

## TURNING ISSUES AND VALUES INTO DATA



How do we transition from a discussion of values and issues into measurements? A key piece of the puzzle is the concept of “trade-offs” and how these related variables can then be measures. For example, there is a relationship between growth patterns and the protection of open lands. If people live closer together and develop less land, there may be more access to views, wildlife and open lands for recreation and agricultural uses. Some of these trade-offs are measurable.

Residential development, typically, does NOT pay for itself; it generally costs more to provide services and infrastructure to homes than they generate in property taxes. The opposite is true for commercial development, agricultural land, and open lands, which bring in roughly three times more revenue than they require in services. These relationships among competing values, trade-offs and measurements provide a platform for communities to have a more objective dialogue about achieving their stated goals and values, and exploring alternatives development patterns. Data and modeling tools allow us to explore and measure trade-offs and facilitate healthy community dialogue.

### LINKS FOR TURNING ISSUES AND VALUES INTO DATA:



**“Measurements that Matter”** (Envision Utah, 2011)



**“Scenario Planning Guidelines”** (Oregon Department of Transportation, Draft 2011)

## BASELINE PROJECTION



A baseline scenario tells a story of how a regions and communities may change over a specified time period if current policies and practices continue. Often, a baseline simply projects the development patterns of the recent past into the future. A baseline provides a point of reference to compare ideas generated by the public. Baselines help participants ask themselves if the community is heading toward a desired future, or if some changes are in order. This acts as the control—helping residents to understand the relative advantages and disadvantages of alternative scenarios that are developed in the next phase of the process.

A baseline analysis may include: projection of land development, anticipated housing characteristics, air quality, traffic congestion and water consumption. The baseline analysis may also include an estimate of the market demand for various housing types into the future.

Another way to anticipate growth is to develop a build-out projection, which represents the total number of homes that may be built if growth follows current trends. A build-out projection is developed by totaling the current number of homes, approved subdivisions, and remaining units that could be built based on current zoning and future land-use plans.

### LINKS FOR BASELINE PROJECTION:



**"Envision Morgan, Your Valley Your Vision"** (Envision Utah, 2008) - [Chapter 1—Introduction](#)



**"Envision Cache Valley"** (Envision Utah, 2010) - [Chapter 2—Public Process](#)



**"2008 Utah Baseline"** (Governors Office of Planning and Budget, 2008) - [Complete Report](#)



**"Wasatch Choices 2040 Housing Demand Analysis"** (Economic and Planning Systems Inc., 2005)



**"Creating Building Prototypes"** (Fregonese Associates)



**"High Plains Initiative (WY) Baseline Analysis"** (Envision Utah, 2010)



**"Envision Cache Valley Baseline Scenario Simulation Video"** (Envision Utah, 2010)

## DATA SETS



Our scenarios and our future vision are reliant on the data we use. Finding the right data sets, managing those data sets, and using them appropriately with the right tools is akin to any other trade: gardening, construction, carpentry, etc. The quality of the product and our ability to communicate effectively depend on the effective management and use of data.

Key data sets for scenarios planning relate to the three-legged stool of sustainability: environment, community, and economics. More specifically, we need data on demographics (population projections, household size, etc.); environmental constraints (wetlands, waterways, steep slopes, soil type, etc.); housing/land use (parcel data, assessor's data, housing surveys, census information, land use and zoning); transportation (travel patterns, transportation infrastructure and traffic reports); and political boundaries (cities, towns, counties, state and federal lands, etc.). As we layer this information, we begin to get a complete picture of current conditions and we can begin constructing a "baseline" projection of things like growth, development, transportation, and environmental impact.

### DATA SET LINKS:



**"Data Gathering for Scenario Planning"** (Fregonese Associates)



**"Creating Building Prototypes"** (Fregonese Associates)



**"Market Research Excel Worksheet"** (Fregonese Associates)



**"GIS Data Set Worksheet - Example"** (Envision Utah, 2011)

## MODELING TOOLS



Planners increasingly use computer models to evaluate the long-term impacts of today's land-use and transportation decisions, and developers and lenders use models to assess the financial viability of projects. Armed with modeling tools, stakeholders can operate from a common set of data, find ways both private and public interests can benefit, and make decisions based on an understanding of how a particular development will affect the developer, the neighborhood, and the region as a whole.

The GIS-based software package Envision Tomorrow (ET) puts powerful tools in planners' hands to design and test land-use and transportation decisions. Cities and regions can use ET to examine possibilities at a range of scales. Whether considering how to maximize growth around transit or to identify development and redevelopment priorities, ET provides planners with an easy-to-use, analytical decision making toolbox.

Cities and regions all over the United States are using ET. Chicago uses the tool to conduct housing studies; Baton Rouge is analyzing future growth scenarios. The Southern California Association of Governments is examining the potential for emissions reduction through different land use policies. In Portland, the regional government is refining their ability to test land use and transportation policies through scenario planning. Smaller cities like Waco, Texas and Mountlake Terrace, Washington have found Envision Tomorrow to be a valuable addition to their planning toolbox.

### LINKS FOR MODELING TOOLS:



**"Urban Planning Tools for Climate Change Mitigation"** (Lincoln Institute of Land Use Policy, 2009)



**"Scenario Planning with Envision Tomorrow"** (Fregonese Associates, 2011)



**"Envision Tomorrow - Sample Data Requirements"** (Fregonese Associates, 2011)