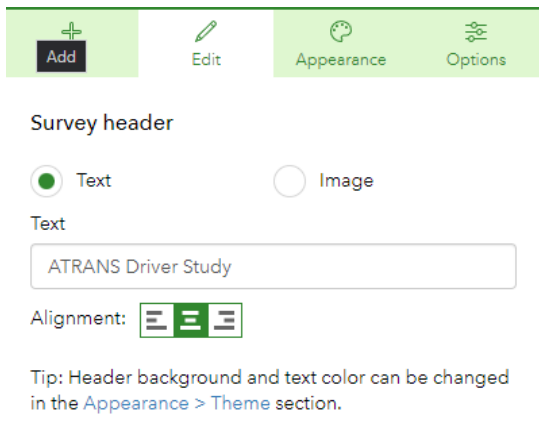
To begin our survey, we will edit our survey name with the edit button on the top menu bar. The “Tags” box is optional and is used to group similar surveys to easily search later from your main Survey123 landing page. The summary area is basic information about the survey. Hit the “OK” button to save and note that your survey name is no longer “Untitled Survey”, it’s now named what you chose for a name. This name will be shown on your main landing page. This name will not be shown to the public when sharing your survey, it is only for internal use (Figure 4).

Figure 4 | Survey Title



Click on the “Edit” button in your Survey Tools pane to set your public survey name. You can choose an image or text as your survey tool header name. This is at the very top, and the first thing people will see when opening the survey. You can choose the alignment of your text or image here as well. We chose text and centered. (Figure 5) Once you have these option set, click on the ‘Save’ button in the Save/Preview/Publish pane (Figure 3).

Figure 5 | Survey Header



Click on ‘Appearance’ in your Survey Tools pane (Figure 3) to adjust the theme of your survey, click. Here, you can choose colors of your header and main background of your survey, along with text. You can add a custom image to your background as well. Clicking any of the Theme colors will adjust all settings to align to that specific color/image theme. Adjust these settings to your preferences (Figure 6). If at any point you accidentally get colors or settings to a point where you’re unable to read something properly, or just feel like you need to start over fresh, feel free to reload the page. We have saved our survey in the previous step, so your settings will revert to the last save.

Figure 6 | Survey Theme

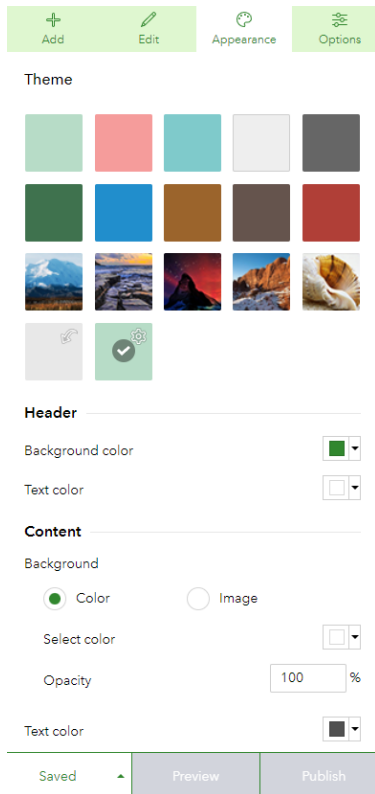
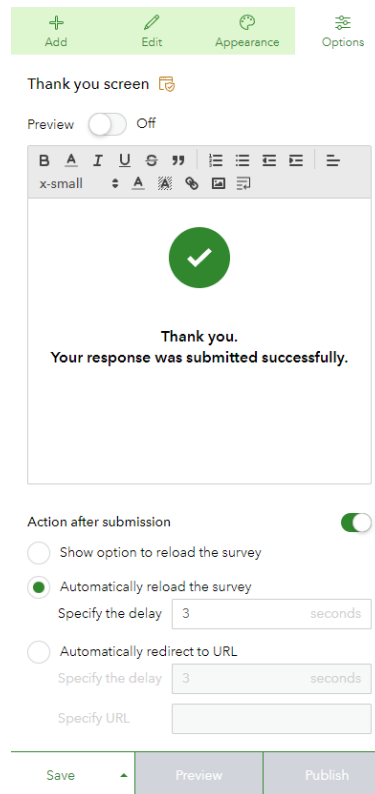


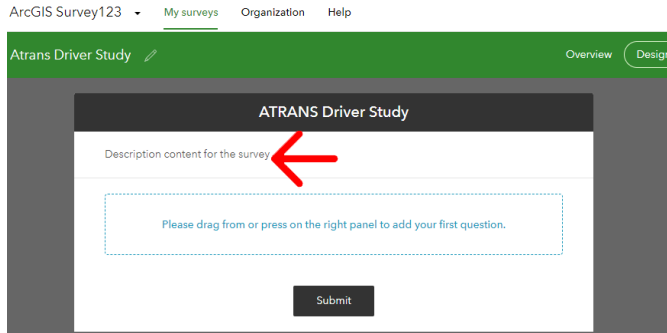
Figure 7 | Response Confirmation



In the survey tools pane (Figure 3) click on Options. This page allows you to set your Thank You screen options, and the behavior of the survey after the user has completed a submission. You can choose to have the survey reload, or to redirect to another website. You can also use the text editor window in these options to create a custom Thank You page. Our survey used the default thank you page, and was set to reload the survey after 3 seconds. You can also toggle this Thank You page on and off in your Survey Canvas area(Fig.3) by using the “Preview” button.

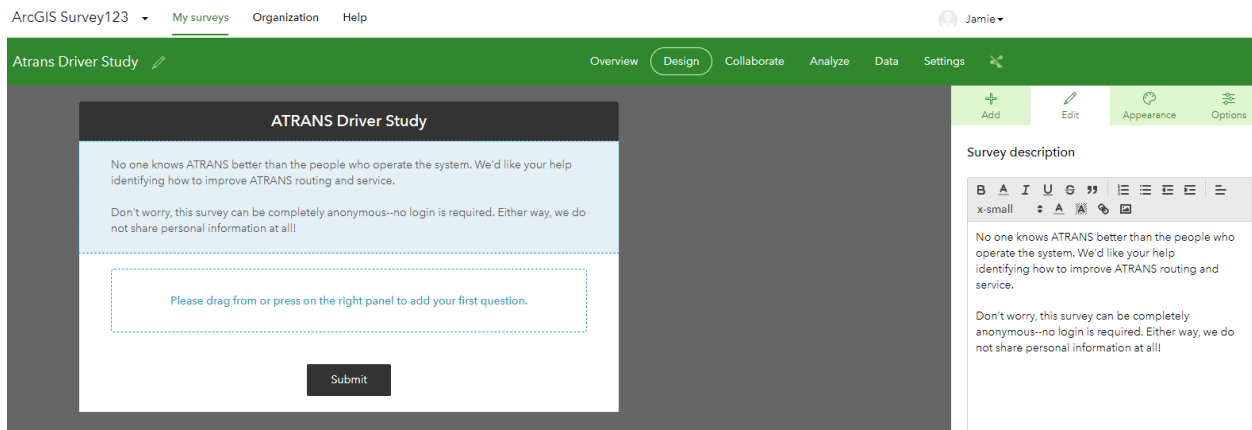
Clicking on the ‘Add’ button on your Survey Tools pane (Figure 3) will bring you to the tools used to add data and questions to your survey. In your Survey Canvas (Figure 3), each module within the survey can be selected. Select the module that has the Description content for the survey (Figure 8).

Figure 8 | Module Description



The Edit window will appear in the Survey Tools pane after clicking (Figure 3) and you can edit a short description of your survey. This can be info about your survey, or simple instructions on how to use the survey tool. Using the text editor, you can edit fonts or font sizes, add images or website links. Click “Save” (Figure 3) when you are done.

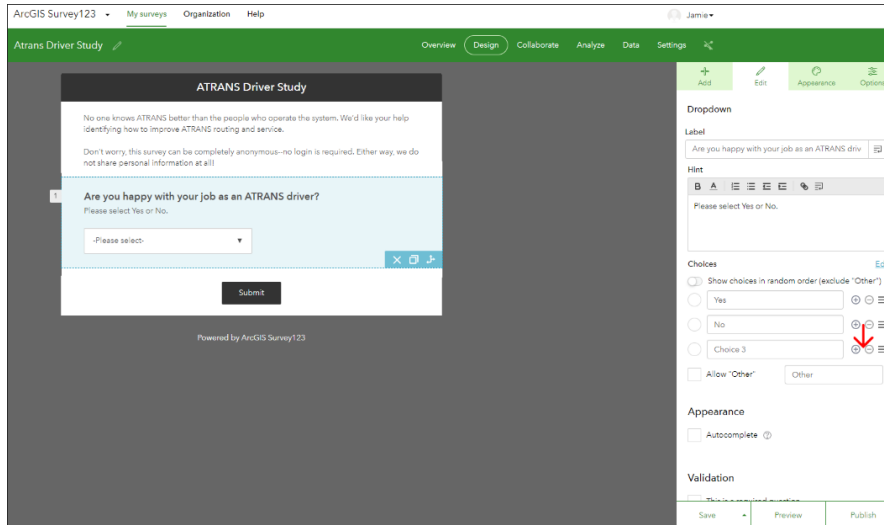
Figure 9 | Module Design



Click on Add in the Survey Tools pane (Figure 3) to add your first question. In the Add menu, you can choose what type of question you want to ask. For our first question, we want to know if the person taking the survey is happy as a driver for Atrans. We will select ‘Dropdown’ as our question type as we have two possible answers. Yes, or no. There are several options for the Dropdown question option.

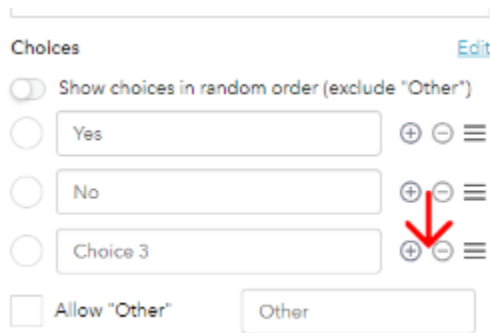
- Label - The name of the question
- Hint - A brief description of the question.
- Choices - Your option list for the question.
- Appearance(Autocomplete) - Used for question lists with very long choice lists.
- Validation - You can select this to be a required question where if a user does not complete it, the survey will not allow the user to continue.
- Other - You can cache the answer, which will auto populate the last picked option from the question. You can also Hide from the Survey, which will allow you to save the question to the survey for future use, but hide from the public after publishing.

Figure 10 | Choice Selection



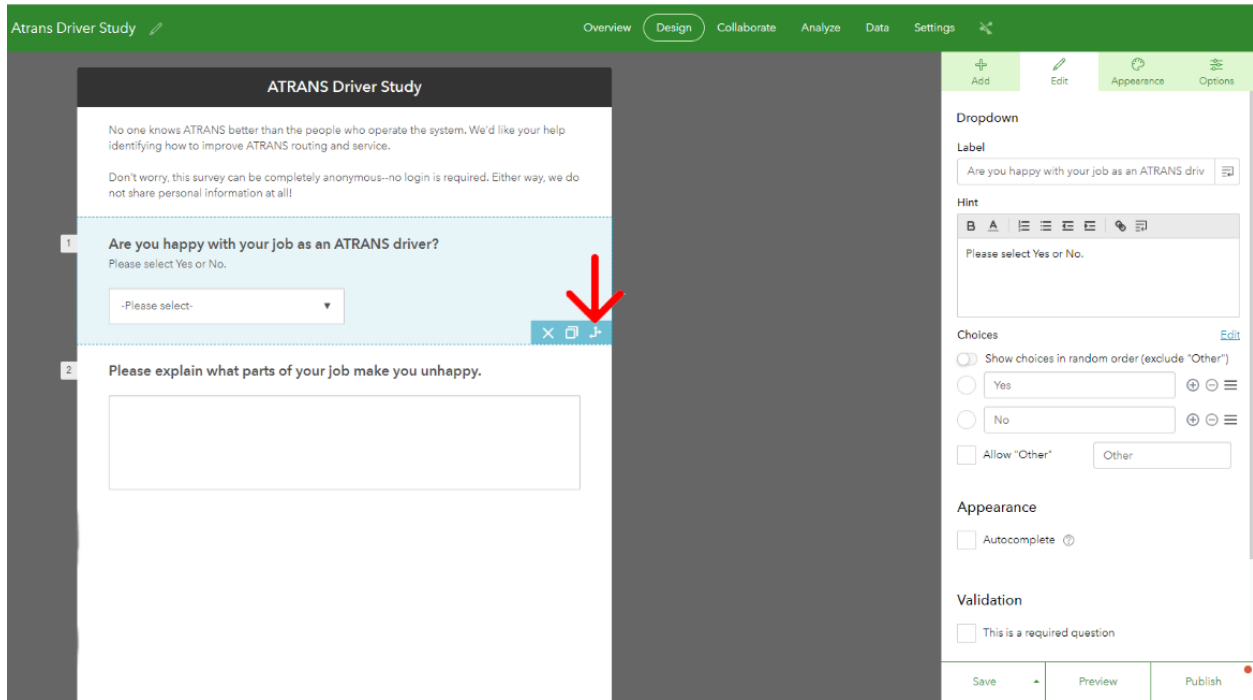
In Figure 10, we selected ‘Yes’ and ‘No’ for our Choices. Hitting the minus button beside Choice 3 will delete any unused answers, hitting the plus button will add an additional option for predefined answers (Figure 11).

Figure 11 | Drop Down Menu



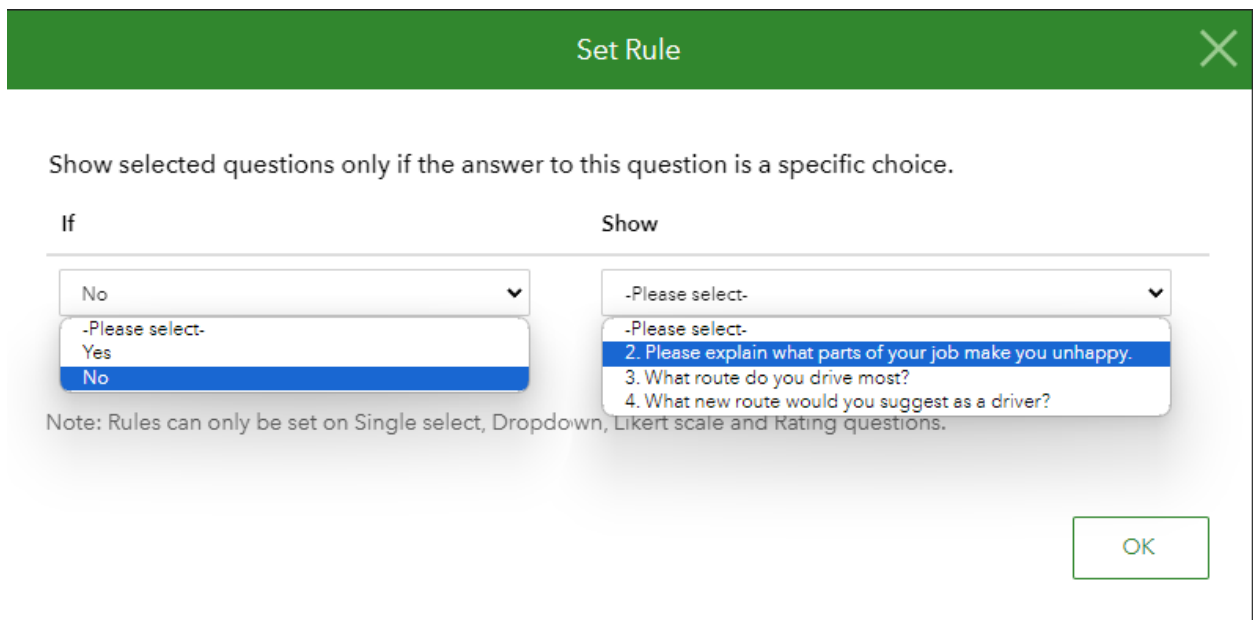
If the user selects ‘No’ for an answer to our first question, we want a new question to populate. If they answer ‘Yes’, they can proceed to question 2. We need to create a new question and set rules for the survey to only show this question if a certain response is given. We can begin by creating a new question, in this case we want to use “Multiline Text” in the Survey Tools pane (Figure 3) by clicking the Add button, and then Multiline Text. We’ve filled out our question, but now we need to create our rule. Clicking on the “Set Rule” button (Figure 12) on the question inside the Survey Canvas area will bring up the rule window.

Figure 12 | Set Rule Button



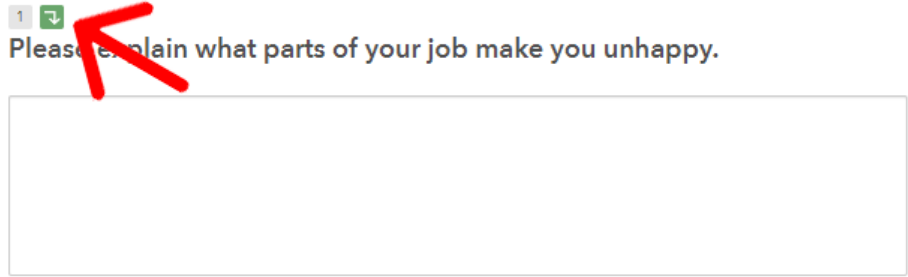
The Set Rule window can be set to hide our secondary question until the No answer is selected. In the 'If' column, we select the 'No' response, and in the 'Show' column, we select the question that is initially hidden, our rule will be set to show this hidden question only if the user answers 'No' (Figure 13). Click 'OK' to continue.

Figure 13 | Rule Setting



We can verify that our rule has been set by looking at the question title. If we see the green arrow icon, we know the rule is in place, and ready to go (Figure 14).

Figure 14 | Rule Confirmation

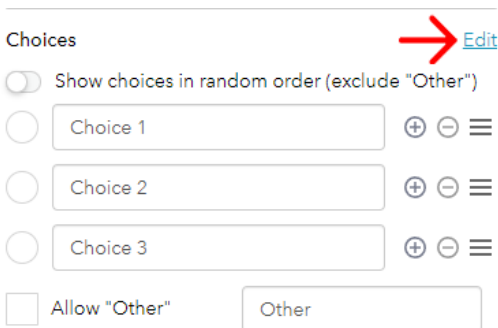


For our next question, we needed to know which route the driver drives the most. We will select the same “Dropdown List” question in the “Add” pane of the Survey Tools (Fig.3). As before in our first question, we will need to edit the options. We also made this a required question. We have several more answer options for the user to pick from, including:

- Jackson / Lower 3rd
- MacArthur
- Broadway
- Willow Glen River
- Elliot / Cabrini
- Monroe / Alexandria Mall
- Pineville
- England Airpark
- Night Route 1
- Night Route 2
- Night Route 3
- Night Route 4

Since our answer option list is so long, we don’t want to type each individual route into each of the choices options. In the ‘Edit’ window, you’ll see a blue hyperlink for ‘Edit’ (Figure 15).

Figure 15 | Edit Feature



Clicking this ‘Edit’ button will allow you to batch complete a list of Choices. You can copy and paste your list into the following window making any space adjustments you need to make sure each choice is on a line by itself. When finished, click ‘Ok’ (Figure 16). Our Choices list is now updated with the entire list of routes (Figure 17). Click ‘Save’ to continue.

Figure 16 | Edit Choices

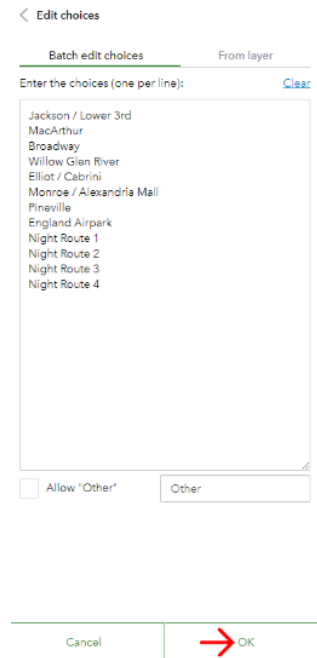
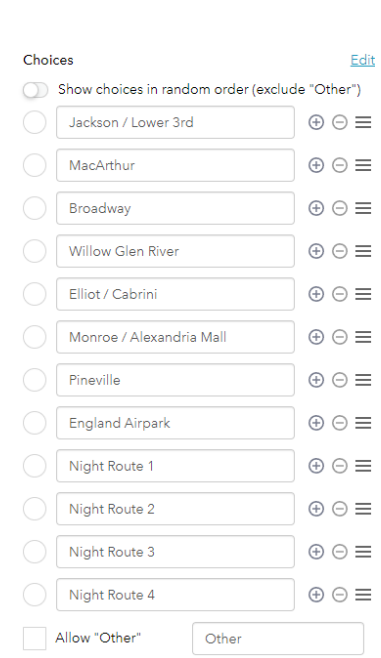


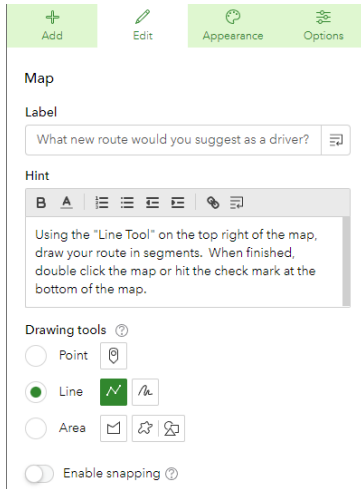
Figure 17 | Confirm Choices



For our next question, we want a mapping module in our survey. We want the drivers to be able to draw symbols on a map to show us where route changes should be made. Click on ‘Add’ again to add another survey question. Scroll down to ‘Location’ and click on ‘Map’. This will add the mapping question to the survey and open the edit window to customize your mapping question.

In the Edit window, we can name our question, and add a Hint to help users fill out this question. We’ve found that most users are tech savvy enough to navigate and use this tool. There are some that will have a harder time with using this portion of the survey than others, so giving a little direction in the Hint area has been helpful. Since we are looking for routes, the selected geometry for this mapping question will be ‘Line’ (Figure 18).

Figure 18 | Map Geometry



Options for Map and Extent may differ on your account. Here, you can select which basemap you want for your map. We chose Open Street Maps for our basemap. This is also where you can set your initial map extent by clicking on the map (Figure 19) zooming to your preferred survey location, and saving your survey. You can also create custom basemaps to use within your ArcGIS Organizational account.

Figure 19 | Basemap

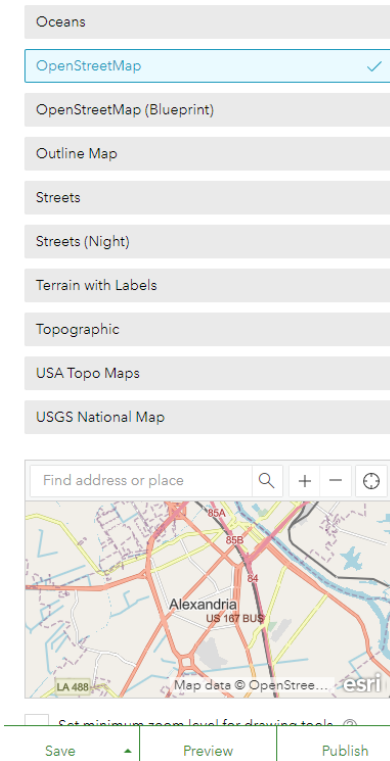
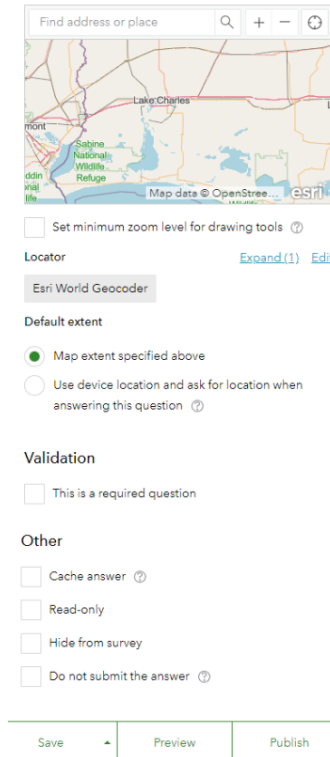


Figure 20 | Map Extent



You can manually adjust your map extent to the geographic area of your survey. You can also set the minimum zoom level for drawing tools which means the drawing tools will not work unless the user is zoomed into the map at your desired level. This will help with line accuracy. For our purposes, we don't need high accuracy, we only need a general idea of where this user thinks the route needs to be. Once you set the map location in your survey area, make sure the Map Extent specified above is clicked (Figure 20). If your survey area is much larger and will encompass statewide or countrywide data, it's advisable to allow the device location to be used. For our purposes, we are only interested in a small geographic area, so we kept the extent that we set. All other options as default are set for this survey. Click Save to continue.

We only have one more question for our Atrans drivers. Going back to Add in the Survey Tools pane, we want to add a question that allows the user to type their response. Adding the 'Multiline Text' question will allow this. Like in previous questions, this question also allows you to change to question to a Cached answer, Read-Only, or to Hide from the survey. You can also set a Min/Max option for text length. This can help persuade the user into typing something of substance into the text field (Figure 21).

Figure 21 | Map Text Response

The screenshot shows the configuration interface for a 'Multiline text' question. At the top, there are four tabs: 'Add', 'Edit', 'Appearance', and 'Options'. The 'Add' tab is selected. Below the tabs, the question is titled 'Multiline text'. The 'Label' field contains the text 'How would you spend \$1 million to improve thi'. Below the label is a 'Hint' field with the text 'Please type as much or as little detail as needed.' and a rich text editor toolbar. The 'Default value' field is empty and contains the text 'Predefined answer for this question'. Below that is a 'Calculation' field with the text 'Use an expression to calculate the answer'. The 'Validation' section has three options: 'This is a required question' (checked), 'Set minimum and maximum characters count' (checked), and 'Minimum' and 'Maximum' character count fields. The 'Other' section has three options: 'Cache answer', 'Read-only', and 'Hide from survey'. At the bottom, there are three buttons: 'Save', 'Preview', and 'Publish'.

A good practice is to save often. We've found that most ESRI applications online automatically sign you out after a certain amount of time. Working on a survey at the end of the day, making several changes and going home without saving could cost you a lot of time and effort. You'll be forced to sign in again the next day, and all your changes that were not saved will be lost.

Your next, and final step in preparation for publishing the survey is to Save your work and click on Publish in the Save/Preview/Publish pane (Figure 3). After hitting save, you'll see an option to Modify Schema. An easy way to understand this is that the application is offering you a chance to modify the data name types in the fields of this data. The application will automatically assign names to each field based on the questions you've input (Figure 22). The Name field can be edited to whatever you desire these fields to be named. This is allowed because in larger surveys, when looking at the data after the public has participated in the survey, some of the fields can sometimes be similar and hard to decipher if you're not looking at this page specifically. We normally shorten the names to better understand the data when collecting results (Figure 23). Please note that any name you change cannot have any spaces. Spaces must be filled with an underscore.

Figure 22 | Field Name Assignment

Modify Schema

All survey data is stored in a feature layer associated with your survey. Use the settings below to control the field names of your feature layer as well as the values stored for choices in your survey. Once published, changes to name and field length are not allowed for existing questions.

| Label | Name | Field type | Field length |
|---|------------------------|-----------------------|--------------|
| <input type="checkbox"/> Are you happy with your job as an ATRANS driver? <ul style="list-style-type: none"> · Yes · No | happy_with_job | esriFieldTypeString | 255 |
| <input type="checkbox"/> Please explain what parts of your job make you unhappy. | parts_of_job_unhappy | esriFieldTypeString | 1000 |
| <input type="checkbox"/> What new route would you suggest as a driver? | new_route_suggestion | esriFieldTypeGeometry | |
| <input type="checkbox"/> What route do you drive most? <ul style="list-style-type: none"> · Jackson / Lower 3rd · MacArthur · Broadway · Willow Glen River · Elliot / Cabrini · Monroe / Alexandria Mall · Pineville · England Airpark · Night Route 1 · Night Route 2 | what_route_most_driven | esriFieldTypeString | 255 |

Figure 23 | Data Nomenclature

Modify Schema

All survey data is stored in a feature layer associated with your survey. Use the settings below to control the field names of your feature layer as well as the values stored for choices in your survey. Once published, changes to name and field length are not allowed for existing questions.

| Label | Name | Field type | Field length |
|---|----------------------|---------------------|--------------|
| Are you happy with your job as an ATRANS driver? | happy_with_job | esriFieldTypeString | 255 |
| · Yes | Yes | | |
| · No | No | | |
| Please explain what parts of your job make you unhappy. | parts_of_job_unhappy | esriFieldTypeString | 1000 |
| What changes would you make to improve this route? | changes_to_route | esriFieldTypeString | 255 |

After you're finished editing your field names, hit the publish button. Once the survey is finished publishing, we need to make sure the survey is available to share with the public, so we need to adjust our share settings that can be found on the Navigation Panel (Figure 3) under the Collaborate page. This is also where we will find the Share Results page (Figure 24). You must hit the Save button at the bottom of the pages to save any changes made to the survey sharing page.

Figure 24 | Share Results

Share survey **Share the survey only** Share this survey

Share results **Share the results of the survey**

Update survey **Arcgis Online Groups who can edit the survey** Open the survey in browser directly

Group settings **Group Settings are managed in your organization page.**

Link **Copy the URL** **Open the survey in a new tab**

https://arcg.is/1vuSqn0 **Show the QR code**

Ask the user how to open the survey, in browser or in the survey 123 field app

Open the survey in the Survey123 field app directly. [Learn more about this option](#)

Embed

To embed your survey, you must share it with Everyone.

Who can submit to this survey?

Everyone (public)

Members of my organization (Rapides Area Planning Commission)

Members of the following groups:

- Address Assignments [Details](#)
- Address Data Management Content [Details](#)
- AEX_Sample [Details](#)
- RAPC Addressing Hub Content [Details](#)
- RAPC Basemaps [Details](#)

What can submitters do? When editing results on the Survey123 website, submitters can only update and delete their own records. [Learn more about sharing surveys](#)

Only add new records

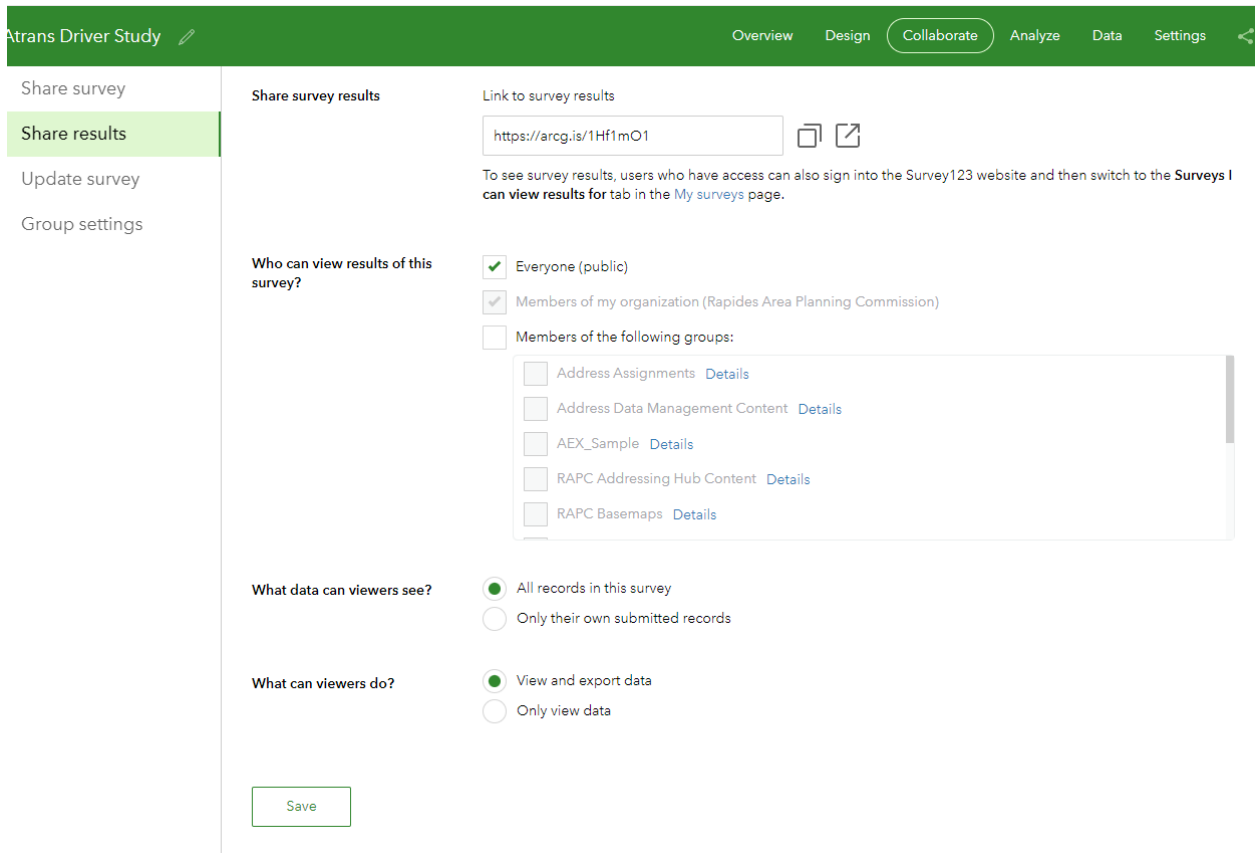
Add and update records (read access enabled)

Save

We can see the options to share the main Survey here. For our application, we want the process to be as easy as possible for respondents. Opening in the browser directly versus in anything else is an extra step we don't need. We chose to share this with the public (Figure 24), meaning anyone with a link to the survey can view and submit responses. You can also generate a QR Code to send out in an email or on a flyer, in addition to copying the direct link to open the survey from this window as well (Figure 24).

The Share Results page is where you can share the results of your survey. It's shared in the same way as the actual survey. Anyone with the link can view/download the results (Figure 25).

Figure 25 | Download Results

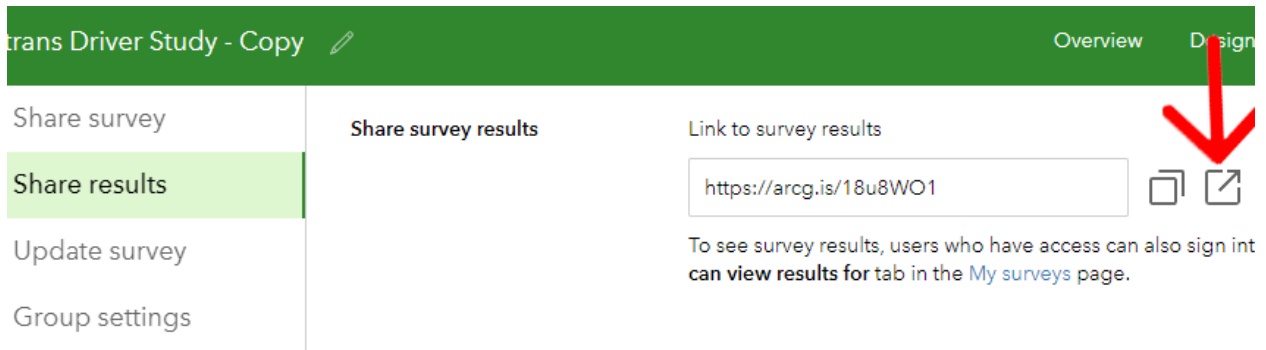


We've shared this survey with Everyone and can send out links to the results page from here. You can also change permissions of what viewers can see or do from this page (Figure 25).

Survey Results

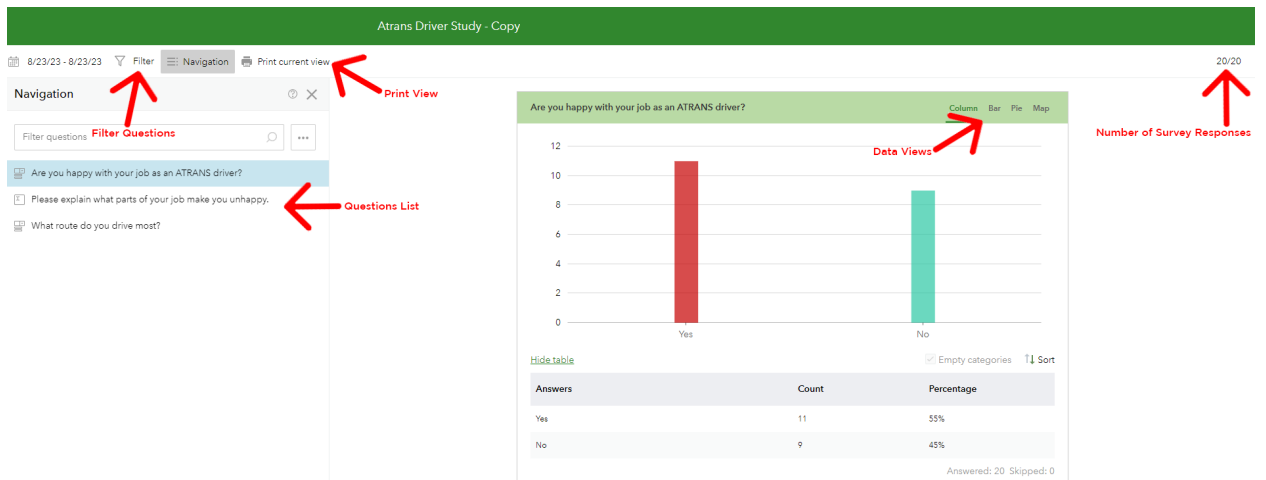
From the Share Results page in the Collaborate page, copy the link to open in a new browser window, or click on “Open the survey in a new tab” button (Figure 26).

Figure 26 | Share Results Link



Most of this page is self-explanatory. Your type of question will determine what type of data types are returned. For instance, in our second question, which was “Please explain what parts of your job make you unhappy.” We allowed text input. The application will generate a word cloud that will take the most used words and give you a count on how many times they were used. In our questions where there was a predetermined answer list, (i.e. Yes, No or the list of Routes that were driven most) You can separate these answers in a column chart, a bar chart, a pie chart, or view the inputs from the mapping element by changed Data Views (Figure 27). You can also print data from this page. If you have several questions, you can also filter by question. Looking at the top right will give you the total number of survey responses (Figure 27).

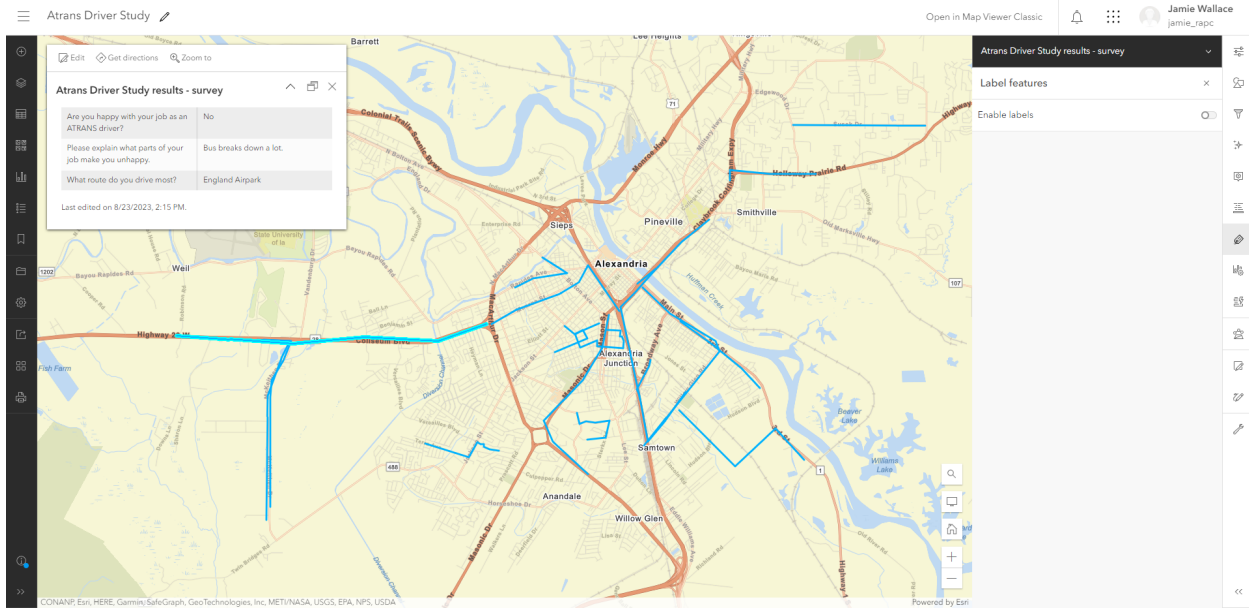
Figure 27 | Survey Response Filter & Count



In order to view the routes that the respondents drew into the survey, you can create a web map in ArcGIS Online Organization. When opening your web map, you should easily find your survey results. It will be named whatever you chose to name your survey followed by results-survey. For our survey, we named it Atrans Driver Study, so our corresponding layer we wanted to add was named “Atrans Driver Study results-survey”. We added the data to a web map and chose an appropriate base map.

For our purposes, we didn't need to label or change any symbology. The web map was only to be used to visually see where these proposed routes were geographically. Each drawn in feature is selectable to view attribute fields that come straight from the survey that the respondent submitted (Figure 28). You must adjust sharing properties on your web map if you want to share this with the public.

Figure 28 | Mapping Results

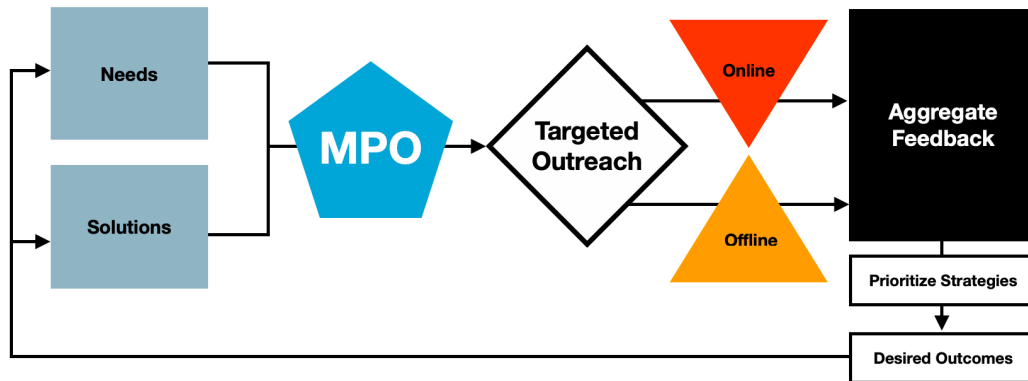


Whether you view this survey data on a web map, or in the shared results page of Survey123, it's all the same. It's a matter of preference in the end, as some people can consume data on an actual map easier than in a table or chart.

Outreach Methodology

RAPC developed a methodology for integration with the survey tool as well as the methodology for collecting and consolidating the data inputs from the GIS section of the survey. Known as the Flexible Public Involvement Framework (FPIF), this methodology was designed to complement traditional public outreach efforts, increase public access to information and participation in the planning process. FPIF improves public awareness participation by making project information and input accessible online or offline, individually or groups, at pop-up or large events, self-guided or assisted, for small or large projects.

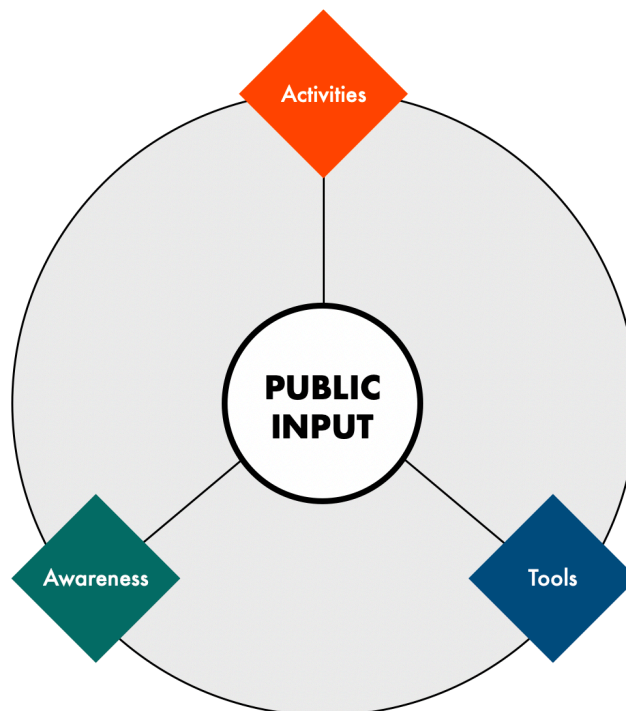
Figure 29 | Flexible Public Involvement Framework



Core Components

At its core, the FPIF model consists of three components: tools, activities, and awareness. Each component includes subcomponents that can be combined in a variety of combinations according to each project and need.

Figure 30 | FPIF Core Components



Tools

Meeting people where they are is a big part of public outreach. The Tools core component includes a website, surveys and Maps, input kiosk, meeting in a box, in addition to traditional Phone and Mail. The webpage serves as the hub of the FPIF, including project information, links to input tools, schedule of engagement activities, public comment, and contact information. The website can be a dedicated page as part of your existing organization's website or a unique to the project. The MPO used Adobe Express (included as part of its license) to develop webpages unique for each project.

The MPO selected Survey123 to serve as the framework for its online survey and mapping tool. Included as part of its ESRI license, the tool offers an interactive map that is fully integrated in Arc GIS that can serve as a stand-alone mapping tool or as part of an online survey. It offers a variety of user interactions with the map like choosing bus routes, drawing areas or improvement, and adding comments on existing infrastructure.

A basic ESRI Survey123 framework was developed by the MPO to serve as the foundation for all transportation planning projects and consisted of an overview or description of purpose, instructions, and dropdown menu with point classification categories. At its basic level, the framework includes an overview of the survey, step-by-step instructions, and a drop-down menu to classify points. Using the Survey123 tool, the user would scroll or zoom to area of interest, select 'points,' choose point type then place on map, enter description of concern, and add photo. Other users could also click on other users' comments and agree or disagree.

A direct link to the online Survey123 tool was then included on the agency/project website. The MPO also used Alchemer (formerly SurveyGizmo) to develop survey tools and aggregate feedback without a mapping component.

Once online, the survey link was uploaded onto public input kiosks deployed at MPO designated public comment locations inside the metro planning area. Mobile internet-connected tablets, featuring the Survey123 tool, were also used to capture survey responses in-person at pop-up or large community events.

It was impossible for APMPO staff to attend every group meeting or community event throughout the metro planning area. The meeting-in-a-box was developed to provide all the tools and resources for community groups to hold their own meetings regarding transportation planning projects. The boxes were the same and contained the following:

- Phase-based questions used to guide public discussion about the project.
- Public comment cards for citizens to give feedback or concerns.
- Large metropolitan planning area map where citizens could identify problem areas.
- Ad materials with project information, survey links, public input opportunities, etc.

The APMPO deployed new public input kiosks to help make the transportation planning process for accessible to the public. Deployed throughout the metropolitan planning area, these were internet-connected tablets directly linked to the project webpage and public input tools. These new tools provided additional opportunities for members of the public who do not have access to the internet to participate in the transportation planning process. The APMPO also used these as mobile input stations at pop-ups and large community events.

Activities

Once the public input tools are ready, input activities are essential to ensuring the tools are used and encourage public participation in the planning process. Key components include for Activities included crowdsourcing data collection, in-person surveys, focus groups, and Town Hall style (community) meetings.

Crowdsourcing was used by the MPO to engage, disseminate, and collect information from stakeholders and public. A crowdsourcing GIS Story Map was used to obtain basic level data or feedback from a larger, diverse group of the public. The MPO also used the ESRI Mobile App to collect bus stop information to develop the first GIS inventory of transit facilities inside the MPO planning area, including lat/long, type, condition, amenities, and accessibility.

The MPO used in-person surveys as another way to enhance the public engagement primarily conducted through face-to-face interviews, typically conducted at intercept points along key roads and businesses, buses on transit routes, and community events. The MPO used internet connected, smart mobile devices to access the survey tool online, or worked with stakeholders using their smart mobile device.

Using a focus group approach, APMPO staff also facilitated direct feedback from established community organizations to inform policy, program, and project development. The MPO typically used small, structured group discussions led by a facilitator or self-guided 'Meeting-in-a-box' to obtain input from hard-to-reach populations and supplement community input from Town Hall meetings. This approach was used to consult a diverse range of stakeholders in a small group setting to produce shared knowledge and incorporate public preferences and values in a participatory manner.

For larger projects, the MPO used Town Hall style meetings as an important tool for informing the public about the project, gauge community input, and identify solutions on a larger community-wide scale. They also served to promote the project by generating media coverage, mobilizing community support, as well as identify identifying individuals and organizations for future partnerships and collaborations. The MPO typically worked with the project steering committee to raise the profile of the meeting and increase public awareness. Town Hall meetings consisted of stations where participants learned about the project and provided input. Public input kiosks were deployed at each station to obtain participant feedback and serve as a digital enhancement.

Awareness

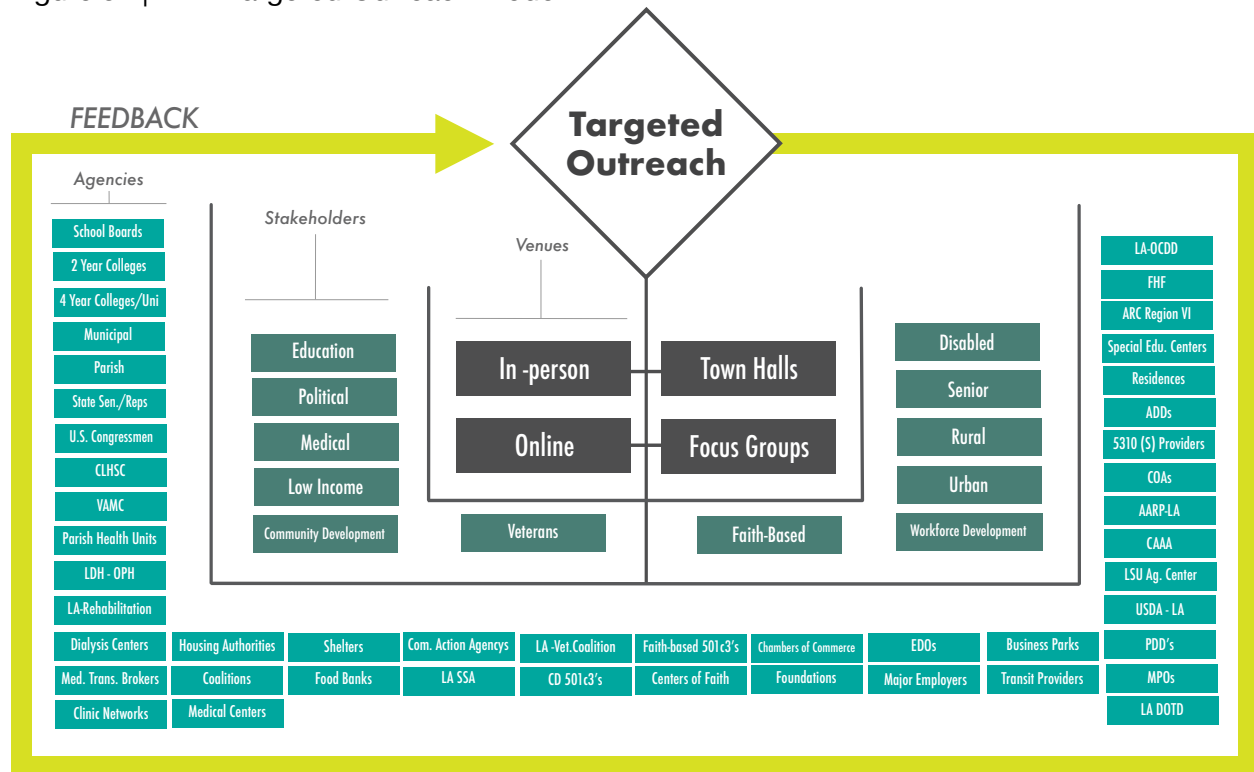
As a cooperative process designed to foster involvement by all users of the transportation system, awareness is critical to ensuring any successful transportation planning effort. The MPO promoted project awareness through email campaigns, media outreach, and promotional QR flyers. The MPO used its existing email databases and project notification sign-ups to promote public action to participate in input opportunities online using the project or agency website, social media, public input kiosks, focus groups, and town hall meetings.

The MPO maintained an email listing of all contacts for traditional TV and print media inside the metro area. Working with local media presents an opportunity to help shape how people think about transportation problems and what solutions they would support. Earned media is also critical to promoting project awareness and public input opportunities. In addition to traditional media, social media was used to help promote the project online. The MPO also used social media posts linked to the project website or public input tool (survey or map) to encourage public participation in transportation planning projects.

The MPO used both digital posts and printed flyers containing project information, as well as a call to action to participate in the planning process by attending meetings or completing a survey. Flyers also featured a quick response (QR) code with direct link to the project webpage and additional project information. The QR Flyers are an effective and economic way to enhance public engagement and offer seamless integration between offline and online platforms. QR codes can also provide data analytics, gaining insights into public preferences and behaviors and help determine effective locations to post flyers.

All three core components work together to not only promote the project, but also obtain public and stakeholder input. Again, the objective is to make providing input into transportation, planning projects as easy an accessible as possible, to ensure the most public input.

Figure 31 | FPIF Targeted Outreach Model



Methodology Test Projects

Specific combinations of core components used to pilot the FPIF for each of the above-referenced projects are specified in Table 1. The MPO refined the FPIF methodology by piloting the framework on the following MPO planning projects:

- Metropolitan Transportation Plan 2045, 2021
- Atrans Service Planning and Asset Study, 2021
- Rock Island Greenway South Feasibility Study, 2022
- Rapides Parish School Board Redistricting, 2022
- Public Review and Comment Periods, 2021-2023
- CHSC Road Safety Map It! Tool, 2023

Table 1 | FPIF Applications

| Project | Tools | | | | | | | Activities | | | | Awareness | | |
|--|-----------------|--------------------|---------------------|--------------|------------------|--------------|--------------|----------------|-------------------|----------------|------------|-----------|-------|-----------|
| | Project Website | Online Survey Tool | Online Mapping Tool | Input Kiosks | Meeting in a Box | Mobile Tools | Phone / Mail | Crowd-sourcing | In-person Surveys | Group Meetings | Town Halls | Email | Media | QR Flyers |
| MTP 2045 | X | X | X | X | X | X | X | | | X | X | X | X | X |
| RPSB Redistricting | | X | | X | | | X | | | | X | X | | |
| CHSC Map It! Tool | | X | X | X | | X | | X | | X | | X | | |
| ATRANS Service Planning & Asset Study | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Rock Island Greenway (S) | X | X | | X | | X | X | | | X | X | X | X | X |
| Public Review & Comment | X | | | X | | X | X | | | | | X | X | |

Results

By employing the tools that the MPO was able to access under existing ESRI, Adobe, and Alchemer software licenses, the MPO was able to generate unlimited surveys for multiple planning projects – increasing the number of responses by reducing the cost per response. Table 2 provides an example of cost savings comparing survey tools developed for the 2040 Metropolitan Transportation Plan (MTP) and 2045 MTP.

Table 2 | MTP 2040 vs. MTP 2045 Survey Cost / Response

| Survey Tool | Cost | # Applications | Completed Responses | \$ / Completed Response |
|---|------------|------------------|---------------------|-------------------------|
| MetroQuest | \$4,975.00 | 1 | 107 | \$46.50 |
| Online Web + Survey Map Tool <i>(excludes Enterprise License)</i> | \$1,000.00 | unlimited annual | 121 | \$8.26 |

Table 3 | Traditional vs. FPIF Completed Responses

| Project | Year | Method | Total Started | Total Completed | Response Rate |
|--|--------|-------------|---------------|-----------------|---------------|
| Metropolitan Transportation Plan 2040 | (2016) | Traditional | ? | 107 | ? |
| Rapides Parish Comprehensive Resiliency Plan | (2017) | Traditional | ? | 99 | ? |
| Metropolitan Transportation Plan 2045 | (2021) | FPIF | 154 | 121 | 79% |
| Rock Island Greenway South Feasibility Study | (2022) | FPIF | 266 | 197 | 74% |

* Response Rate calculated by dividing the number survey views by the number surveys completed.

Public input survey tools and project outreach implemented using FPIF resulted in a 54% increase in the average number completed surveys. The traditional public input approach employed by the MPO for the 2040 MTP update, and Parish Resiliency plan used a single-use survey tool and outreach approach as illustrated in Figure 3. Using the traditional approach, RAPC averaged 103 completed survey responses.

The new public input approach supplemented with the FPIF used by the MPO for their Bicycle and Pedestrian User Survey, 2045 MTP, and Rock Island study using multi-use survey tools (ESRI Survey 123 and Alchemer) and outreach approach as illustrated in Figure 4. Using the FPIF modified approach, RAPC averaged 281 completed survey responses.

Table 4 | Traditional vs. FPIF Average Response Rate

| Traditional Completed Responses | |
|--|------------|
| Metropolitan Transportation Plan 2040 | 107 |
| Rapides Parish Comprehensive Resiliency Plan | 99 |
| <i>Average Completed Response</i> | 103 |
| FPIF Completed Responses | |
| Metropolitan Transportation Plan 2045 | 121 |
| Rock Island Greenway South Feasibility Study | 197 |
| <i>Average Completed Response</i> | 159 |
| FPIF Impact | |
| TRAD Average | 103 |
| FPIF Average | 159 |
| % CHANGE / INCREASE | 54% |

Figure 32 | Traditional Public Input & Outreach Approach

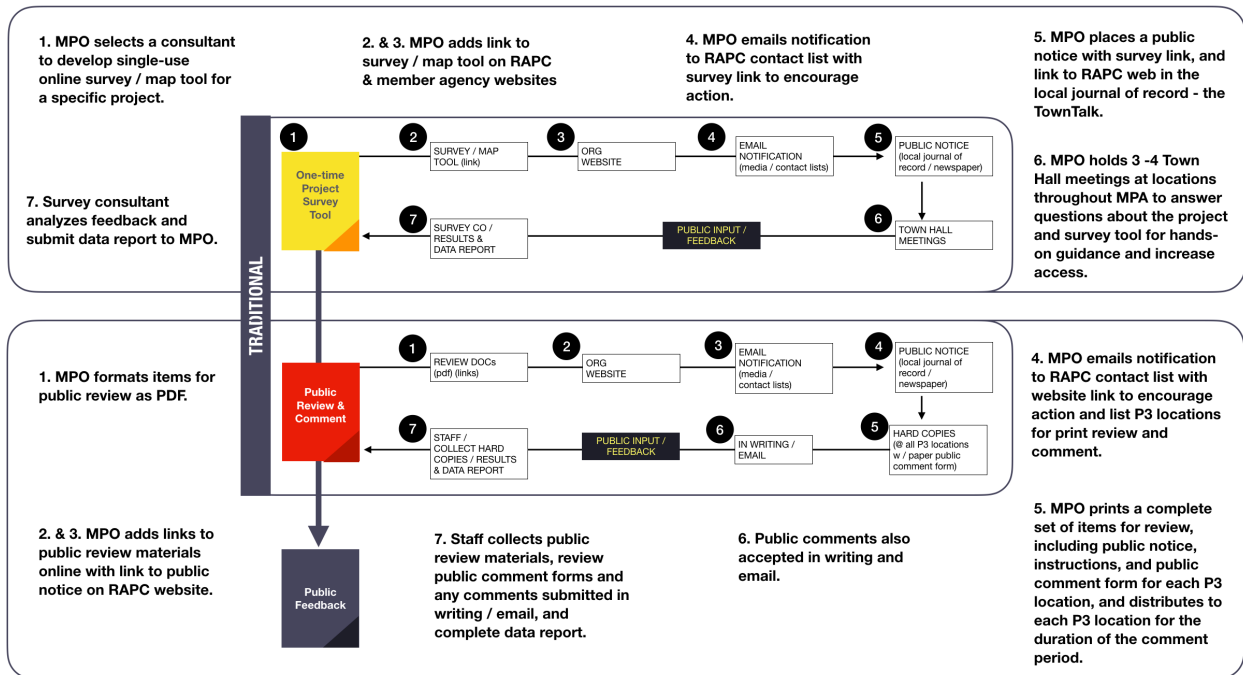


Figure 33 | FPIF Modified Public Input & Outreach Approach

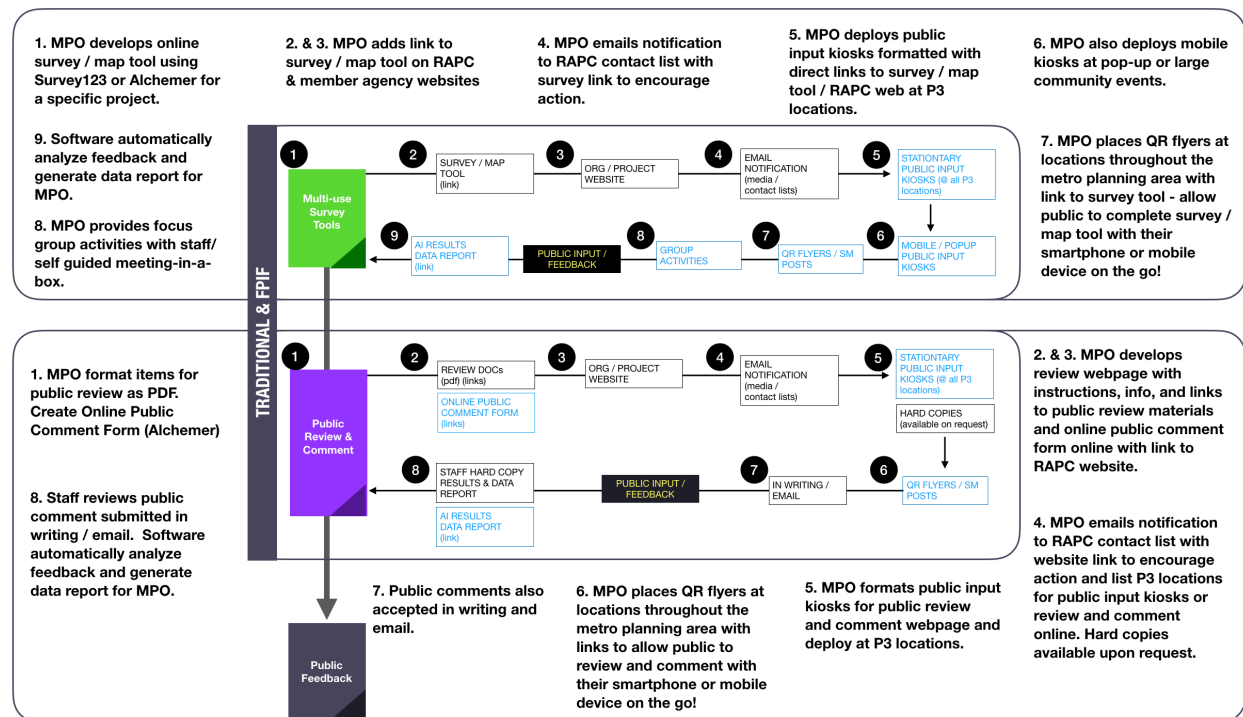


Figure 34 | FPIF Survey & Map Tool Deployment

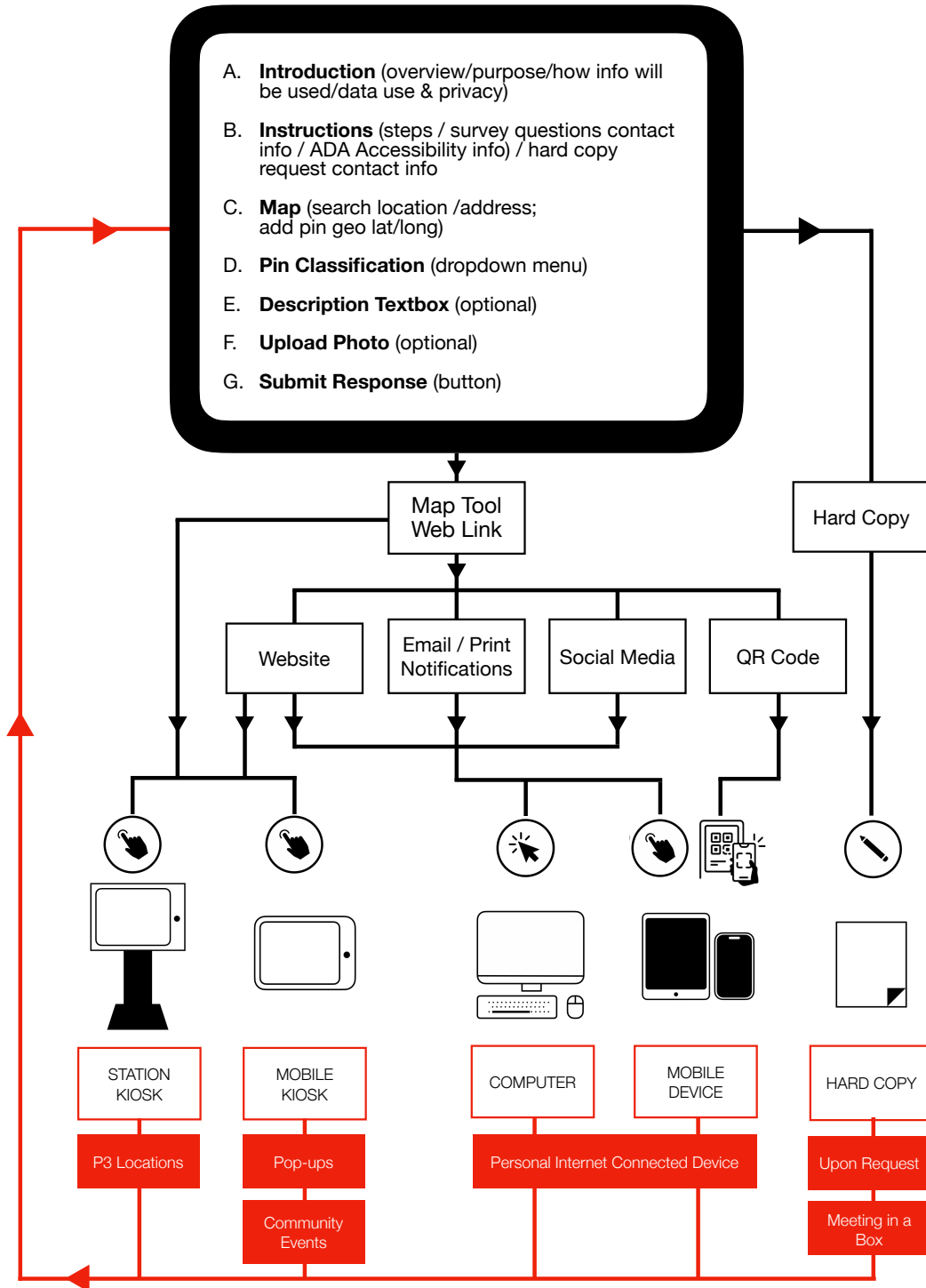
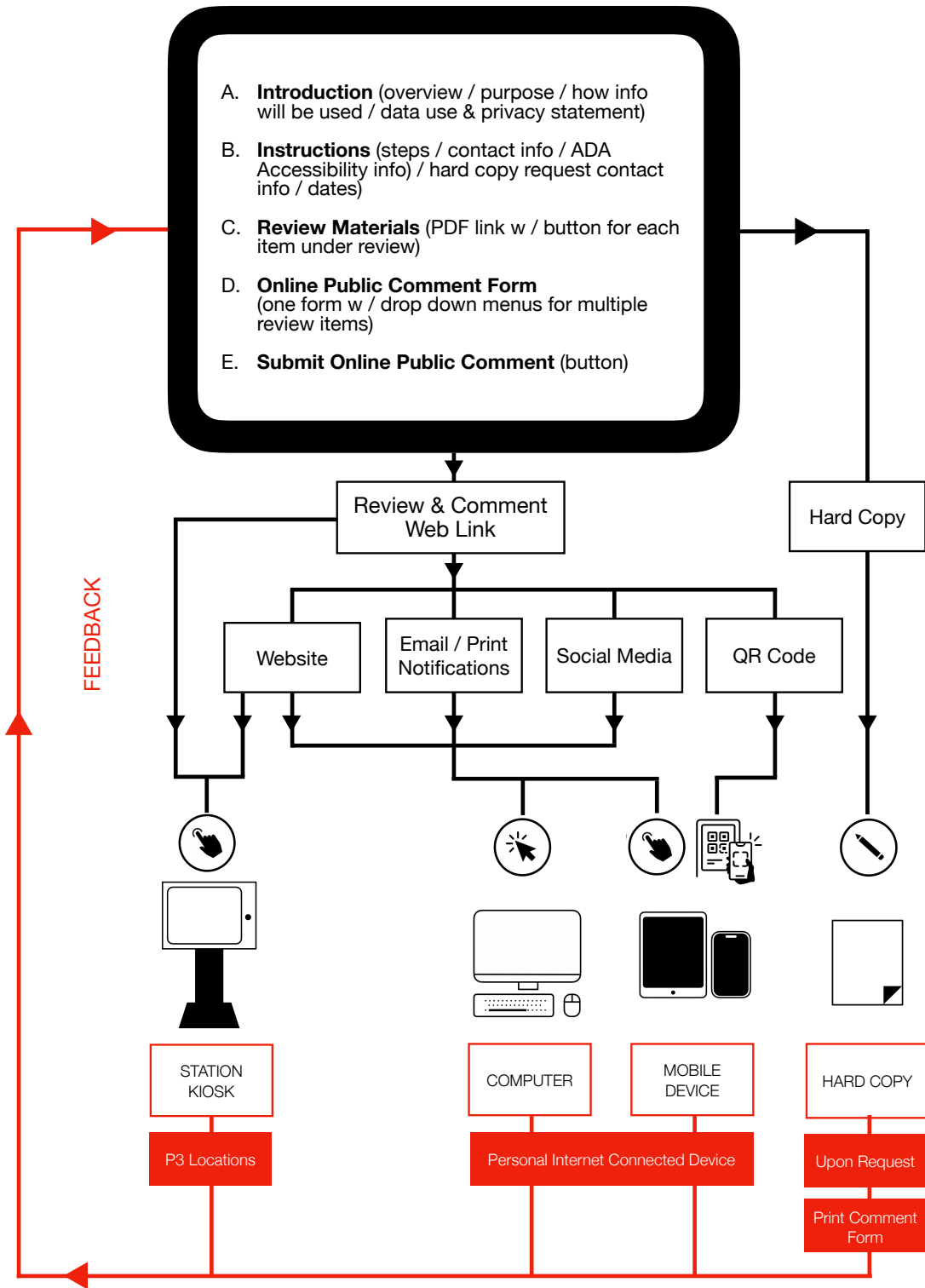


Figure 35 | FPIF Public Comment & Review Deployment



How to Implement FPIF

The MPO developed the quick start chart to guide agencies with FPIF implementation. It's important to remember the FPIF is scalable and can be modified to suite transportation planning projects.

Table 5 | How to Implement FPIF

| How to Start: | You'll Need: | Software Used: |
|--|--|---|
| <ol style="list-style-type: none"> 1. BUILD your online data collection tool plus a separate one to serve as an online public comment form. Create hard copies (by request and at all P3 locations). 2. ADD direct links to the online survey tool and public comment form to your website. 3. PROMOTE the project and website by including a direct link (QR) on all project flyers, notices, updates for both traditional and online media. 4. USE cell/wifi-connected smartphones or tablets with direct link to project webpage or survey tool to conduct in-person surveys, engage community groups, deploy as public input kiosks, or share to crowdsource data. | <ol style="list-style-type: none"> 1. Online Survey Tool Software 2. Website (project, agency, or social) 3. Mobile Connected Device (tablet/smartphone) 4. Kiosk (optional) | <ul style="list-style-type: none"> • Adobe Acrobat • Adobe Express • Alchemer • ArcGIS Survey123 • JamfNow • QR-Code-Generator • Word/Pages |

The FPIF represents a powerful component of public engagement, enabling anyone with or without an internet connected mobile device (smart phone, tablet) to access, review, comment, and participate in the planning process. By using the FPIF, the MPO saw a significant increase in public participation in regional planning projects. The MPO will enshrine the FPIF methodology into the RAPC public participation plan as part of its next update.

The MPO is working to incorporate FPIF into new planning projects and tools including crowdsourcing tools to identify and assess road safety issues, post-disaster damage assessments, as well as creation and maintenance of GIS inventories for transpiration (and transit) facilities.