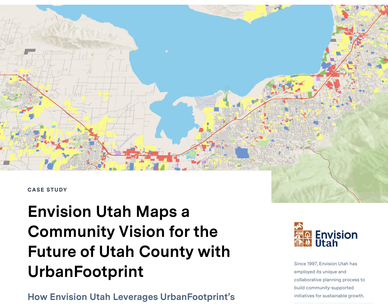

CASE STUDY

Envision Utah Maps a Community Vision for the Future of Utah County with UrbanFootprint

How Envision Utah Leverages UrbanFootprint's Robust Scenario Planning Capabilities

Established in 1997, Envision Utah engages businesses, government agencies, community leaders, and local residents to build a strategic and sustainable vision for Utah, covering key planning issues like air quality, education, agriculture, transportation and more. In 2018, Envision Utah launched the Valley Visioning project to create a community-supported vision for growth in Utah County, one of the fastest growing counties in the U.S. Valley Visioning was the first major project in which the nonprofit used UrbanFootprint for its mapmaking and scenario planning. Specifically, they leveraged the platform to create different land use scenarios of the expected growth targets, and then presented the scenarios to the public for feedback.

Compared to their former toolset, the Envision Utah team found that UrbanFootprint dramatically streamlined the entire planning process, as Vice President of Planning Ryan Beck explains: "UrbanFootprint is the perfect tool for the job we do. We're able to create numerous land use scenarios, measure the impacts and benefits, and easily share the results with our community members and let them decide based on the outcomes. It's extremely important for us to empower them as decision makers." Until the Valley Visioning project, the nonprofit had used a combined system of desktop GIS and spreadsheets for its scenario planning. But that process has always demanded a steep learning curve and been altogether unwieldy, whereas the team found UrbanFootprint to be intuitive and easy to use, allowing them to get up and running in half a day.

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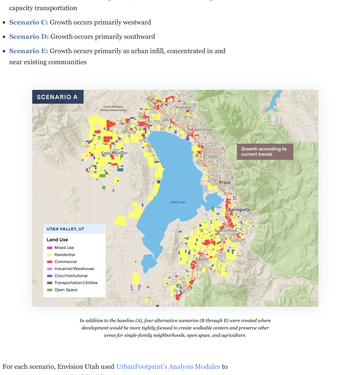
>
> **Ryan Beck, VP of Planning at Envision Utah**



To illustrate curious growth outcomes, the Envision Utah team created five scenarios in UrbanFootprint.

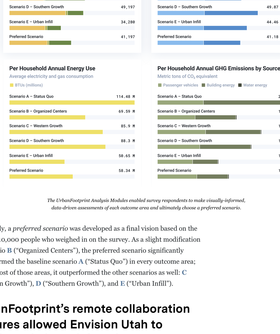
Envision Utah used UrbanFootprint to build and analyze multiple land use scenarios and present their potential impacts to the community

In anticipation of Utah County's projected growth of one million people by 2065, the Valley Visioning project set out to explore various development strategies and ask residents and stakeholders to review and vote for their preferences through an online survey. The ultimate goal was to inform policy makers and leaders of which strategies resonate best with the public as ways to achieve the most desirable outcomes.

To illustrate the various growth outcomes, the Envision Utah team created five scenarios in UrbanFootprint. In Scenario A below, growth trends from the last 20 years would continue. In this scenario, future development spreads out indiscriminately, consuming vacant valley land to the west and south, building plentiful parking and large lots, and transitioning agricultural land to homes and businesses.

In addition to that baseline scenario, four alternative scenarios (also illustrated below) were created where development in all cases, conversely, would be more tightly focused to create walkable centers and preserve other areas for single-family neighborhoods, open space, and agriculture:

- Scenario B: Growth occurs in organized, mixed-use centers near high-capacity transportation
- Scenario C: Growth occurs primarily westward
- Scenario D: Growth occurs primarily southward
- Scenario E: Growth occurs primarily as urban infill, concentrated in and near existing communities



In addition to the baseline (A), four alternative scenarios (B through E) were created where development would be more tightly focused to create walkable centers and preserve other areas for single-family neighborhoods, open space, and agriculture.

For each scenario, Envision Utah used UrbanFootprint's Analysis Modules to project outcomes in each of the following areas:

- Agricultural and open space lost to new development
- Residential and commercial water consumption
- Residential and commercial energy use
- Outdoor water use
- Building and water greenhouse gas emissions

The Analysis Modules provided the Envision Utah team the wide range of metrics they needed to analyze the outcomes in each area and ultimately saved them considerable time on analysis. As Beck points out, "UrbanFootprint's Analysis Modules have been extremely valuable for us. We're able to quickly demonstrate the spatial distribution of populations and jobs across multiple scenarios and measure additional metrics like transit access to jobs, walk access to parks, risk and resilience, emissions, and more."

Based on the projected outcomes that the Analysis Modules enabled Envision Utah to generate, respondents to the Valley Visioning survey were able to make visually-informed, data-driven assessments of each outcome area. Following are examples of how the different scenarios compared in terms of undeveloped land consumed, average annual water and energy use, and annual building emissions of greenhouse gases.

The UrbanFootprint Analysis Modules enabled survey respondents to make visually-informed, data-driven assessments of each outcome area and ultimately choose a preferred scenario.

Ultimately, a preferred scenario was developed as a final vision based on the input of 10,000 people who weighed in on the survey. As a slight modification of scenario B ("Organized Centers"), the preferred scenario significantly outperformed the baseline scenario A ("Status Quo") in every outcome area; and in most of those areas, it outperformed the other scenarios as well: C ("Western Growth"), D ("Southern Growth"), and E ("Urban Infill").

UrbanFootprint's remote collaboration features allowed Envision Utah to continue their work from home

Beyond streamlining and enhancing their scenario planning, Envision Utah recently realized some additional benefits to using UrbanFootprint. As the COVID-19 pandemic limits our ability to work in close proximity, the team is able to continue its work on Valley Visioning and other projects, thanks to the platform's remote collaboration capabilities.

Because of UrbanFootprint accessibility from anywhere online, team members have been able to view and edit planning projects simultaneously, boosting the efficiency of their collaborative process. As Envision Utah Associate Planner Cody Lutz notes, "UrbanFootprint's web-based platform has been a huge plus for our team. We can sign on from anywhere to easily map and access data without having to download giant shapefiles all the time. The collaborative aspect has also been super helpful when we want to review each other's work, since it's not saved locally. UrbanFootprint has definitely helped our work from home workflow."

Their ability to work from anywhere and collaborate remotely, combined with the speed and flexibility afforded to them in their scenario planning, has helped Envision Utah to focus more of their efforts on empowering community stakeholders and residents to make informed choices for the state of Utah's future.

Envision Utah

Since 1997, Envision Utah has employed its unique and collaborative planning process to build community-supported initiatives for sustainable growth.

envisionutah.org