##### [00:00:00.430] - Speaker 1

In this demo, I'd like to show you the community vis Scenario 360 buildout Wizard this is a very popular component of Community Viz. Build out is a commonly performed planning analysis in which you calculate how many buildings could be built on your land according to current land use right regulations. I started with a simple conceptual land use plan for a proposed development site. The Build Out Wizard takes this data and some input settings to create final land use layout and building points representing a potential future scenario for development of this site. You can see these output layers in my table of contents in the layer grouping called Build Out.

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The buildings layer is made up of residential, mixed use and commercial buildings represented as colored dots on the map below. These points are land use features, but you'll note that no buildings were built on the pond area of the map. In fact, if I turn off my original conceptual land use layer, you can actually see where the layer was clipped by the pond areas. Build Out Wizard also summarizes the total development potential for my project in these handy charts. This shows me how many dwelling units could be built and how much floor area could be built.

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And there's also a very nice report available in my reports list that tells me all about my Build out results. Running a build out analysis is relatively straightforward. You will need at a minimum, some land use features like our conceptual land use layer and associated densities for each. I find it helpful to have a table of my use and densities before I even begin a project. This data all gets input into the Build Out Wizard, which I can find in the Scenario 360 Drop down tools.

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You will notice that there is an advanced version of the Build Out Wizard which I will click so you can see some of the advanced settings. The wizard has several components starting with Numeric, which does the math. So in this case it is set to my conceptual land use layer and the field land use stores the land use designations in this layer. This screen shows my density rules. For example, for commercial and mixed use densities, I have set floor area ratios.

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And then for residential, I set dwelling unit densities, most commonly in dwelling units per acre. But there are a number of ways to define density in both residential and nonresidential areas of my map. There is the ability to include mixed use both in terms of within a site and within a building. If you do set up mixed use within a building, you can give it even more specific values, like what percent of floor area is used for each building. Mixed use is always optional.

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You can put in efficiency factors if you want, which simply reduces your total number of buildings by a percentage. This isn't always necessary because in Community Viz you can actually do more careful calculations using our spatial build out. But this is another way to approach it if you prefer. This shows more about the building layout which again is totally optional. This screen here is rather important.

##### [00:02:52.770] - Speaker 1

It's constraints to development. Remember on the map I had some pond areas perhaps in my land use regulations. I have a rule that says you're not allowed to build on ponds. Pretty logical. So fine.

##### [00:03:04.450] - Speaker 1

I can specify that here in this screen, I told it no building on ponds. Since I had some existing buildings, I subtracted them out here and that's pretty much the end of numeric build out. Continuing on the spatial build out you can see how those points were placed on the map. To do that is not too hard. You just have to tell it some rules.

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Like if you want to specify a minimum separation distance between buildings or different layout patterns. You can follow roads as I've done in some areas here, or you can do a grid or a random layout. And if you want to do something like step back from roads, you can do that as well. You can choose to have your building set up as points or as footprints. I'm using points.

##### [00:03:45.290] - Speaker 1

You can also go on and do some set up for 3D visualization. I'm not going to do that in this demo. So I'll finalize with the screen here. When running build out I have the option to override previous runs or build a new scenario for comparison. Thus I can always come back and make smaller or large refinements.

##### [00:04:00.970] - Speaker 1

And depending on what I've changed, I can set up scenarios to track the differences between runs. So that's a very short introduction to a very powerful tool within Community Viz called the Build Out Wizard.