##### [00:00:03.130] - Speaker 1

Welcome to this Community Viz Video Tutorial this tutorial provides an introduction to the 360 Indicators Wizard. The 360 Indicators Wizard gives you a comprehensive, well rounded set of standard planning measurements or indicators related to your study area. The wizard can be used to create up to 101 indicators. Using the wizard saves you time because it sets up dozens of analysis components such as assumptions, indicators, attributes, and charts automatically.

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The majority of indicators are straightforward calculations like distances, totals, averages, and percentages. Other indicators are slightly more complicated because they use coefficients such as auto emissions per household to estimate results. In these cases, the wizard sets up variable assumptions that are initially set to a default value based on US. National averages. You can keep these defaults or adjust them to your local study area if desired.

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The minimum input data required to run the wizard is a parcels layer. This layer is typically parcels, but could really be any polygon input that has the attributes needed to create your desired indicators. To find out which indicators are available with the data you have, you can check the help topics for each data type. For example, in the parcels help topic, I can see that if I only have a parcels layer, the wizard can still create two indicators for me average parcel size, and parcels area total. As I scroll down in this table, I see that if I also have attributes in my parcels layer, such as the population attribute, the wizard can create the population, population density, residential water use, and other indicators.

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Each data type has a similar health topic page with a table with which indicators are available with different layer and attribute combinations. If you are interested in a particular indicator or category of indicators, you can find out which data inputs you need by going to the 360 Indicators Summary table. This table lists each indicator with the data layers and attributes required, as well as a brief description. You can also view an indicator's individual help topic for more information about the formulas used to calculate the indicator and the associated attributes, indicators, and assumptions. The 360 Indicator Summary Table is easily accessible on each wizard page by clicking the Summary Table button next to the main help button.

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Now let's look at the wizard and explore the builtin resources and outputs with an example. The 360 Indicators Wizard is available from the Decision Tools toolbar or from the Scenario 360 Toolbar drop down menu. In the Wizard, I'm going to choose the Housing Near City Center and developed land area per 10 indicators. If I'm not sure what the indicator will calculate, I can hover over these info icons to view a brief description, or I can click on the blue links or help buttons for more information. In Scenario 360 Help.

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For the Housing Near Cities Center indicator, I will need a parcels layer with a dwelling units attribute, a city center layer, and optionally, a network data set. If I want to calculate distances along a network rather than using straight line distance for developed land Area per 1000, I will need parcels with land use and population attributes. I can find these data requirements in the indicator help topics, or I can go to the Select Data page in the wizard and see which layers and attributes are required. As I click on different rows in the Data Layers and Attributes tables, notice that the blue Help links update and the window beneath the Attributes table will give you information about the attribute and what format the attribute value should have. The hover over icons, blue links and Help buttons are on this page as well.

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To provide additional information and quick access to relevant health topics on the Select Options page, I also need to match my land use codes to the standard 360 indicators. Land Uses because Developed Land Area per 1000 required a land use attribute, these standard land use names are needed for formulas that rely on a specific naming convention. When you click the Run Now button, the wizard will create and calculate numerous analysis components. Let's look at the output components for housing near City center and developed land area per 1000. When I open the indicators window, I see both of my new indicators, and I also see that I have a few other indicators.

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These are indicators that were needed to calculate developed land Area per 1000, so they were created as well. The wizard also created the walkable distance assumption for my housing near city center indicator. This assumption defines what I mean by near. The default value for walkable distance is a quarter of a mile. If I want to expand that value to a half of a mile, I can do that now, and my Housing Near City Center indicator value will update automatically.

##### [00:05:10.370] - Speaker 1

The wizard also created charts for my indicators and new attributes with the formulas needed to calculate my indicators. For the housing near city center indicator. The wizard created the distance city center attribute. This measures the distance from each parcel to the nearest city center. The wizard also created the nearest city center attribute, which evaluates the distance to City Center value against the walkable distance assumption for each parcel.

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If the distance is less than or equal to walkable distance, the parcel receives a value of one. Otherwise, it receives a value of zero. Then my Housing Near City Center indicator can sum the number of dwelling units for parcels that have a value of one. To calculate the number of dwelling units within a walkable distance of city centers similarly, the wizard set up several dynamic attributes with formulas used to calculate the developed Land Area per 1000 indicator. 360 Indicators is a great way to add content to your analysis and explore a wide variety of indicators for your study area.

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The wizard automatically creates these new indicators along with supporting indicators, assumptions, attributes, and charts. To learn more about using the 360 Indicators Wizard, please look for the other 360 Indicators videos in the video tutorial gallery. Thank you for watching this Community Viz video Tutorial. For more video tutorials and Community Viz resources, please visit the website.