

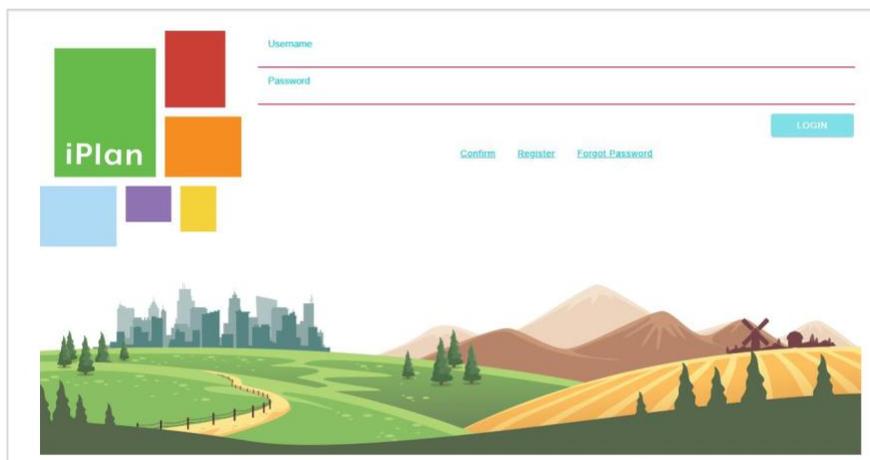


iPlan Quick Start Guide

This quick start guide will walk you through the steps of creating and sharing a localized land-use simulation in *iPlan*. It will also provide an overview of how to use the simulation itself, though the best way to learn that is to use *iPlan*'s "Tutorial" function. Also, please note that the screenshots shown in these instructions were taken using a laptop; the images may vary slightly if you are using a smartphone or tablet, but all the functionality is the same.

Creating an Account

Using Chrome, Firefox, or Safari, go to: <https://app.i-plan.us/>





Select “Register” to create an account. You will be prompted to enter an email address and to create a username and password.

If you indicate that you are an educator, you will be able to import other users under your account and see data associated with those users. This is helpful for managing use of *iPlan* in classrooms or other educational settings.

After you fill in all the required information, you will be emailed a confirmation code to enter on the next screen and complete your registration. You will then be returned to the log in page, where you can enter your username and password to access your account and use *iPlan*.



Constructing a Localized Land-Use Simulation

Using Chrome, Firefox, or Safari, go to: <https://app.i-plan.us/>

After you log in to your account, you will see the following screen:



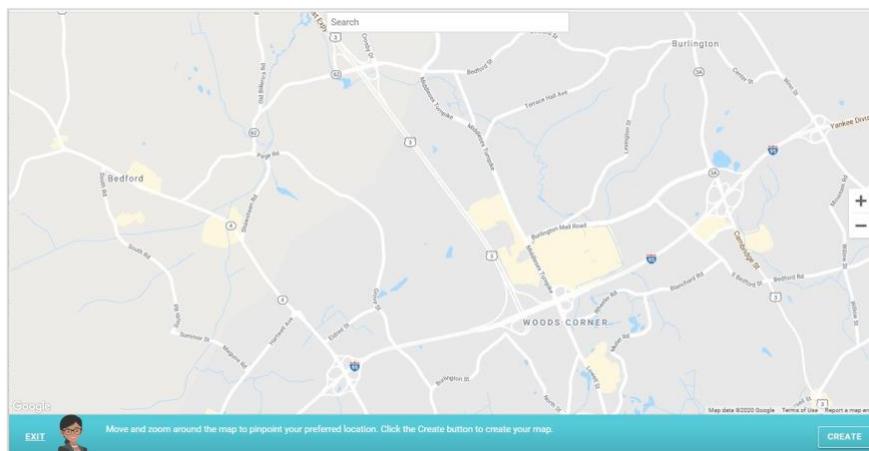
Select “New Map” to begin the simulation construction process. (Note: If you have never used *iPlan* before, you may want to begin with the “Tutorial”, which will show you how to use a localized land-use simulation in *iPlan*. Understanding what learners will be able to do with the simulation may help you with the simulation construction process.)

(1) Choosing a Location

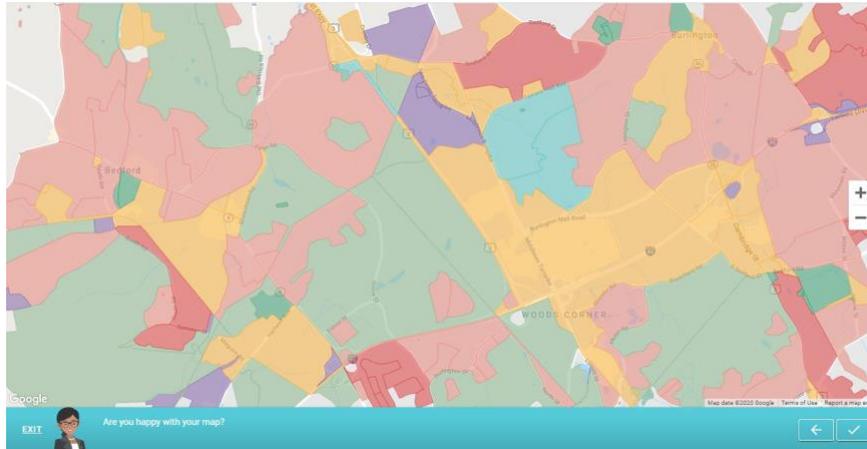
If you allow location access, the map will display your current location; if you do not, the map will display the default location (Madison, Wisconsin). *iPlan* uses a Google Maps interface, so to choose a location for your land-use simulation, you can either search for it in the search bar at the top of the screen, or you can move the map to the desired location.

The land-use map the system creates will have approximately the same boundaries as what is visible on your screen, so zoom in or out and pan the map as needed to get the desired location.

Currently, *iPlan* can only make land-use simulations in the contiguous United States.



Once you have the desired region in view, select “Create”.



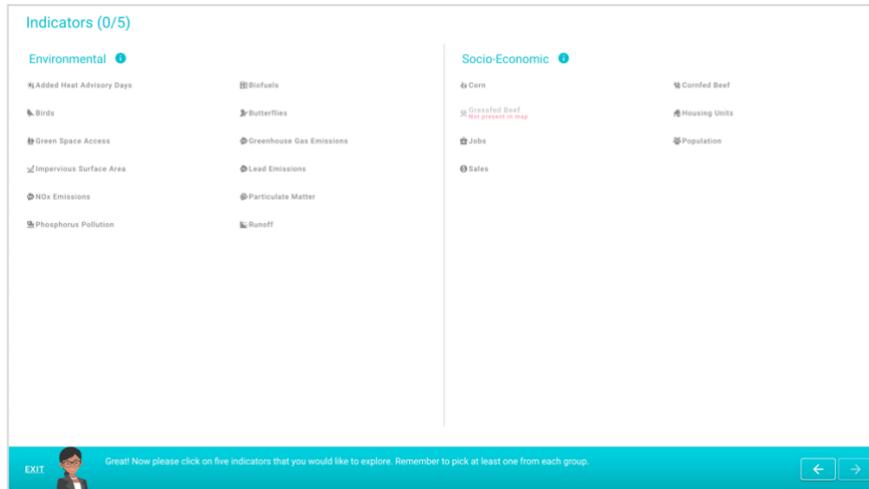
In most cases, you will see the map color-coded to indicate the land-use classes. The map will have approximately 200 parcels regardless of the size of the region you choose.

If you are happy with your map, select the check button to continue. If not, you can select the back arrow to change the region and try again.

In some cases, the system will indicate that a suitable land-use map cannot be made of the region you have selected. You will be prompted to go back and try a different region. Usually, this happens because the map is zoomed in too far (and thus the total area is too small); zoom out a little and try again.

(2) Choosing Indicators

Once you have created a land-use map, you will be prompted to choose five indicators to model.

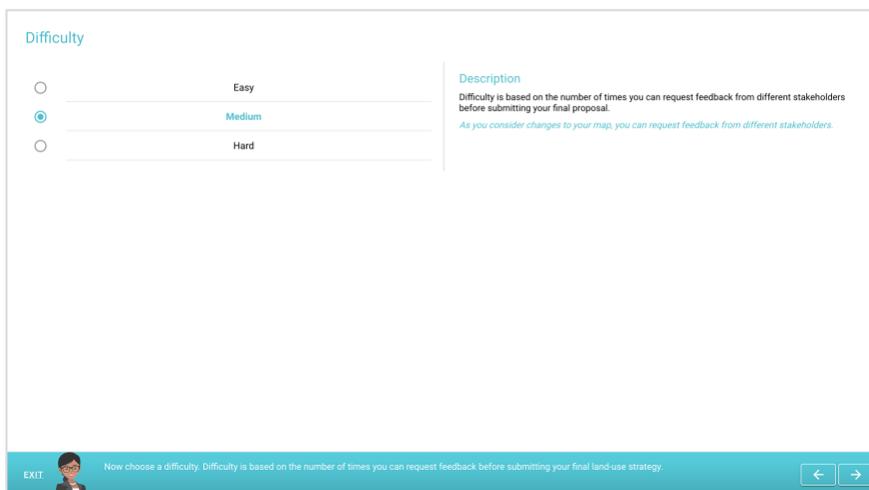


The indicators—measurable outcomes of land-use—are divided into environmental and socio-economic categories. You must choose at least one indicator from each category and five total. Select the **i** button for more information on the indicators. Note that some indicators may not be available for a given map.

Once you have chosen five indicators, select the forward arrow.

(3) Choosing a Difficulty Level

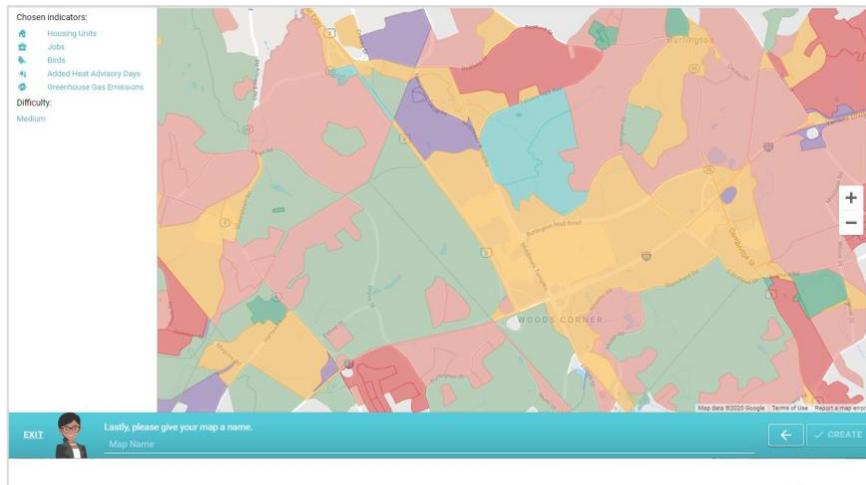
iPlan has three difficulty levels. Note that the difficulty settings are based on the number of times that the player can get feedback from stakeholders on their proposed land-use plans.



Select the forward arrow to continue.

(4) Completing Simulation Construction

To complete simulation construction, the system will prompt you to name your map.



Choose a name that reflects the simulation you have constructed. Note that you can always change the name later by accessing “My Maps” from the main menu. Select the “Create” button to save your simulation, which will allow you to share it with others (described below) or use it yourself.

Tutorial Mode

Using Chrome, Firefox, or Safari, go to: <https://app.i-plan.us/>

After you log in to your account, you will see the following screen:



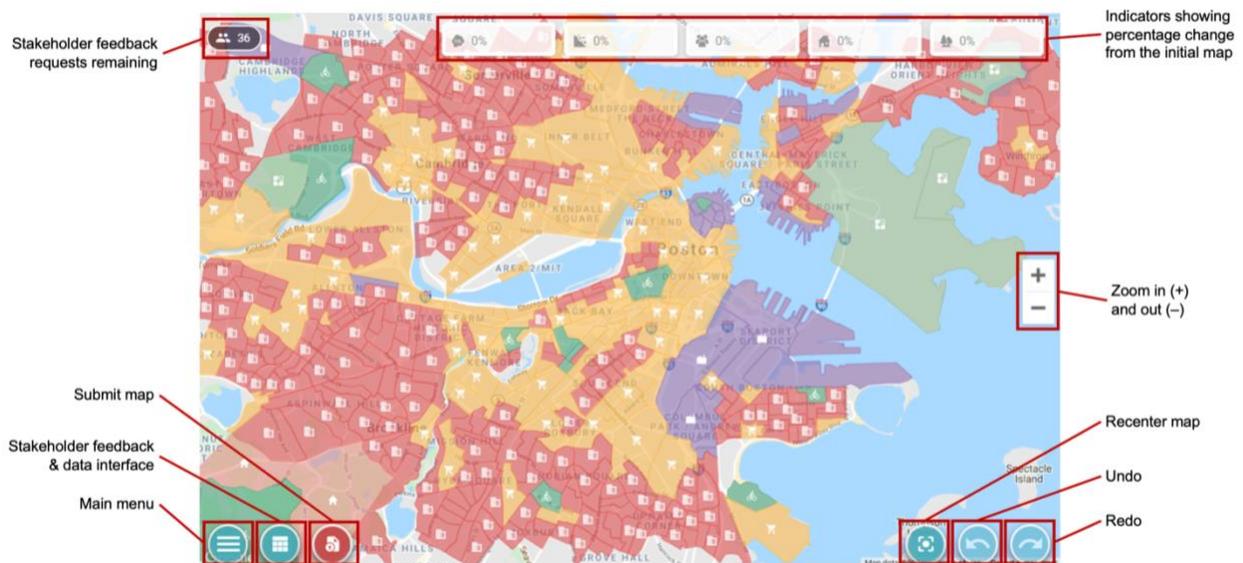
Select “Tutorial” to open the tutorial mode, which uses a reduced-size map (~70 parcels) to guide you through all the features of *iPlan*.

Using *iPlan* Simulations

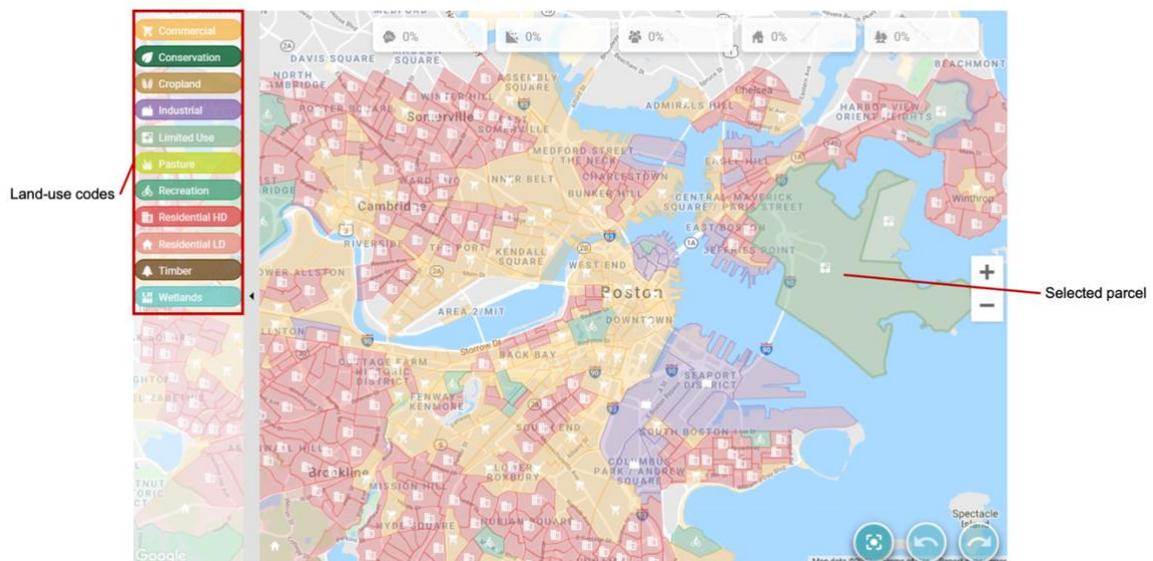
The Tutorial (described in the previous section) is the best way to learn how to use *iPlan* simulations. The following diagrams are intended only as a quick reference to the interface and its key features.

Map Interface

The main interface in *iPlan* is a land-use planning map. Each parcel can be selected and changed to another land-use type, and the simulation models the effects of the change on the indicators.



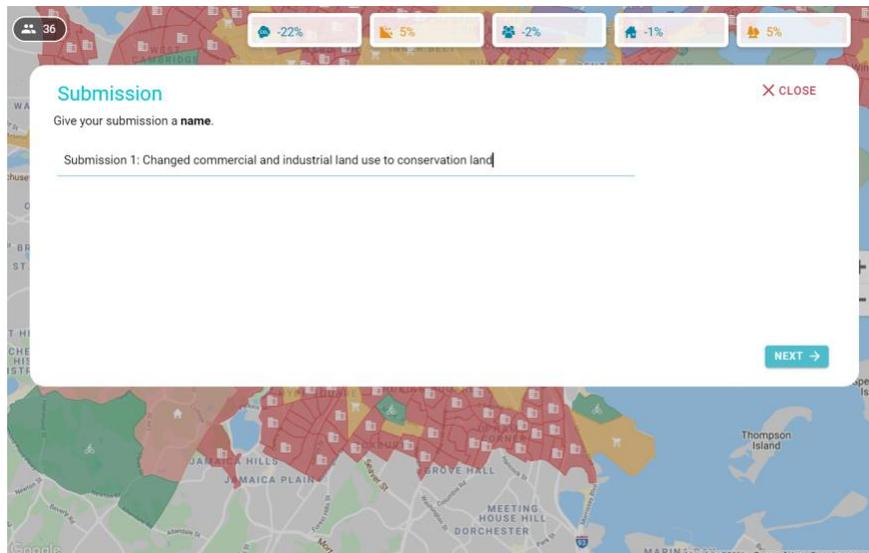
If one or more parcels are selected, the list of land-uses appears on the left.



Selecting “Submit” will open the submission interface. Submitting maps to the stakeholders for feedback helps the user identify both *what* changes the stakeholders want and *how much* change they want.

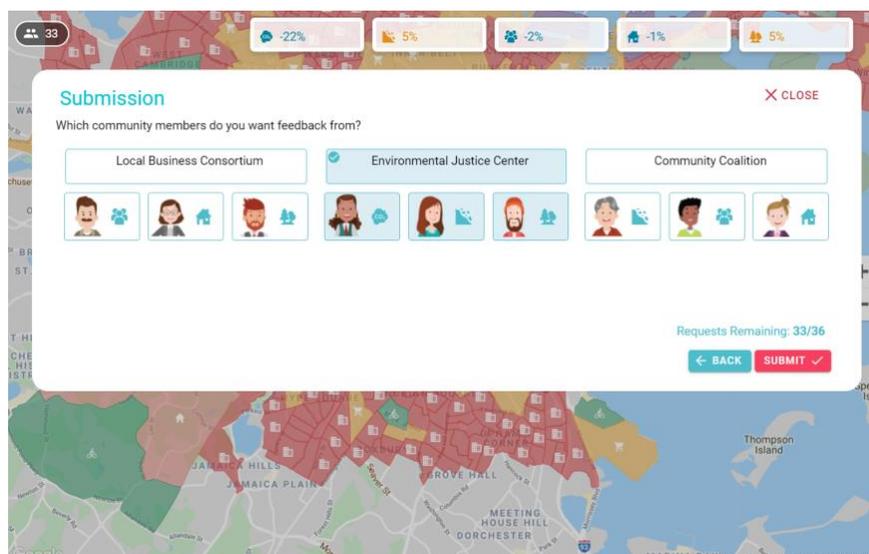
Submission Interface

The system will prompt the user to name their submission. Leaving this field blank will simply number the submissions.



The screenshot shows a web interface with a map background. At the top, there are five colored buttons with icons and percentages: a blue button with a minus sign and '-22%', a yellow button with a plus sign and '5%', a green button with a plus sign and '-2%', a blue button with a plus sign and '-1%', and an orange button with a plus sign and '5%'. A user icon in the top left shows '36'. A white modal window titled 'Submission' is open, with a 'CLOSE' button in the top right. The text inside the modal says 'Give your submission a name.' Below this is a text input field containing 'Submission 1: Changed commercial and industrial land use to conservation land'. At the bottom right of the modal is a green 'NEXT' button with a right-pointing arrow.

Next, the system will ask which stakeholders the user would like to ask for feedback. You can select an entire bloc (e.g., the Environmental Justice Center) or individual stakeholders.



The screenshot shows the same web interface as above. The modal window now asks 'Which community members do you want feedback from?'. It features three main selection buttons: 'Local Business Consortium', 'Environmental Justice Center' (which is selected with a blue checkmark), and 'Community Coalition'. Below these are three rows of individual stakeholder icons, each with a small blue checkmark. At the bottom right of the modal, it says 'Requests Remaining: 33/36' and has two buttons: a blue 'BACK' button and a red 'SUBMIT' button with a checkmark.



When a user selects “Submit”, the system will bring up the Stakeholder Feedback and Data Interface.

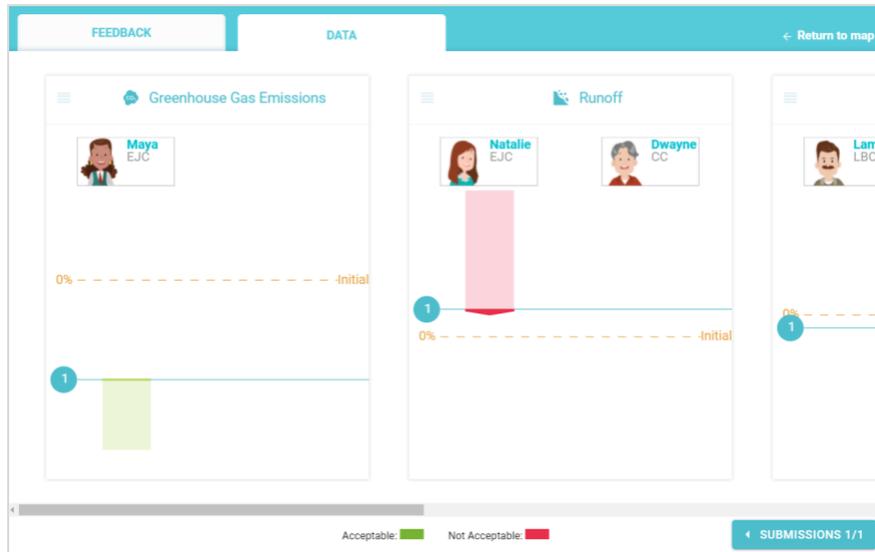
Stakeholder Feedback and Data Interface

Stakeholders selected for feedback will provide a “thumbs up” or “thumbs down” depending on whether they are satisfied by the submitted map. The text associated with each stakeholder will explain their feedback.

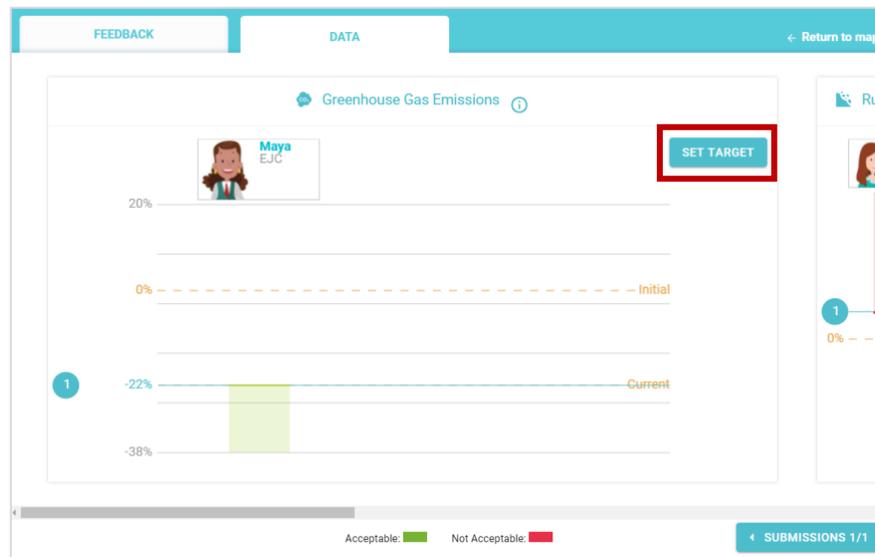
The screenshot shows a web interface with two tabs: 'FEEDBACK' (selected) and 'DATA'. The title is 'Submission 1: Changed commercial and industrial land use to conservation land'. Below the title, there are three groups of stakeholders: 'Local Business Consortium' (3 icons), 'Environmental Justice Center' (3 icons), and 'Community Coalition' (3 icons). A 'Total 1/3' indicator is on the right. Below this, three individual feedback cards are shown:

- Maya** (Local Business Consortium): **Acceptable**. Feedback: "I'm impressed. Your plan should reduce GHG levels significantly, benefits for both residents and the environment. Well done!". Status: thumbs up.
- Natalie** (Environmental Justice Center): **Not Acceptable**. Feedback: "I don't like this plan. With such high amounts of impervious surface area, you have not accounted for the safety and livability our area.". Status: thumbs down.
- Freddy** (Community Coalition): **Not Acceptable**. Feedback: "There is too little green space in this map. Without green space, the ecosystem may be disrupted and animals will have nowhere to live.". Status: thumbs down.

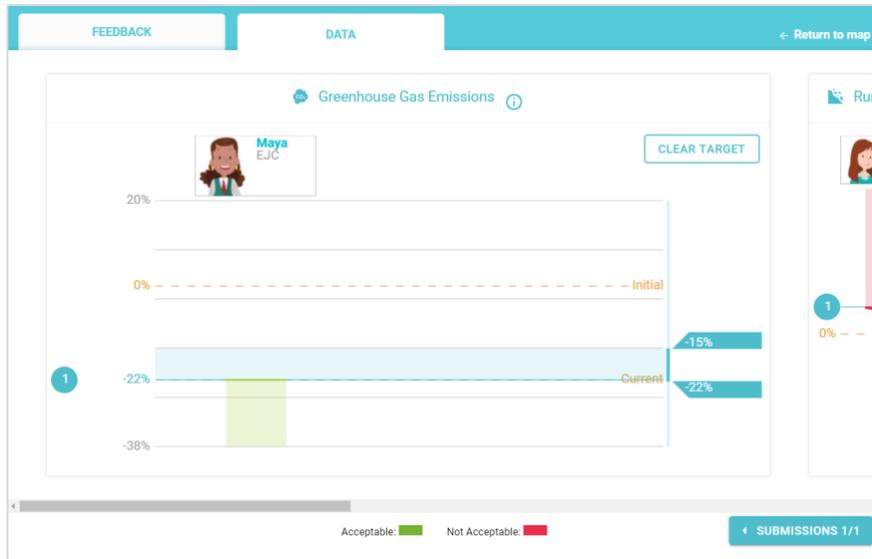
To explore further, the “Data” tab contains information about the level of each indicator in the submitted map (numbered blue line) as well as the level of each indicator in the original map (orange “Initial” dashed line). For stakeholders whose feedback has been obtained, the graphs indicate whether or not they were satisfied and in which direction they would like the indicator to change. In the graph below, for example, the submitted map lowered greenhouse gases, which satisfied Maya, but it raised runoff, and Natalie would prefer less runoff than Submission 1 achieved.



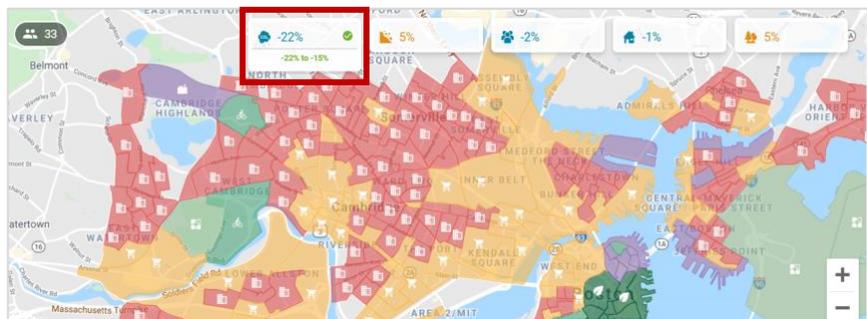
Selecting any indicator graph brings up a more detailed view.



Selecting "Set Target" will enable users to set a goal for that indicator by choosing an upper and lower bound.



When the user returns to the Map Interface, the targets will display in the Indicator Panel; when a given map satisfies the criteria, the numbers will turn green and a check mark will appear.



The simulation ends in one of two ways:

- (1) When the number of stakeholder feedback requests reaches zero, the next submission will automatically be a final submission.
- (2) The user can select "Final Submission" at any time from the Submission Interface

Submitting a "final" land-use plan will generate feedback from all nine stakeholders, and the user will no longer be able to make submissions, though they will be able to access the Map Interface and make land-use changes and also access prior submission feedback and data.

