TREASURE VALLEY

GROWTH SCENARIO
ANALYSIS

FINAL REPORT

Prepared for:
Treasure Valley Futures Project

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Introduction

DEFINING THE TREASURE VALLEY FUTURES PROJECT

The Treasure Valley Futures Project, funded by a grant from the Federal Highway Administration, has provided the Treasure Valley with various opportunities to examine the critical relationships between population and employment growth, transportation investment, and the changing character of the valley. This innovative project has been led by a diverse and broad-based consortium of interests from throughout the two-county region including: local elected officials; local, regional, and state agencies; concerned citizens; non-profit groups, and state universities. A wide variety of activities have been completed under the auspices of this grant, including informational presentations to almost every city council and planning and zoning commission as well as to both county commissions; hands-on workshops where citizens developed alternative growth scenarios for specific places in their communities; a forum to identify barriers preventing the region from growing in a more cohesive manner, preparation of a tool kit providing policy options for local communities; and an analysis of future growth scenarios illustrating the various impacts and implications of different growth patterns within the valley. Appendix A details the Treasure Valley Project history, and Appendix B names the various groups and their participating members that were involved. In all, over 35 people participated directly in a technical advisory capacity, and over 25 participated in a policy advisory capacity. Many more citizens were involved through subcommittees and the public process. The results of the project will continue to multiply long after the grant itself has expired. Appendix C describes the methodology and assumptions used to estimate land supply for the region. Appendix D outlines the methodology and assumptions used to create the land use allocation model.

WHY CONDUCT A GROWTH SCENARIO ANALYSIS

This report is the final work product of the Treasure Valley Futures Project. The primary intent is to define three possible scenarios for future growth in the valley and to evaluate these scenarios in comparison to each other as well as to consider how these possible “futures” compare to the vision Treasure Valley communities have defined for themselves through their comprehensive plan goals and the goals of the Treasure Valley Partnership. None of the three scenarios should be considered a “prediction” of the actual future but they all illustrate various aspects of what could happen. By identifying the various implications of each scenario and comparing the three, it becomes possible to see why and how various local policy decisions can and do have significant implications for individual communities and the valley as a whole.
WHAT ARE SCENARIOS AND HOW WERE THESE SCENARIOS DEVELOPED

In looking at future growth in any given place there are two fundamental questions that must be asked:

1. How much total new growth will occur, including population growth and employment growth?
2. Where will this new growth be located?

To answer the first question about how much growth is likely to occur, entities interested in predicting future growth typically use complicated statistical models to forecast increases in population and jobs. Often forecasts are developed by one group, like the Federal Government or the State of Idaho, and then other groups use these numbers to generate additional or more specific projections. For example, the State of Idaho generates long-range population and employment growth projections for the entire state. Idaho Power, which needs to plan its long-term investment in infrastructure, uses these statewide projections to create growth projections for each county in the state. COMPASS, the regional planning organization in the Treasure Valley, takes the Idaho Power projections done at the county level and assigns growth to even smaller areas to assist with specific transportation planning activities. As part of the COMPASS process, the Idaho Power population and employment projections are reviewed with staff from all of the local jurisdictions in the valley, with elected officials, and with other experts. As a result of this process COMPASS establishes a single set of growth projections for each community that becomes the standard planning tool all communities use to understand how much future growth they are likely to experience in a 20 to 25 year timeframe.

Because there is clear political consensus around the process for developing population and employment projections in the Treasure Valley, this report does not attempt to recreate a new set of projections. Instead, the focus of this report is on the second question – where new growth will be located using three growth “scenarios.”

A scenario is an educated guess about how future events could unfold, but unlike forecasts which are developed using standard statistical modeling techniques that quantify outcomes, scenarios illustrate ways in which various factors can converge to create a more complete picture of the future. Most planning efforts using scenarios start with a common set of underlying assumptions about the future, such as population growth projections, and create multiple plausible concepts about how these assumptions could play out under different sets of circumstances.

As this report will illustrate, scenarios are a critical planning tool for the Treasure Valley because where growth occurs, or what patterns growth creates, can have more profound implications for communities than the actual amount of development. A relatively small degree of growth in an area can impact its look and feel more than a larger amount of growth that is accommodated in a different manner. Therefore, strategies for “managing growth” that only focus on the overall amount of growth or the rate of growth in a particular community
rarely have the desired outcome, which is to minimize the negative impacts of change. Strategies for managing growth that focus on making high-quality communities able to accommodate change without sacrificing individual community character and quality of life, and that focus growth in locations best suited for it, can minimize negative impacts much more effectively.

The Treasure Valley Futures project chose to consider three specific growth scenarios that bracket a reasonable range of options for where and how future growth might occur. Two of the scenarios, Scenarios 1 and 2 as described below, focus on potential 20-year growth patterns for 2000-2020. Both of these scenarios assume the same amount of household and employment growth using COMPASS projections from 1998 but distribute this growth throughout the region in very different ways. The third scenario illustrates how each community would grow based on existing land use policies in its Comprehensive Plan until all available land has been developed and the community is “built out.” Because buildout is not based on any timeframe, nor is the absolute amount of growth a community could accommodate linked to any type of population or employment forecast, this scenario is more hypothetical than the others; but this scenario does reflect the ultimate implications of current local land use policy which is also a useful point of comparison with the first two scenarios. A detailed description of each scenario is presented below:

Scenario 1: COMPASS 2020 Ada/Canyon County Transportation Model 1998 (COMPASS Scenario) – Periodically COMPASS develops a Transportation Improvement Plan (TIP) for the Treasure Valley based on long-range population and employment projections. These growth projections are assigned to actual subareas within the valley called traffic analysis zones (TAZs) to test future travel demand and to assist in making decisions about where future transportation improvements should be made. The process of determining how much growth is likely to occur in each TAZ is done by COMPASS staff based on input from each community’s Comprehensive Plan as well as extensive review by local experts and elected officials to ensure that factors, such as political and market constraints, have been taken into account. While this TAZ-based growth projection is not intended to act as a regional “top down” plan, it does represent one comprehensive vision of how the valley could grow. The land use assumptions used to create the scenario used in this report were developed in 1998 and were the most current assumptions when the Treasure Valley Futures project was started. COMPASS is currently in the process of developing an updated projection that will be available later in 2002.

Scenario 2: Unconstrained Current Trend Through 2020 (TVF Scenario) – This scenario shows where future development would occur in the Treasure Valley by 2020 if the growth patterns from 1994 through 2000 were to continue for the next 20 years. In this case statistical modeling was used to determine a set of factors that predict how much growth is likely to go to each TAZ within the valley. Key factors include available land supply, the presence of existing similar development, and transportation...
accessibility. This scenario assumes no major redevelopment of existing
developed areas, no development on steep slopes, no development on
federally owned land or land owned by other major public institutions,
and no development in floodplains or other environmentally sensitive
lands. All other land, including land currently in agricultural uses was
considered available for development without regard for any existing
land use policies. A more detailed description of the methodology for
determining land available for development and for assigning growth by
TAZ is included in Appendix C.

Scenario 3: Comprehensive Plan Policy Buildout (Comp Plan Scenario) –
Under this scenario the total amount of development permitted by the
land use policies/objectives in each community’s comprehensive plan
was calculated based on allowable development densities. This scenario
shows the total amount of future development that is permitted within the
current public policy framework for the Treasure Valley. There is no
timeframe or population and employment projection serving as the basis
for this scenario. Available land supply assumptions used to derive
potential buildout are shown in Appendix C.
Looking at Patterns in the Treasure Valley

The unique character and sense of place that people identify as the Treasure Valley is made up of both natural and man-made features. This is a place framed by mountains and foothills and shaped by rivers and streams. People have added their own complex overlay on the natural environment including canals, farms, roads, houses, and work places, as well as cultural institutions like schools, community centers, and government buildings. Together these elements make a place that is different from any other place, reflecting a distinct history and a particular way of life. Planning for the future must build on these important features without destroying the qualities that make the Treasure Valley special.

To help preserve what is special about the valley while acknowledging the inevitable process of growth and change, it is critical to understand and think about this area in two ways. One is to see the valley as a single place, or region, made up of interconnecting systems; the other is to recognize the importance of individual or local places within this regional framework. At both the regional and the local level the interaction between the built, cultural, and natural environment combine into a series of physical patterns that can best be understood by looking at maps.

A series of six “physical structures” maps (see pages 11-16) have been developed as part of the Treasure Valley Futures project to provide a new framework for understanding key valley patterns. At first glance, these maps seem to be the traditional resource inventory of natural and built systems and uses. But, in fact, these maps have bundled various electronic databases into a structured format designed to accentuate patterns of combined local natural and cultural resources together in a single representation. The maps are also designed to make various types of resource data “spatial” such that people can begin to see and understand how to use this information at both the regional and local scale.

The primary goal of these maps is to illustrate the basic “valley urban landscape ingredients,” those natural and cultural systems and assets that shape the form and vitality of the Treasure Valley. They combine the formal, spatial and functional aspects described by citizens as those critical characteristics and qualities of Treasure Valley. These maps can serve as a point of departure from which to begin the process of adding new information, sharing data, identifying critical areas and emerging new traits to understand existing land use patterns in the valley and facilitate future planning at both the local and regional scale.
THE PHYSICAL STRUCTURES MAPS

The physical features map set consists of six maps, organized around three themes. The themes are -- Valley Rooms, Valley Urban Landscapes and Valley Movement. The design of each map seeks to render three characteristics:

To describe the built up centers and the physical edges of Treasure Valley,

To describe how each local community sits within the diverse form and structure of the valley, and

To describe the fundamental systems, both natural and manmade, and key facilities that define the basic spatial and functional relationships among the valley communities.

Each category is viewed from two scales -- the valley as the whole region and the individual communities, or local scale, within the valley. The data has been shaped to accentuate key elements critical to making smart growth and livable community planning and development decisions. Therefore some information is repeated or formatted in an atypical manner, or some systems are separated to heighten their importance. These maps are to be seen as overlays, such that various combinations of assets and issues can be generated for discussion.

1. VALLEY ROOM

One of the primary goals of this map study is to illustrate how the various communities of the Boise metropolitan region are located on the center plain and within the boundaries of the place called "Treasure Valley". In the past the term has referred to a loose aggregation of municipalities located along the Boise River and in the adjacent agricultural landscape. As the area gains in population and increased sprawl, defining this giant geomorphic and cultural urban landscape space as a specific room becomes critical to setting regional and local growth policy. This approach generates two results. The first is to identify those common characteristics that link the local communities together into a Treasure Valley region. (Map 1) The second is to show how this "common urban landscape room" called Treasure Valley is topologically different for each community. This is vividly clear when one sees how each community differs in its relationship to the diverse pattern of the local geomorphology and soil structure. (Map 2)

Map 1. The Community Valley. Treasure Valley's boundary is defined by surrounding foothills and main line canals. Its center is a combination of terraces (commonly called benches) and creeks/rivers, floodplains crisscrossed by a network of canals, and ditches. The valley's diverse terrain offers numerous prospects, view sheds, habitat corridors, broad plains and protected groves. The valley terrain has become critical to a local community's "civic" identity. The collective terrain is a signature environment for the diverse communities contained in the Treasure Valley. For example most valley citizens call out the panoramic views, easy access to rich habitats and a range of recreational environments to define the valley. They are landmarks to commuters using the
regional movement systems. Its continued visual presence underpins resident perception of the valley’s high quality of life.

Map 2. Community Boundaries. This map adds to the map described above. By placing the municipal boundaries of each community over the valley morphology one begins to see how the basic community spaces overlay the diverse geography contained within the valley. The downtown centers of each community denote their historic beginning points and centers of activity. This map also illustrates the importance of recognizing the “community valley” features at the local level, because many community boundaries cross the regional-scale features. Examples of this include the Boise River and the topographic benches.

2. Valley Urban Landscapes

The Treasure Valley receives about 12 inches of precipitation annually. The verdant landscape of agriculture and river riparian woods have been dependent upon the wise management of limited water resources, through natural and constructed waterways. “Bois” is the French word for forest or grove. This word inspired early settlers to name the state capital “Boise” after the stands of trees growing from the water systems of the valley. To many residents Treasure Valley is a community oasis amid the dry landscape of the Western Snake River Plain and Great Basin.

Rather than combining both the waterways and landscape network in one map, they have been separated for two reasons. The first is to reinforce the fact that it is the waterway system, both above and below the surface that shapes community form and quality of life. (Map 3.) The second is that the landscape of parks and natural habitats is predicated upon this waterway system. (Map 4.) The separation of these two interrelated waterway and network systems highlights that resources are managed, design and planned by fundamentally different agencies and departments. Typically the waterway is an engineered utility or public work and the landscape network parks and habitat as a parks, recreation, and schools.

Map 3. Community Waterways. The intention of this map is to show the waterway system as a unified system. When in fact it is a complex composite of watershed and irrigation district authorities. Also the waterway system has a full range of water quality issues and hydrological processes. This map has been designed to begin the process of connecting this fragmented pattern of districts and processes into a Treasure Valley system, serving local and down river valley needs. Also it shows how the waterway and accompanying open space system afford cross-valley pedestrian and habitat flow and movement. This map shows how the waterway system brings the possibility of oasis or “bois” to each community. The waterways give the valley its meaning as a place to live and work.

Map 4. Community Landscapes. As the valley begins to fill in with development, the waterway system will have to evolve from an agricultural supply and drainage system into a community civic infrastructure system providing basic
water supply, neighborhood landscape and habitat network. The map begins to show how the valley accommodates a diverse range of uses such as a variety of agricultural production, recreational activities and environmental habitat. These uses are community landmarks as well. It begins to show the potential for intra-neighborhood connections to public facilities, services and neighborhood nodes.

As each city adds and improves its waterways, parks, school grounds and environments, this map can be updated to show how these individual acts begin to add up into a Treasure Valley landscape.

3. **Valley Movement**

In the Treasure Valley the following maps show that there are two scales of interrelated movements systems to address the underlying issue that any system will have to balance transportation modes along key corridors to eventually serve a diverse population living in a varying geography. The two are intra-valley and intra-community.

An intra-valley movement system is composed of principal transportation corridors and transit systems that are designed to move commuters across the valley from community to community to work and regional goods, services and entertainment, as is illustrated in Map 5. An intra-community movement network is composed of minor transportation corridors and local transit system moving residents between work, home and local good and services, as is illustrated in Map 6. The word network refers to the nature of the trip, which tends to be a loop with a set of multiple destinations. This is different than the word system, which is used to refer to the movement trip pattern of commuters and other primarily single-purpose trips moving between activity centers.

Besides moving automobiles, services vehicles, trucks and transit vehicles, the movement systems serve an additional function as a primary valley open space, recreational and habitat network. These movement facilities are gigantic environments that need to be planned and designed to enrich the valley environment and support the context of the valley “room.”

**Map 5. Valley Movement Network.** This map illustrates those primary transportation systems connecting different communities in the region to each other, and connecting the valley to the rest of the state and beyond. It shows the potential for primary cross-valley connections as a hierarchy of principal transportation corridors and transit serving mixed-use regional activity centers. It is possible to envision how certain sections of the region’s principal transportation corridors currently function as – or could one day become – community activity corridors.

**Map 6. Community Movement System.** This map shows the variety of local transportation corridors connecting places from town to town and neighborhood to neighborhood, making intra-town or community connections using minor corridors and transit supportive mixed-use neighborhood nodes. This map illustrates how this fabric of minor transportation corridors is beginning to add up to a valley system while also serving a variety of local traffic...
circumstances. For example in some towns minor transportation corridors are main streets of neighborhoods in others they are central corridors passing through habitats.
Map 1: The Community Valley

Treasure Valley Futures
"The Community Valley"
Map 3: Community Waterways
Map 4: Community Landscapes

Treasure Valley Futures
"Community Landscapes"
Comparing The Scenarios – Where Growth Would Go

This chapter is divided into four basic sections, ‘Land Supply’, ‘Residential Growth’, ‘Employment Growth’ and ‘Jobs and Housing’. The first section profiles the current land supply and recent residential land consumption trends in the Treasure Valley in order to better understand where and how quickly residential development has been occurring from 1994 to 2000. The second section evaluates the magnitude and density of future housing unit production in different Treasure Valley sub-regional areas, and the type of vacant land that would be used up or “consumed” as a result of housing development under the three different scenarios. The third section then takes a close look at where and what type of employment growth will occur under the TVF and COMPASS scenarios. The final section explores the relationship between jobs and housing.

The sub-regional areas of the Treasure Valley were created in order to identify distinct development trends and likely future outcomes within the region. The basic unit of analysis for these scenarios is the traffic analysis zone (TAZ). Some of the smaller towns and cities in Canyon County are not called out individually in the quantitative analysis because the boundaries of the traffic analysis zones (TAZs) do not conform to the boundaries of the impact areas for these municipalities. Because of this data limitation Parma, Wilder, Greenleaf, Notus, and Melba have been incorporated into one of the rural sub-areas of Canyon County.

SCENARIOS OVERVIEW

The housing and employment growth projections outlined in this chapter – COMPASS, TVF, Comp Plan – were derived according to three different methodologies. The main objective in comparing the three projections sets to each other is to better understand the physical development implications resulting from the land use policies that form the basis for each projection set.

The COMPASS scenario uses growth projections that are assigned to TAZs within the valley to test future travel demand and to assist in making decisions about where future transportation improvements should be made. The process of determining how much growth is likely to occur in each TAZ is done by COMPASS staff based on input from each community’s Comprehensive Plan as well as extensive review by local experts and elected officials to ensure that factors, such as political and market constraints, have been taken into account. The land use assumptions used to create the scenario used in this report were developed in 1998 and were the most current assumptions when the Treasure Valley Futures project was started.

The TVF scenario shows where future development would occur in the Treasure Valley by 2020 if the growth patterns from 1994 through 2000 were to continue for the next 20 years. In this case statistical modeling was used to determine a set of
factors that predict how much growth is likely to go to each TAZ within the valley. Key factors include available land supply, the presence of existing similar development, and transportation accessibility. This scenario assumes no major redevelopment of existing developed areas, no development on parcels with excessive slope, no development on federally owned land or land owned by other major public institutions, and no development in floodplains or other environmentally sensitive lands. All other land, including land currently in agricultural uses was considered available for development without regard for any existing land use policies.

The Comp Plan scenario uses current comprehensive plan development densities to arrive at a conceptual future buildout number based on existing developable land supply. The total amount of development permitted by the land use policies/objectives in each community’s comprehensive plan was calculated based on allowable development densities. This scenario shows the total amount of future development that is permitted within the current public policy framework for the Treasure Valley. There is no timeframe or population and employment projection serving as the basis for this scenario.

**LAND SUPPLY**

Perhaps one of the most fundamental outcomes of the analysis is to quantify the supply of available land to accommodate the future growth pressures faced by the Treasure Valley. By showing the land consumption trend and the remaining development potential within the region a realistic vision of the magnitude and spatial distribution of future development in the valley can be formed.

**LAND CONSUMPTION TRENDS 1994-2000**

Recent land use consumption trends and their relationship to household growth represent the first step in characterizing the growth pressures that will continue to challenge the region. The land consumption trend documents very clearly the actual impacts resulting from the intersection of current local land use policies and the household and employment growth that has occurred in the Treasure Valley. This section documents the amount of land in the Treasure Valley that was utilized for residential construction between 1994 and 2000. As shown in Table 1 below, the amount of acreage in residential land uses increased by a substantial 33 percent in just six years, between 1994 and 2000. The fact that the number of households in the region increased by only 46 percent over the past ten years according to the 2000 Census seems to indicate that individual households on average are occupying more space than they did in the past. Indeed, growth figures presented in the Residential Growth section below show that the number of households in the region increased by only 24 percent between 1996 and 2000. The numbers below hint at a sprawling trend as new housing is built at average lower densities than the existing housing stock. Furthermore, as Table 1 also shows, rural areas and small cities are really driving this rapid regional land consumption as these areas explode with lower density development on previously vacant land.
Table 1: Residential Land Consumption by Type of Place, 1994-2000

<table>
<thead>
<tr>
<th>Place Type</th>
<th>Acres in Residential Land Use</th>
<th>Additional Res. Acres '94-'00</th>
<th>Percent Increase '94-'00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>35,579</td>
<td>43,430</td>
<td>7,851</td>
</tr>
<tr>
<td>Small Cities</td>
<td>4,835</td>
<td>6,913</td>
<td>2,079</td>
</tr>
<tr>
<td>Rural</td>
<td>23,013</td>
<td>33,789</td>
<td>10,776</td>
</tr>
<tr>
<td>Total</td>
<td>63,426</td>
<td>84,132</td>
<td>20,706</td>
</tr>
</tbody>
</table>


While the table above illustrates the 1994 and 2000 residential acreage totals and the proportional increase in residential acreage during that time period, the figures below illustrate how the valley’s 1994 residential acreage and the 1994-2000 incremental increase in residential acreage is distributed within the region. As shown in Figure 1 and Figure 2 below, although metro areas of the valley contained well over half (56 percent) of the region’s total residential land supply in 1994 these areas experienced a much lower share (38 percent) of the incremental increase in residential acreage between 1994 and 2000. Conversely, rural areas of the valley contained a much lower share (36 percent) of the region’s total residential land supply in 1994 received 52 percent of the incremental increase in residential land between 1994 and 2000.

Figure 1: Treasure Valley Residential Acreage by Type of Place, 1994
A more detailed accounting of land consumed for residential uses reveals that rural areas of the counties adjacent to the existing metro cores of the valley are receiving the majority of continuing sprawling development. As shown in Figure above and detailed in Table 2 on the following page, over half (almost 11,000 acres) of the residential land used up between 1994 and 2000 was in rural areas of the region, followed by metro areas (almost 8,000 acres) and small cities (around 2,000 acres). Although the small cities of Eagle, Kuna, Star and Middleton all added residential acreage at a greater rate between 1994 and 2000 than the region as a whole, their expansion is dwarfed by the increases that occurred for the same time period in rural areas of the valley. Rural areas grew from 36 percent of the region’s residential land base in 1994 to 40 percent of the residential land base in 2000.
### Table 2: Residential Land Consumption by Sub-regional Area, 1994-2000

<table>
<thead>
<tr>
<th>County/Region</th>
<th>Area/City</th>
<th>Acres in Residential Land Use 1994</th>
<th>Acres in Residential Land Use 2000</th>
<th>Additional Res. Acres '94-'00</th>
<th>Percent Increase '94-'00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Metro</td>
<td>26,237</td>
<td>31,452</td>
<td>5,216</td>
<td>19.9%</td>
</tr>
<tr>
<td></td>
<td>Boise</td>
<td>18,893</td>
<td>21,624</td>
<td>2,732</td>
<td>14.5%</td>
</tr>
<tr>
<td></td>
<td>Garden City</td>
<td>1,122</td>
<td>1,330</td>
<td>208</td>
<td>18.6%</td>
</tr>
<tr>
<td></td>
<td>Meridian</td>
<td>6,222</td>
<td>8,498</td>
<td>2,276</td>
<td>36.6%</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>4,472</td>
<td>6,417</td>
<td>1,944</td>
<td>43.5%</td>
</tr>
<tr>
<td></td>
<td>Eagle</td>
<td>3,181</td>
<td>4,309</td>
<td>1,129</td>
<td>35.5%</td>
</tr>
<tr>
<td></td>
<td>Kuna</td>
<td>607</td>
<td>1,125</td>
<td>519</td>
<td>85.5%</td>
</tr>
<tr>
<td></td>
<td>Star</td>
<td>685</td>
<td>982</td>
<td>297</td>
<td>43.4%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>7,956</td>
<td>12,569</td>
<td>4,613</td>
<td>58.0%</td>
</tr>
<tr>
<td></td>
<td>Central Ada</td>
<td>3,993</td>
<td>6,401</td>
<td>2,408</td>
<td>60.3%</td>
</tr>
<tr>
<td></td>
<td>North Ada</td>
<td>3,684</td>
<td>5,732</td>
<td>2,048</td>
<td>55.6%</td>
</tr>
<tr>
<td></td>
<td>South Ada</td>
<td>279</td>
<td>436</td>
<td>156</td>
<td>56.0%</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>38,665</td>
<td>50,438</td>
<td>11,772</td>
<td>30.4%</td>
</tr>
<tr>
<td></td>
<td>Metro</td>
<td>9,342</td>
<td>11,978</td>
<td>2,636</td>
<td>28.2%</td>
</tr>
<tr>
<td></td>
<td>Caldwell</td>
<td>2,910</td>
<td>3,696</td>
<td>786</td>
<td>27.0%</td>
</tr>
<tr>
<td></td>
<td>Nampa</td>
<td>6,432</td>
<td>8,281</td>
<td>1,849</td>
<td>28.7%</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>362</td>
<td>497</td>
<td>134</td>
<td>37.1%</td>
</tr>
<tr>
<td></td>
<td>Middleton</td>
<td>362</td>
<td>497</td>
<td>134</td>
<td>37.1%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>15,056</td>
<td>21,220</td>
<td>6,164</td>
<td>40.9%</td>
</tr>
<tr>
<td></td>
<td>North Canyon</td>
<td>4,206</td>
<td>6,280</td>
<td>2,074</td>
<td>49.3%</td>
</tr>
<tr>
<td></td>
<td>South Canyon</td>
<td>5,246</td>
<td>7,098</td>
<td>1,853</td>
<td>35.3%</td>
</tr>
<tr>
<td></td>
<td>West Canyon</td>
<td>5,605</td>
<td>7,841</td>
<td>2,237</td>
<td>39.9%</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>24,761</td>
<td>33,695</td>
<td>8,934</td>
<td>36.1%</td>
</tr>
<tr>
<td></td>
<td>Metro</td>
<td>35,579</td>
<td>43,430</td>
<td>7,851</td>
<td>22.1%</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>4,835</td>
<td>6,913</td>
<td>2,079</td>
<td>43.0%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>23,013</td>
<td>33,789</td>
<td>10,776</td>
<td>46.8%</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>63,426</td>
<td>84,132</td>
<td>20,706</td>
<td>32.6%</td>
</tr>
</tbody>
</table>


**Baseline Land Supply**

The baseline land supply quantifies the amount of land currently available for growth in the Treasure Valley. For a detailed accounting of the methodology used to define the region’s land supply, please refer to Appendix C. Table 3 below shows that 526,000 acres or 80 percent of the region’s total buildable land supply remains available for future development. It is important to bear in mind that even after the vacant land supply is consumed and the region is considered to be “built-out”, there is still room for plenty of intensification and additional construction through infill development and more efficient use of sites that are already developed. Not surprisingly Table below shows that the majority (88 percent) of the valley’s future development capacity is in rural areas. Most of this rural land is very likely in outlying areas where it is difficult or infeasible to deliver municipal services. However, most of the remaining rural developable land supply is considered suitable for housing construction according to current comprehensive plan land use designations from the various Treasure Valley jurisdictions.
Table 3: Regional Developable Land Supply by Type of Place, 2000

<table>
<thead>
<tr>
<th>County/Region</th>
<th>Area/City</th>
<th>Total Acres</th>
<th>Developable Acres</th>
<th>Percent Built-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Metro</td>
<td>154,698</td>
<td>128,531</td>
<td>54,820</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>22,364</td>
<td>18,900</td>
<td>10,306</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>Rural</td>
<td>888,916</td>
<td>508,528</td>
<td>460,966</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,065,979</td>
<td>655,960</td>
<td>526,092</td>
</tr>
</tbody>
</table>


Although they are substantially more developed than non-metro areas, bigger cities such as Boise, Meridian, Nampa and Caldwell still contain considerable land supply for absorbing future growth in the region. The region’s four large cities together have almost 55,000 acres of raw land that is considered suitable for development. The total land base in these cities is overwhelmingly designated for residential development according to current comprehensive plan policies, as shown in Table 4 below, which means that they may be well-positioned within the region to accommodate continuing residential growth, if infrastructure and the local political climate allow for it. In contrast to the region’s metro areas, small cities in the Treasure Valley contribute relatively little additional land capacity, with only roughly 10,000 acres of land suitable for development among them.
Table 4: Regional Developable Land Supply by Jurisdiction, 2000

<table>
<thead>
<tr>
<th>County/Region</th>
<th>Area/City</th>
<th>Total Acres</th>
<th>Developable Acres</th>
<th>Percent Built-Out</th>
<th>2000 Comp. Plan Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Developed</td>
<td>Remaining</td>
<td></td>
</tr>
<tr>
<td>Ada County</td>
<td>Metro</td>
<td>105,426</td>
<td>85,449</td>
<td>49,064</td>
<td>36,384</td>
</tr>
<tr>
<td></td>
<td>Boise</td>
<td>73,828</td>
<td>57,456</td>
<td>35,576</td>
<td>21,879</td>
</tr>
<tr>
<td></td>
<td>Garden City</td>
<td>3,176</td>
<td>2,231</td>
<td>2,147</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Meridian</td>
<td>28,421</td>
<td>25,762</td>
<td>11,341</td>
<td>14,421</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>19,496</td>
<td>16,395</td>
<td>7,673</td>
<td>8,722</td>
</tr>
<tr>
<td></td>
<td>Eagle</td>
<td>11,977</td>
<td>9,509</td>
<td>7,141</td>
<td>36,208</td>
</tr>
<tr>
<td></td>
<td>Kuna</td>
<td>3,531</td>
<td>3,102</td>
<td>1,360</td>
<td>1,742</td>
</tr>
<tr>
<td></td>
<td>Star</td>
<td>3,987</td>
<td>3,783</td>
<td>1,026</td>
<td>2,757</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>552,976</td>
<td>211,247</td>
<td>15,272</td>
<td>195,975</td>
</tr>
<tr>
<td></td>
<td>Central Ada</td>
<td>52,042</td>
<td>43,349</td>
<td>7,141</td>
<td>36,208</td>
</tr>
<tr>
<td></td>
<td>North Ada</td>
<td>111,593</td>
<td>73,151</td>
<td>7,667</td>
<td>65,484</td>
</tr>
<tr>
<td></td>
<td>South Ada</td>
<td>389,341</td>
<td>94,747</td>
<td>46,443</td>
<td>94,283</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>677,898</td>
<td>313,091</td>
<td>72,009</td>
<td>241,082</td>
</tr>
<tr>
<td>Canyon County</td>
<td>Metro</td>
<td>49,273</td>
<td>43,082</td>
<td>24,647</td>
<td>18,435</td>
</tr>
<tr>
<td></td>
<td>Caldwell</td>
<td>18,314</td>
<td>15,413</td>
<td>8,113</td>
<td>7,300</td>
</tr>
<tr>
<td></td>
<td>Nampa</td>
<td>30,959</td>
<td>27,670</td>
<td>16,534</td>
<td>11,135</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>2,868</td>
<td>2,505</td>
<td>922</td>
<td>1,584</td>
</tr>
<tr>
<td></td>
<td>Middleton</td>
<td>2,868</td>
<td>2,505</td>
<td>922</td>
<td>1,584</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>335,940</td>
<td>277,281</td>
<td>32,271</td>
<td>264,991</td>
</tr>
<tr>
<td></td>
<td>North Canyon</td>
<td>63,291</td>
<td>52,482</td>
<td>8,646</td>
<td>43,836</td>
</tr>
<tr>
<td></td>
<td>South Canyon</td>
<td>126,359</td>
<td>109,232</td>
<td>10,026</td>
<td>99,205</td>
</tr>
<tr>
<td></td>
<td>West Canyon</td>
<td>146,290</td>
<td>135,568</td>
<td>13,619</td>
<td>121,949</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>388,081</td>
<td>342,869</td>
<td>57,859</td>
<td>285,010</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>Metro</td>
<td>154,698</td>
<td>128,531</td>
<td>73,711</td>
<td>54,820</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>22,364</td>
<td>18,900</td>
<td>8,594</td>
<td>10,306</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>888,916</td>
<td>608,528</td>
<td>47,563</td>
<td>460,966</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,065,979</td>
<td>655,960</td>
<td>129,868</td>
<td>526,092</td>
</tr>
</tbody>
</table>


The largest sources of remaining developable land are: West Canyon (121,949 acres), South Canyon (99,205 acres), South Ada (94,283 acres), and North Ada (65,484 acres). These areas together comprise approximately 72 percent of the region’s remaining developable land supply, and 65 percent of the residential land supply as classified by current comprehensive plans.

RESIDENTIAL GROWTH

This section closely examines the expansion of residential land that will result from the land use policies pursued under the different COMPASS, TVF and Comp Plan scenarios. It should be noted that data are not always available for each scenario, so that in cases where data limitations do not allow for a comparison of all three scenarios, the discussion is limited to those scenarios and time frames where the data do apply.
**HISTORIC RESIDENTIAL GROWTH TRENDS**

Over the last two decades, the housing stock of the Treasure Valley increased by more than 64,000 housing units to 163,000 housing units in 2000, an increase of 65 percent over 1980 levels. Of the housing units added during this 20-year time period 33,000 units or more than half of all units, were added between 1994 and 2000. Residential growth projected by COMPASS shows a slowing residential growth pattern over the course of the next two decades with the region’s housing stock expected to increase by roughly 77,000 housing units or 47 percent, up to a total of almost 240,000 housing units by 2020.

As shown in Table 5 suburban density housing accounted for two-thirds (67 percent) of the total incremental increase from 1994 to 2000. Agricultural density housing product accounted for the smallest share of the increase (4 percent), but was the residential density class that expanded the most rapidly at a rate of 38 percent.

**Table 5: Regional Housing Production, 1994-2000**

<table>
<thead>
<tr>
<th>Density Class</th>
<th>1994 Units</th>
<th>2000 Units</th>
<th>'94-'00 Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>3,213</td>
<td>4,437</td>
<td>38.1%</td>
</tr>
<tr>
<td>Rural</td>
<td>15,345</td>
<td>19,270</td>
<td>25.6%</td>
</tr>
<tr>
<td>Suburban - Low</td>
<td>27,529</td>
<td>34,596</td>
<td>25.7%</td>
</tr>
<tr>
<td>Suburban - High</td>
<td>54,086</td>
<td>69,039</td>
<td>27.6%</td>
</tr>
<tr>
<td>Urban</td>
<td>14,860</td>
<td>16,882</td>
<td>13.6%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>14,682</td>
<td>18,406</td>
<td>25.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>129,715</strong></td>
<td><strong>162,630</strong></td>
<td><strong>25.4%</strong></td>
</tr>
</tbody>
</table>


**BASELINE HOUSING SUPPLY**

This section takes a look at the density of the existing housing in the different parts of the Treasure Valley, according to the density assumptions shown in Table 6 below.

**Table 6: Residential Density Assumptions**

<table>
<thead>
<tr>
<th>Density Class</th>
<th>Acres/Dwelling Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>2.46</td>
</tr>
<tr>
<td>Suburban</td>
<td>0.24</td>
</tr>
<tr>
<td>Urban</td>
<td>0.08</td>
</tr>
</tbody>
</table>


As shown in Figure 3 below, Treasure Valley’s baseline housing supply is overwhelmingly concentrated in the metro areas of the region with roughly 84 percent of total housing units located in the cities of Boise, Nampa, Meridian,
and to a lesser extent Caldwell. Rural areas pick up another 11 percent of the region’s housing stock and the remainder lies within small cities.

Figure 3: Baseline Share of Treasure Valley Housing Units by Type of Place, 2000

![Pie chart showing the share of Treasure Valley housing units by type of place in 2000. Metro areas have the largest share (24%), followed by suburban areas (11%), small cities (5%), and rural areas (5%).]

Figure 4 below illustrates the baseline housing unit distribution in a slightly different fashion, by grouping housing units by density and their distribution throughout the Treasure Valley. It shows that the vast majority of the total housing units in the region in 2000 were built at suburban densities, and this type of housing accounts for almost two-thirds (64 percent) of the region’s total housing stock. Well over half (57 percent) of total housing units were built at suburban densities in metro areas. Urban density housing, with 22 percent of the total, comprises the next largest component of the region’s housing stock and is located almost exclusively in metro areas. Rural density housing product, which accounts for the remaining 15 percent of the baseline housing supply, is split almost evenly between metro and rural areas.
The main story told by these numbers is one of metro areas that are dominated by relatively low-density housing development. As will be discussed in greater detail below, urban density housing is concentrated primarily in Boise, which alone has almost two-thirds (64 percent) of the housing product built at this density level. However, Boise also has more than half (55 percent) of the region’s total suburban density housing, and almost a quarter (22 percent) of the region’s total rural density housing. Suburban density housing in Boise constitutes more than two-thirds of the city’s total housing stock. The high prevalence of relatively low-density housing in the Treasure Valley’s largest city should serve as a reality check regarding the general sprawling nature of the region’s supply of housing.

As Table 7 on the following page illustrates in greater detail, the composition of the baseline housing stock by density class varies considerably between the different cities and sub-regional areas of the Treasure Valley.
### Table 7: Regional Housing Stock by Sub-County Area and Residential Density Class, 1994 & 2000

<table>
<thead>
<tr>
<th>County/Region</th>
<th>Area/City</th>
<th>1994 Housing Units</th>
<th>2000 Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ag.</td>
<td>Rural</td>
</tr>
<tr>
<td>Ada County</td>
<td>Metro</td>
<td>360</td>
<td>5,843</td>
</tr>
<tr>
<td></td>
<td>Boise</td>
<td>111</td>
<td>3,867</td>
</tr>
<tr>
<td></td>
<td>Garden City</td>
<td>1</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>Meridian</td>
<td>248</td>
<td>1,772</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>157</td>
<td>1,208</td>
</tr>
<tr>
<td></td>
<td>Eagle</td>
<td>83</td>
<td>932</td>
</tr>
<tr>
<td></td>
<td>Kuna</td>
<td>18</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td>Star</td>
<td>56</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>594</td>
<td>1,830</td>
</tr>
<tr>
<td></td>
<td>Central Ada</td>
<td>346</td>
<td>978</td>
</tr>
<tr>
<td></td>
<td>North Ada</td>
<td>189</td>
<td>809</td>
</tr>
<tr>
<td></td>
<td>South Ada</td>
<td>59</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>1,111</td>
<td>8,881</td>
</tr>
<tr>
<td>Canyon County</td>
<td>Metro</td>
<td>237</td>
<td>2,296</td>
</tr>
<tr>
<td></td>
<td>Caldwell</td>
<td>70</td>
<td>614</td>
</tr>
<tr>
<td></td>
<td>Nampa</td>
<td>167</td>
<td>1,682</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>13</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Middleton</td>
<td>13</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>1,852</td>
<td>4,083</td>
</tr>
<tr>
<td></td>
<td>North Canyon</td>
<td>367</td>
<td>1,142</td>
</tr>
<tr>
<td></td>
<td>South Canyon</td>
<td>625</td>
<td>1,489</td>
</tr>
<tr>
<td></td>
<td>West Canyon</td>
<td>860</td>
<td>1,452</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>2,102</td>
<td>6,464</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>Metro</td>
<td>597</td>
<td>8,139</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>170</td>
<td>1,293</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>2,446</td>
<td>5,913</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3,213</td>
<td>5,343</td>
</tr>
</tbody>
</table>

Source: Spatial Dynamics

**Agricultural Land Conversion Projection**

A major issue facing the Treasure Valley land supply over the course of the next two decades is the amount of agricultural land that will be converted to other land uses to accommodate expected growth under the region’s current land
use policies. An inevitable consequence of continued population growth in the absence of higher urban and suburban densities is that undeveloped lands at the fringe of metro areas will be used for residential and commercial development. Although the study team did not have the resources to estimate the amount of acreage currently in agricultural production, it was able to use property tax records and computer mapping to estimate the amount of land that could be used for farming, based on parcel size, slope constraints, and location within the region. The numbers below are only available for the TVF scenario, since comparable data was not available for the COMPASS scenario. Table 8 below shows that a little more than 5 percent of the current agricultural acreage in the region will likely to be utilized for residential growth by 2020.

Table 8: Agricultural Land Consumed by Projected Residential Growth, 2000-2020

<table>
<thead>
<tr>
<th></th>
<th>Total Agricultural Acres, 2000</th>
<th>Agricultural Acres Consumed by Residential Development, 2000-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural Suburban Urban Total</td>
<td>Rural Suburban Urban Total</td>
</tr>
<tr>
<td>Central Ada</td>
<td>36,208</td>
<td>2,859 655 36 3,550</td>
</tr>
<tr>
<td>North Ada</td>
<td>13,251</td>
<td>972 184 23 1,178</td>
</tr>
<tr>
<td>South Ada</td>
<td>94,283</td>
<td>280 295 17 592</td>
</tr>
<tr>
<td>Ada County Subtotal</td>
<td>143,742</td>
<td>4,111 1,134 75 5,320</td>
</tr>
<tr>
<td>North Canyon</td>
<td>43,836</td>
<td>3,053 384 13 3,450</td>
</tr>
<tr>
<td>South Canyon</td>
<td>99,205</td>
<td>4,453 717 30 5,199</td>
</tr>
<tr>
<td>West Canyon</td>
<td>121,949</td>
<td>6,748 590 52 7,390</td>
</tr>
<tr>
<td>Canyon County Subtotal</td>
<td>264,991</td>
<td>14,253 1,691 96 16,040</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>408,732</td>
<td>18,364 2,825 171 21,360</td>
</tr>
</tbody>
</table>


As Figure 5 below illustrates, rural residential development is expected to be the main driver in the conversion of agricultural lands to residential uses over the next two decades. Although this data is not available at the city level, the numbers show that anticipated rural residential development in Central Ada, North Ada, and North Canyon in particular will likely lead to a significant loss of agricultural lands, higher than the regional average of 4.5 percent for this particular residential density class. Similarly, suburban residential development in these same areas may consume more agricultural acreage than the regional average of 0.7 percent for suburban densities. While the absolute number of agricultural acres expected to be used for residential development may not seem especially significant compared to the vast agricultural land supply in the region, it is a considerable amount of land. Consider that more than 18,000 rural agricultural acres will be converted to housing, which is roughly one-third of the 55,000 acres of remaining development capacity of the region’s metro areas. In addition to unduly taxing the region’s infrastructure systems, rural residential housing that is constructed in agricultural areas is likely to result in extensive land use conflicts as the desires of homeowners are pitted against the economic realities of farmers working to make a living in their backyards.
Canyon County is clearly expected to lead the future conversion of agricultural acreage to residential land uses, as the figure above illustrates. Although a greater proportion of agricultural lands in Central and North Ada County will be lost to residential development than any other areas of the region, Canyon County overall will lose far more agricultural land in absolute acres than Ada County. Of the total 21,360 agricultural acres that will likely be utilized for residential development by 2020, 75 percent of them are in Canyon County. More than one-third (over 7,000 acres) of the total is in West Canyon County alone, a particularly disconcerting fact considering that area’s relative isolation from currently established infrastructure systems.

**2000-2020 HOUSING GROWTH SCENARIO COMPARISON**

The figures and tables below summarize the incremental increase in the region’s housing stock that is expected over the course of the next two decades under the TVF and COMPASS projections. Although the total number of additional housing units is the same under both scenarios, the increase is allocated differently among the places in the region. Additionally, the TVF projection breaks out the increase into residential density classes, while the COMPASS projection does not. According to the COMPASS projection, future residential growth will be heavily concentrated in more urbanized parts of the valley, with 82 percent of the increase in housing units between 2000 and 2020 allocated to metro areas, as shown below in Figure 6.
By contrast, the TVF scenario shown in Figure 7 shows more intensive growth in rural areas of the region than in the COMPASS scenario. Under the TVF scenario, rural areas will receive more than twice the amount of additional housing units than in the COMPASS scenario.

As shown in Table 9 below, the difference between the TVF and COMPASS scenarios illustrated above has significant repercussions for the distribution of housing within the region. The COMPASS scenario mirrors very closely the current baseline distribution of housing units within the Treasure Valley, with metro areas, small cities, and rural areas essentially maintaining in 2020 their current baseline
shares of the region’s housing stock. Under the TVF scenario, however, rural areas of the valley are expected to shift from 11 percent of the total housing stock in 2000 to 18 percent of the total housing stock in 2020, absorbing more than 25,000 housing units.

**Table 9: TVF and COMPASS Shifts in Distribution of Regional Housing Stock, 2000-2020**

<table>
<thead>
<tr>
<th>City/Area</th>
<th>2000 Baseline</th>
<th>2020 TVF</th>
<th>2020 COMPASS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Housing Units</td>
<td>Percent of Total</td>
<td>Housing Units</td>
</tr>
<tr>
<td>Metro</td>
<td>136,985</td>
<td>84.2%</td>
<td>183,493</td>
</tr>
<tr>
<td>Small Cities</td>
<td>8,594</td>
<td>5.3%</td>
<td>13,832</td>
</tr>
<tr>
<td>Rural</td>
<td>17,051</td>
<td>10.5%</td>
<td>42,519</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>162,630</td>
<td>100.0%</td>
<td>239,844</td>
</tr>
</tbody>
</table>


Table 10 below summarizes the magnitude and spatial distribution of the anticipated future expansion of the region’s housing stock according to the residential density classes outlined in the housing baseline section above. As previously mentioned, the 2020 COMPASS scenario does not break out housing growth projections by density class. Housing units constructed from 2000 to 2020 in metro areas, where the majority of residential growth will occur under the TVF scenario will be mostly at suburban densities, accounting 72 percent of total growth in these areas. Urban densities will also make up 21 percent of the incremental increase in these areas and the remaining 7 percent will be rural densities. Surprisingly, the vast majority (69 percent) of the incremental increase in rural areas under the TVF scenario will also be at suburban and urban densities, with rural densities accounting for less than one-third (31 percent) of the increase. The valley’s small cities are likely to become more urban in terms of their housing stock mix.

**Table 10: TVF Regional Housing Stock Increase by Subregional Area and Density, 2000-2020**

<table>
<thead>
<tr>
<th>Region</th>
<th>Place Type</th>
<th>2000-2020 Housing Units Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Suburban</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>Metro</td>
<td>3,231</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>861</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>7,987</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12,079</td>
</tr>
</tbody>
</table>

Residential Density Assumptions: Rural (2.46 Acres/DU); Suburban (0.24 Acres/DU); Urban (0.08 Acres/DU)
Table 11 below shows in greater detail the distribution of projected future housing growth in the region by city and sub-regional area according to the TVF and COMPASS scenarios. One of the more surprising findings revealed in this data is the fact that rural areas are expected to grow as rapidly as some of the valley’s metro areas according to the TVF scenario. Rural Ada County, for example, will capture 15 percent of the region’s growth in housing over the next twenty years, which is about the same share of new housing growth as for the city of Meridian. Similarly, rural Canyon County will have 18 percent of the region’s residential growth, which is about the same share of the incremental increase as for the metro areas of the county (Caldwell and Nampa). The TVF scenario portrays a vision of increasingly non-city-centered development, a vision that will not change unless the region’s land use policies can be reformed to channel growth toward urbanized areas that are better suited to accommodate it. The three maps at the end of this section physically illustrate the current residential development pattern and the TVF and COMPASS projections for 2020.
Table 11: TVF and COMPASS Regional Housing Stock Increase by Sub-Regional Area, 2000-2020

<table>
<thead>
<tr>
<th>County/Region</th>
<th>Area/City</th>
<th>2000</th>
<th>2020</th>
<th>2000-2020 Increase</th>
<th>2000-2020 Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline Total</td>
<td>TVF Total</td>
<td>COMPASS Total</td>
<td>TVF Increase</td>
<td>COMPASS Increase</td>
</tr>
<tr>
<td></td>
<td>(% of Region)</td>
<td>(% of Region)</td>
<td>(% of Region)</td>
<td>(% of Total Increase)</td>
<td>(% of Total Increase)</td>
</tr>
<tr>
<td>Metro</td>
<td>104,998</td>
<td>138,053</td>
<td>155,321</td>
<td>33,055</td>
<td>50,323</td>
</tr>
<tr>
<td></td>
<td>64.6%</td>
<td>57.6%</td>
<td>64.8%</td>
<td>42.8%</td>
<td>65.2%</td>
</tr>
<tr>
<td>Boise</td>
<td>83,927</td>
<td>105,063</td>
<td>117,070</td>
<td>21,136</td>
<td>33,143</td>
</tr>
<tr>
<td></td>
<td>51.6%</td>
<td>43.8%</td>
<td>48.6%</td>
<td>27.4%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Garden City</td>
<td>5,268</td>
<td>5,329</td>
<td>8,052</td>
<td>281</td>
<td>3,314</td>
</tr>
<tr>
<td></td>
<td>3.2%</td>
<td>2.3%</td>
<td>3.6%</td>
<td>0.3%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Meridian</td>
<td>15,803</td>
<td>27,461</td>
<td>29,669</td>
<td>11,658</td>
<td>13,866</td>
</tr>
<tr>
<td></td>
<td>9.7%</td>
<td>11.4%</td>
<td>12.4%</td>
<td>15.1%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Small Cities</td>
<td>7,499</td>
<td>11,742</td>
<td>17,432</td>
<td>4,243</td>
<td>13,281</td>
</tr>
<tr>
<td></td>
<td>4.6%</td>
<td>4.9%</td>
<td>3.6%</td>
<td>5.5%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Eagle</td>
<td>4,823</td>
<td>7,269</td>
<td>5,892</td>
<td>2,446</td>
<td>1,069</td>
</tr>
<tr>
<td></td>
<td>3.0%</td>
<td>3.0%</td>
<td>1.5%</td>
<td>1.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Kuna</td>
<td>1,986</td>
<td>3,210</td>
<td>2,316</td>
<td>1,004</td>
<td>330</td>
</tr>
<tr>
<td></td>
<td>1.2%</td>
<td>1.3%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Star</td>
<td>690</td>
<td>1,263</td>
<td>342</td>
<td>573</td>
<td>-148</td>
</tr>
<tr>
<td></td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.2%</td>
<td>0.7%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Rural</td>
<td>4,878</td>
<td>16,310</td>
<td>10,250</td>
<td>11,432</td>
<td>5,372</td>
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<td>Central Ada</td>
<td>2,437</td>
<td>6,779</td>
<td>3,413</td>
<td>4,342</td>
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<tr>
<td></td>
<td>1.5%</td>
<td>2.8%</td>
<td>1.4%</td>
<td>5.6%</td>
<td>1.3%</td>
</tr>
<tr>
<td>North Ada</td>
<td>2,298</td>
<td>7,836</td>
<td>6,088</td>
<td>5,538</td>
<td>3,790</td>
</tr>
<tr>
<td></td>
<td>1.4%</td>
<td>3.2%</td>
<td>2.5%</td>
<td>7.2%</td>
<td>4.9%</td>
</tr>
<tr>
<td>South Ada</td>
<td>143</td>
<td>1,263</td>
<td>749</td>
<td>1,552</td>
<td>604</td>
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<tr>
<td></td>
<td>0.1%</td>
<td>0.7%</td>
<td>0.3%</td>
<td>2.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td>County Subtotal</td>
<td>117,375</td>
<td>166,105</td>
<td>174,321</td>
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<td></td>
<td>72.2%</td>
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<td>Metro</td>
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<td>44,646</td>
<td>13,451</td>
<td>12,659</td>
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<td>Caldwell</td>
<td>9,798</td>
<td>15,056</td>
<td>15,767</td>
<td>5,258</td>
<td>5,396</td>
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<td></td>
<td>6.0%</td>
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<td>6.6%</td>
<td>6.8%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Nampa</td>
<td>22,189</td>
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<td>28,879</td>
<td>8,193</td>
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<td></td>
<td>13.6%</td>
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<td>10.6%</td>
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<tr>
<td>Small Cities</td>
<td>1,095</td>
<td>2,092</td>
<td>1,410</td>
<td>997</td>
<td>315</td>
</tr>
<tr>
<td></td>
<td>0.7%</td>
<td>0.9%</td>
<td>0.6%</td>
<td>1.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Middleton</td>
<td>1,095</td>
<td>2,092</td>
<td>1,410</td>
<td>997</td>
<td>315</td>
</tr>
<tr>
<td></td>
<td>0.7%</td>
<td>0.9%</td>
<td>0.6%</td>
<td>1.3%</td>
<td>0.4%</td>
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<tr>
<td>Rural</td>
<td>12,173</td>
<td>26,209</td>
<td>19,467</td>
<td>14,036</td>
<td>7,294</td>
</tr>
<tr>
<td>North Canyon</td>
<td>2,683</td>
<td>5,691</td>
<td>4,711</td>
<td>3,008</td>
<td>2,028</td>
</tr>
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<td></td>
<td>1.6%</td>
<td>2.4%</td>
<td>2.0%</td>
<td>3.9%</td>
<td>2.6%</td>
</tr>
<tr>
<td>South Canyon</td>
<td>4,306</td>
<td>9,478</td>
<td>6,429</td>
<td>5,172</td>
<td>2,123</td>
</tr>
<tr>
<td></td>
<td>2.6%</td>
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<td>2.7%</td>
<td>4.7%</td>
<td>2.7%</td>
</tr>
<tr>
<td>West Canyon</td>
<td>5,184</td>
<td>11,040</td>
<td>8,327</td>
<td>5,856</td>
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</tr>
<tr>
<td></td>
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<td>3.5%</td>
<td>7.6%</td>
<td>4.1%</td>
</tr>
<tr>
<td>County Subtotal</td>
<td>45,255</td>
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<td>30.7%</td>
<td>27.3%</td>
<td>36.9%</td>
<td>28.2%</td>
</tr>
<tr>
<td>Metro</td>
<td>136,985</td>
<td>183,491</td>
<td>199,947</td>
<td>46,506</td>
<td>62,492</td>
</tr>
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<td></td>
<td>84.2%</td>
<td>76.5%</td>
<td>83.4%</td>
<td>60.2%</td>
<td>81.6%</td>
</tr>
<tr>
<td>Small Cities</td>
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<td>13,834</td>
<td>10,160</td>
<td>5,240</td>
<td>1,864</td>
</tr>
<tr>
<td></td>
<td>5.3%</td>
<td>5.8%</td>
<td>4.2%</td>
<td>4.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Rural</td>
<td>17,031</td>
<td>42,519</td>
<td>29,717</td>
<td>25,468</td>
<td>12,664</td>
</tr>
<tr>
<td></td>
<td>10.5%</td>
<td>17.7%</td>
<td>12.4%</td>
<td>33.0%</td>
<td>16.4%</td>
</tr>
<tr>
<td>Total</td>
<td>142,630</td>
<td>239,844</td>
<td>239,844</td>
<td>77,214</td>
<td>77,214</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Map 7: Residential Baseline Map, 2000
Map 8: TVF Residential Growth Projection, 2020
Map 9: COMPASS Residential Growth Projection, 2020
EMPLOYMENT GROWTH

This section examines the role that job growth plays in regional population expansion. General economic health and the employment growth that it produces are important determinants of population and household growth within a region. Because the Treasure Valley contains an urbanized area that is relatively isolated from other urbanized areas, the prominence of Boise, Caldwell, and Nampa as major regional employment centers is fundamental to those residents from both within the valley and from elsewhere who commute into the Boise metro area to work. Although vacant land supply figures extracted from current local land use plans were a crucial input in formulating employment projections, land supply was just one factor that was incorporated into a statistical model created to estimate the location and magnitude of future expansions of the region’s employment base. At a more detailed level job growth by industry type has also been calculated for the TVF and COMPASS scenarios, although similar projections are not available for the Comp Plan scenario.

Although reliable employment figures are not available that would allow for matching up economic activity with the housing boom of the late 1990s, more general historic employment growth trend data from the 1980s and 1990s indicate a fairly robust average increase in the region’s employment during that time period. The employment base of the Treasure Valley increased by almost 100,000 jobs or 71 percent since 1980, up to almost 240,000 jobs in 2000. Over the next two decades the region’s employment base is expected to expand by more than 140,000 additional jobs, an increase of 59 percent, and could total as many as 380,000 jobs by 2020.

EMPLOYMENT TRENDS 1987-1997

The employment data that we obtained in order to establish an employment trend for the Treasure Valley came from the Census Bureau’s zipcode-level (ZIP) County Business Patterns dataset. Because these data exclude the self-employed and almost all governmental employment, they undercount the number of actual jobs in the region and as such do not present a complete picture of the regional economy. Nonetheless, the data allow us to determine the overall employment growth rate of the valley’s economy from 1987 to 1997. Between 1987 and 1997, the number of jobs in the valley increased by an impressive 68 percent. Specific economic sectors that grew faster than the regional average and thus increased their share of the employment base during the decade were largely office-based businesses, such as business services, health services and information-based (high-technology) services. However, industrial sector businesses such as construction and heavy manufacturing showed very strong growth during this time as well. The finance/insurance/real estate (F.I.R.E.), high-technology manufacturing, local-serving retail, warehouse/distribution, and personal services sectors all grew at a slower rate than the valley overall.
2000 Employment Baseline

As shown in Figure 8 below, Treasure Valley’s baseline employment is almost entirely concentrated in the metro areas of the region with more than 70 percent of the regional employment base located in the city of Boise alone. The Canyon County metro area (Caldwell and Nampa) comprises an additional 15 percent of the regional employment base.

Figure 8: Baseline Share of Treasure Valley Employment by Type of Place, 2000

In Figure 9 below the baseline employment is distributed in a slightly different fashion by showing the relative importance of different economic sectors in the metro, small cities and rural areas of the Treasure Valley. For a detailed accounting of the methodology used to define the sectors of the region’s employment base, please refer to Appendix C at the end of this report. As the chart below illustrates, the economic sector with the greatest employment in the region in 2000 consisted of office-based businesses, which accounted for slightly less than half (44 percent) of the valley’s total employment. Approximately 42 percent of the total employment base is in the office-based sector in the valley’s metro areas. The industrial sector, with 24 percent of the total, comprises the next largest component of the region’s employment base, and is also mostly concentrated in metro areas, though a significant portion of industrial sector employment is also located in rural areas. The retail sector, which is based almost exclusively in metro areas, accounts for another 19 percent of the regional total.
Table 12 below illustrates in greater detail the sectoral composition of the employment base in each of the cities and sub-regional areas of the Treasure Valley. Since for all intents and purposes the valley’s metro areas comprise the regional employment base, only the cities in these areas will be discussed here. The economy of Boise, the most prominent single employment center in the region, is driven primarily by office-based employment, which accounts for almost half (47 percent) of the jobs there. However, industrial (21 percent) and retail (19 percent) employment also figure prominently in Boise’s economy. Nampa, which has the next largest share of the region’s total baseline employment, has a much more evenly balanced sectoral mix. At 29 percent of the city’s total, industrial employment has a more important role in Nampa’s economy than in that of the region overall, where this same sector accounts for 24 percent of all employment. Similarly, Caldwell has a fairly balanced sectoral mix, with industrial employment employing more people than any other sector (39 percent). Meridian, with the fourth-largest employment base, has more than half (55 percent) of its total jobs in the office-based sector, and is the third largest office employment center in the valley behind Boise and Nampa. Lastly, Garden City appears to have a fairly robust retail base with 32 percent of employment in this sector, though office-based (40 percent) and industrial (26 percent) jobs also play important roles there.
### Table 12: Sub-regional Areas Employment by Sector, 2000

<table>
<thead>
<tr>
<th>County/Region</th>
<th>Area/City</th>
<th>2000 Baseline Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Retail</td>
</tr>
<tr>
<td>Ada County</td>
<td>Metro</td>
<td>19.0%</td>
</tr>
<tr>
<td></td>
<td>Boise</td>
<td>18.5%</td>
</tr>
<tr>
<td></td>
<td>Garden City</td>
<td>30.5%</td>
</tr>
<tr>
<td></td>
<td>Meridian</td>
<td>17.3%</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>36.8%</td>
</tr>
<tr>
<td></td>
<td>Eagle</td>
<td>39.1%</td>
</tr>
<tr>
<td></td>
<td>Kuna</td>
<td>32.7%</td>
</tr>
<tr>
<td></td>
<td>Star</td>
<td>32.1%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>9.6%</td>
</tr>
<tr>
<td></td>
<td>Central Ada</td>
<td>9.4%</td>
</tr>
<tr>
<td></td>
<td>North Ada</td>
<td>17.1%</td>
</tr>
<tr>
<td></td>
<td>South Ada</td>
<td>5.7%</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>19.1%</td>
</tr>
<tr>
<td>Canyon County</td>
<td>Metro</td>
<td>24.9%</td>
</tr>
<tr>
<td></td>
<td>Caldwell</td>
<td>27.9%</td>
</tr>
<tr>
<td></td>
<td>Nampa</td>
<td>22.4%</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>38.6%</td>
</tr>
<tr>
<td></td>
<td>Middleton</td>
<td>38.6%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>11.5%</td>
</tr>
<tr>
<td></td>
<td>North Canyon</td>
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</tr>
<tr>
<td></td>
<td>South Canyon</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>West Canyon</td>
<td>9.8%</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>23.5%</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>Metro</td>
<td>19.9%</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>37.1%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>10.6%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19.8%</td>
</tr>
</tbody>
</table>


### 2000-2020 Employment Growth Scenario Comparison

The figures and tables below summarize the incremental increase in the region’s employment base that is expected to occur over the course of the next two decades according to both TVF and COMPASS projections. Although the total number of additional jobs is the same under both scenarios, the increase is allocated to different areas. The incremental increase in government jobs is identical in both scenarios, both in terms of overall magnitude and spatial distribution within the region. Under both scenarios, agricultural employment remains unchanged between 2000 and 2020, and has been included here simply to provide a more complete picture of the regional employment base. According to COMPASS, as with its residential growth scenario, expansions in the employment base will be heavily concentrated in more urbanized parts of the
valley, with 95 percent of the increase in jobs between 2000 and 2020 allocated to metro areas, as show in Figure 10.

**Figure 10: COMPASS Employment Increase by Type of Place, 2000-2020**

![Pie chart showing employment increase by type of place.](image)

In contrast, the TVF scenario presents a much different spatial distribution of future employment expansion than the COMPASS scenario, with growth less directed toward urban areas than the COMPASS scenario and instead allocated more to rural areas of the region, as shown in Figure 11 below. Under the TVF scenario, rural areas will receive more than five times the amount of jobs and small cities will receive more than three times the amount of jobs that will be added to the regional economy over the next two decades than in the COMPASS scenario.
As is shown in Table 13 below, the difference between the TVF and COMPASS scenarios illustrated above has significant repercussions for the distribution of employment within the region. The COMPASS scenario mirrors very closely the current baseline distribution of jobs within the Treasure Valley, with metro areas, small cities, and rural areas expected to maintain almost exactly in 2020 their current baseline shares of the region’s housing stock. Under the TVF scenario, however, rural areas of the valley are expected to shift from 4 percent of the total employment base in 2000 to 8 percent of the total employment base in 2020, and small cities will shift from 2 percent in 2000 to 4 percent in 2020. Thus, the TVF scenario signals a considerable decentralization of the employment base away from urban centers as considerable numbers of jobs are created in more outlying areas.
<table>
<thead>
<tr>
<th>County/Region</th>
<th>Area/City</th>
<th>2000 Total (% of Region)</th>
<th>2020 Total (% of Region)</th>
<th>COMPASS Total (% of Region)</th>
<th>2000-2020 Increase (% of Total Increase)</th>
<th>2000-2020 COMPASS Increase (% of Total Increase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>Baseline</td>
<td>189,426 (79.2%)</td>
<td>271,890 (71.5%)</td>
<td>304,077 (80.0%)</td>
<td>82,464 (58.5%)</td>
<td>114,651 (81.3%)</td>
</tr>
<tr>
<td>Boise</td>
<td>TVF</td>
<td>170,302 (71.2%)</td>
<td>234,174 (61.6%)</td>
<td>271,904 (71.5%)</td>
<td>63,872 (45.3%)</td>
<td>101,602 (72.1%)</td>
</tr>
<tr>
<td>Garden City</td>
<td>COMPASS</td>
<td></td>
<td>8,23%</td>
<td>9,102 (2.4%)</td>
<td>10,932 (2.9%)</td>
<td>867 (0.6%)</td>
</tr>
<tr>
<td>Meridian</td>
<td></td>
<td></td>
<td>10,889 (4.6%)</td>
<td>28,614 (7.5%)</td>
<td>21,241 (5.6%)</td>
<td>17,725 (12.6%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>189,426 (79.2%)</td>
<td>271,890 (71.5%)</td>
<td>304,077 (80.0%)</td>
<td>82,464 (58.5%)</td>
<td>114,651 (81.3%)</td>
</tr>
<tr>
<td>Boise</td>
<td>TVF</td>
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<td>234,174 (61.6%)</td>
<td>271,904 (71.5%)</td>
<td>63,872 (45.3%)</td>
<td>101,602 (72.1%)</td>
</tr>
<tr>
<td>Small Cities</td>
<td>COMPASS</td>
<td>8,23%</td>
<td>9,102 (2.4%)</td>
<td>10,932 (2.9%)</td>
<td>867 (0.6%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>189,426 (79.2%)</td>
<td>271,890 (71.5%)</td>
<td>304,077 (80.0%)</td>
<td>82,464 (58.5%)</td>
<td>114,651 (81.3%)</td>
</tr>
<tr>
<td>Boise</td>
<td>TVF</td>
<td>170,302 (71.2%)</td>
<td>234,174 (61.6%)</td>
<td>271,904 (71.5%)</td>
<td>63,872 (45.3%)</td>
<td>101,602 (72.1%)</td>
</tr>
<tr>
<td>Small Cities</td>
<td>COMPASS</td>
<td>8,23%</td>
<td>9,102 (2.4%)</td>
<td>10,932 (2.9%)</td>
<td>867 (0.6%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>189,426 (79.2%)</td>
<td>271,890 (71.5%)</td>
<td>304,077 (80.0%)</td>
<td>82,464 (58.5%)</td>
<td>114,651 (81.3%)</td>
</tr>
<tr>
<td>Boise</td>
<td>TVF</td>
<td>170,302 (71.2%)</td>
<td>234,174 (61.6%)</td>
<td>271,904 (71.5%)</td>
<td>63,872 (45.3%)</td>
<td>101,602 (72.1%)</td>
</tr>
<tr>
<td>Small Cities</td>
<td>COMPASS</td>
<td>8,23%</td>
<td>9,102 (2.4%)</td>
<td>10,932 (2.9%)</td>
<td>867 (0.6%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>189,426 (79.2%)</td>
<td>271,890 (71.5%)</td>
<td>304,077 (80.0%)</td>
<td>82,464 (58.5%)</td>
<td>114,651 (81.3%)</td>
</tr>
</tbody>
</table>

Table 14 below summarizes in greater detail the magnitude and spatial distribution of the anticipated future expansion of the region’s employment base according to the economic sectors outlined in the employment baseline section above. The 2000-2020 incremental increase in jobs in metro areas, where the vast majority of employment growth will occur under both the TVF and COMPASS scenarios, is expected to be heavily skewed toward office-based employment. According to both scenarios, the office sector will account for more than one-third (35 percent for TVF, 36 percent for COMPASS) of the employment growth in metro areas over the course of the next two decades. Government jobs will make up 27 percent of the incremental increase in metro areas according to TVF and 22 percent according to COMPASS. Industrial jobs will make up 18 percent of the incremental increase in metro areas under the TVF and 21 percent under the COMPASS scenario. Both scenarios show the retail sector accounting for 21 percent of the incremental increase in metro area employment. Surprisingly, the largest single share of the incremental employment increase in rural areas will also be in the office sector, which the TVF scenario estimates will claim 39 percent of rural employment growth and COMPASS estimates will claim 42 percent. Industrial employment, which currently comprises 45 percent of rural employment, will claim a significantly smaller share of the incremental increase (38 percent for TVF, 34 percent for COMPASS) in these areas.

Table 14: Regional Job Base by Type of Place and Economic Sector, 2000-2020

<table>
<thead>
<tr>
<th>Region</th>
<th>Place Type</th>
<th>TVF 2000-2020 Jobs Incremental Increase</th>
<th>COMPASS 2000-2020 Jobs Incremental Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Retail</td>
<td>Office</td>
</tr>
<tr>
<td>Metro</td>
<td>Retail</td>
<td>22,359</td>
<td>38,022</td>
</tr>
<tr>
<td></td>
<td>20%</td>
<td>35%</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>3,604</td>
<td>5,674</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>45%</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>4,771</td>
<td>7,396</td>
</tr>
<tr>
<td></td>
<td>25%</td>
<td>39%</td>
<td>37%</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>Total Increase</td>
<td>30,734</td>
<td>51,092</td>
</tr>
<tr>
<td></td>
<td>22%</td>
<td>36%</td>
<td>21%</td>
</tr>
</tbody>
</table>


The following maps physically illustrate the relationship between employment and residential development for both the TVF and COMPASS scenarios for the year 2020. The following section describes the implications of the jobs-housing relationship.
Map 10: TVF Employment Growth Projection 2020
Map 11: COMPASS Employment Growth Projection, 2020
JOBS AND HOUSING

Now that we have looked at the expansion of the Treasure Valley’s housing stock and employment base vis-à-vis the regional land supply, a vital next step is to consider how the scenarios will play out in regards to jobs-housing balance. Jobs-housing balance is one index that planners and demographers look at to consider the changing nature of places over time and to begin to think about the potential impacts that shifting residential and employment patterns might have on a region’s transportation and infrastructure networks. Bedroom communities with minimal employment have different infrastructure and municipal service needs – such as schools, parks, and increased fire protection levels -- than major employment centers which may support a greater amount of daytime, convenience retail and require better access to a public transit network. Residents of a primarily residential area that is adding substantial amounts of employment without an accompanying expansion of the housing stock may find their local road network clogged by an increasing number of in-commuting workers. Conversely, in commercial and industrial areas that are transforming to become more residential (often through infill housing), new residents may find that they have to deal with business-related nuisances that would not be as likely to occur in primarily residential areas.

JOBS-HOUSING RELATIONSHIPS

As shown in Table 15 below, the region as a whole is expected to become slightly more “jobs-rich” over the course of the next two decades. The greatest disparity between the TVF and COMPASS scenarios in terms of jobs-housing balance relates to the small cities in the region, where the TVF scenario shows increases in employment and housing units between 2000 and 2020 that are more than three times the amount projected in the COMPASS scenario. This disparity has some considerable implications on the expected 2020 jobs-housing balance for small cities in the valley, with the TVF scenario showing a substantially more jobs-rich balance in 2020 than the COMPASS scenario. The scenarios also offer differing accounts for jobs-housing in rural areas, with TVF showing a shift towards a higher proportion of jobs by 2020 and COMPASS showing a decline in the proportion of jobs.

Table 15: Jobs-Housing Balance by Type of Place, 2000-2020

<table>
<thead>
<tr>
<th>Region</th>
<th>Place Type</th>
<th>Jobs per Housing Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2000 Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Baseline</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>Metro</td>
<td>1.64</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.47</td>
</tr>
</tbody>
</table>

Source: Spatial Dynamics, COMPASS

As mentioned above, the differences between the two scenarios have notable consequences for the jobs-housing balance of the various communities in the Treasure Valley. Table 16 below illustrates in greater detail how future increases in employment and housing will affect the jobs-housing balance of the various communities within the
region. According to the TVF scenario, the valley’s small cities of Eagle, Kuna, Star and Middleton could become more substantial employment centers. According to the COMPASS scenario, the metro areas of Boise and Garden City will receive a significantly higher magnitude of both new jobs and new housing.

Table 16: Jobs-Housing Balance by Sub-regional Area, 2000-2020

<table>
<thead>
<tr>
<th>County/Region</th>
<th>Area/City</th>
<th>Jobs per Housing Unit</th>
<th>2000 Total</th>
<th>2020 Total</th>
<th>00-'20 Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Baseline</td>
<td>TVF</td>
<td>COMPASS</td>
<td>TVF</td>
</tr>
<tr>
<td>Ada County</td>
<td>Metro</td>
<td>1.80</td>
<td>1.97</td>
<td>1.96</td>
<td>2.49</td>
</tr>
<tr>
<td></td>
<td>Boise</td>
<td>2.03</td>
<td>2.23</td>
<td>2.32</td>
<td>3.02</td>
</tr>
<tr>
<td></td>
<td>Garden City</td>
<td>1.56</td>
<td>1.65</td>
<td>1.27</td>
<td>3.32</td>
</tr>
<tr>
<td></td>
<td>Meridian</td>
<td>0.69</td>
<td>1.04</td>
<td>0.72</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>0.47</td>
<td>1.28</td>
<td>0.79</td>
<td>2.70</td>
</tr>
<tr>
<td></td>
<td>Eagle</td>
<td>0.48</td>
<td>1.25</td>
<td>0.72</td>
<td>2.77</td>
</tr>
<tr>
<td></td>
<td>Kuna</td>
<td>0.42</td>
<td>1.11</td>
<td>0.83</td>
<td>2.23</td>
</tr>
<tr>
<td></td>
<td>Star</td>
<td>0.57</td>
<td>1.88</td>
<td>1.37</td>
<td>3.46</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>0.99</td>
<td>0.94</td>
<td>0.68</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td>Central Ada</td>
<td>0.81</td>
<td>1.04</td>
<td>0.80</td>
<td>1.17</td>
</tr>
<tr>
<td></td>
<td>North Ada</td>
<td>0.44</td>
<td>0.69</td>
<td>0.30</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>South Ada</td>
<td>12.79</td>
<td>1.69</td>
<td>3.17</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>1.69</td>
<td>1.82</td>
<td>1.82</td>
<td>2.14</td>
</tr>
<tr>
<td>Canyon County</td>
<td>Metro</td>
<td>1.12</td>
<td>1.38</td>
<td>1.23</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>Caldwell</td>
<td>1.65</td>
<td>1.81</td>
<td>1.42</td>
<td>2.12</td>
</tr>
<tr>
<td></td>
<td>Nampa</td>
<td>0.89</td>
<td>1.16</td>
<td>1.12</td>
<td>1.92</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>0.61</td>
<td>0.85</td>
<td>0.84</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Middleton</td>
<td>0.61</td>
<td>0.85</td>
<td>0.84</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>0.41</td>
<td>0.52</td>
<td>0.32</td>
<td>0.61</td>
</tr>
<tr>
<td></td>
<td>North Canyon</td>
<td>0.20</td>
<td>0.09</td>
<td>0.21</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>South Canyon</td>
<td>0.15</td>
<td>0.53</td>
<td>0.09</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>West Canyon</td>
<td>0.73</td>
<td>0.73</td>
<td>0.57</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>County Subtotal</td>
<td>0.92</td>
<td>1.06</td>
<td>0.95</td>
<td>1.28</td>
</tr>
<tr>
<td>Treasure Valley</td>
<td>Metro</td>
<td>1.64</td>
<td>1.82</td>
<td>1.79</td>
<td>2.35</td>
</tr>
<tr>
<td></td>
<td>Small Cities</td>
<td>0.49</td>
<td>1.22</td>
<td>0.80</td>
<td>2.40</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>0.58</td>
<td>0.68</td>
<td>0.45</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.47</td>
<td>1.59</td>
<td>1.59</td>
<td>1.83</td>
</tr>
</tbody>
</table>

Source: Spatial Dynamics, COMPASS

**SUMMARY**

Recent trend data for housing growth in the valley indicate that between 1994 and 2000 residential growth was overwhelmingly concentrated in rural areas and small cities. Much of this growth occurred at relatively low densities, and the baseline housing supply is therefore heavily weighed toward suburban residential densities (0.24 acres per dwelling unit), even in metro areas such as Boise. Considerable land supply remains in the valley’s metro areas of Boise, Meridian, Nampa, and Caldwell, where an estimated 55,000 acres suitable for future residential development are currently
available. In rural areas of the valley, more than 18,000 acres of agricultural land will be converted to residential uses by 2020. The TVF scenario shows an increased proportion of residential growth occurring in rural areas, at densities that are higher than the baseline housing supply, indicating considerable amounts of “suburban” development in rural areas. The TVF and COMPASS scenarios for residential growth differ mainly on the proportion of future housing production that will occur in metro area, with COMPASS showing 82 percent of the incremental increase occurring in metro areas and TVF showing a substantially lower figure of 60 percent in metro areas. Thus, if the valley were to grow over the next twenty years the way it has grown over the past ten years, there would be an increasing visual and physical distinction between urban/suburban areas in the cities and rural/agricultural areas in the counties. In addition, under the trend scenarios the valley’s housing market would become increasingly concentrated in a single product type.

In terms of employment trends, the data indicates that the valley’s employment base is overwhelmingly concentrated in metro areas. Additionally, the employment base is heavily concentrated in office-based economic sectors, such as business services, health services, and information-based services. These same sectors showed the most significant growth over the course of the 1990s. It is expected that office-based sectors will be responsible for much of the expansion of the employment base in the valley’s rural areas over the course of the next two decades. As was the case with the residential growth projections, the TVF and COMPASS scenarios for employment differ mainly on the proportion of future job growth that will occur in metro area, with COMPASS showing 95 percent of the incremental increase occurring in metro areas and TVF showing a substantially lower figure of 77 percent in metro areas.
Evaluating the Scenarios – What Would Growth Mean?

Quantifying the spatial distribution of potential growth patterns for the Treasure Valley, as shown in the two scenarios discussed above, provides a concrete picture of what the Treasure Valley’s future could be like. But adding up the numbers alone does not tell the whole story. The real question is whether or not these possible scenarios are consistent with the future Treasure Valley residents want for themselves.

There are many ways to measure these scenarios and test their outcomes against some expressed visions or goals for the future. Through the course of the Treasure Valley Futures project there were multiple discussions with policy makers, technical staff people, and among the consultant team itself about the many different types of evaluation criteria that could be used to test the scenarios and measure their impacts and implications. However, given the limited time and resources available, only two very different evaluation methods were selected.

The first evaluation method was the most complex in that it relied upon valley decision makers to do their own assessment of growth patterns. This process was based on the premise that although the Treasure Valley is a single region, it is, in fact, composed of many individual places. If the valley is to have any kind of cohesive land use pattern, then every individual land use decision must be considered both in terms of the local place where development will occur as well as in terms of the contribution this local place makes to the regional land use pattern. This is a complex idea and one that is rarely taken into consideration when local policy makers review proposed projects. Therefore as a way to both educate Treasure Valley decision makers about how to look at projects in both the local and regional context and illustrate how to evaluate such projects against some set of goals or evaluation criteria, the Treasure Valley Futures consultants took a group of 55 people on a bus tour of the valley. Tour participants were asked to rate a series of places against certain criteria that were derived from general themes that were distilled from the valley communities’ comprehensive plan goals.

In contrast, the second technique for evaluating the scenarios was relatively simple and quantitative. Originally, the intent had been to measure the traffic implications of each scenario to demonstrate that the same amount of growth distributed in different ways around the valley would have different implications for various travel demand performance measures. This involved using the COMPASS transportation model to derive a series of indices measuring the different travel demand implications of each scenario. However, there were certain inconsistencies between the 2000 and 2020 land use data for the COMPASS scenario that precluded completing such an analysis for this scenario. Therefore, transportation implications have only been quantified for the Treasure Valley Futures Scenario. COMPASS has since adjusted its land use assumptions for 2000 and 2020 to eliminate these inconsistencies, but these adjustments occurred after the TVF analysis was completed. Any future scenario analyses completed for the valley will allow for a more complete understanding of the traffic implications.
THE BUS TOUR – DOES GROWTH ADD UP?

While the Treasure Valley Futures Project presents several alternative future land use patterns for the entire region, this regional pattern is made up of hundreds, perhaps thousands, of individual development projects. As new projects are built, it is the incremental aggregation of these many single parts that will add up into the Treasure Valley’s future land use pattern. Thus, one way to evaluate the future growth scenarios is to assess individual projects that represent a range of land use choices to determine how each project type contributes both to the specific place or neighborhood where it is located as well as to the regional land use pattern. But, beyond understanding how each projects fits within the local and regional context, it is also important to test whether or not the project will contribute towards creating a desirable local and regional pattern.

The bus tour itself involved approximately 55 people from Ada and Canyon Counties including mayors, and city council members, planning and zoning commissioners, community leaders, city/county staff, and members of the business community. Prior to departing on the Tour participants were provided with a workbook: “Seeing the Treasure Valley: How We Shape Our Region,” which included introductory information about the Treasure Valley Futures Project, information about the tour route and stops, and the evaluation criteria people were to use to evaluate four key stops along the way. Copies of the workbook are available by going to www.tvfutures.org/probench/bench2.html, find the “products” section, and click where the text says “here.”

SLAM – THE EVALUATION THEMES

Each community in the valley, including the rural areas of both counties, have explicitly defined their goals for future growth in their comprehensive plans. The intention behind having such plans is not to stop, limit, or otherwise restrict growth, but to manage growth in such a way as to help each community achieve its own vision for the type of place it wants to be. Therefore comprehensive plans provide one critical yardstick against which future growth can be measured, or evaluated, to determine if these scenarios are consistent with the valley’s vision for itself; or, if projected growth patterns indicate the possibility of a future that may not be what people had intended. As part of the Treasure Valley Futures project the goals from every Treasure Valley community comprehensive plan were compiled into a single document and reviewed to identify the common themes. While there are many ways the plans could be interpreted and summarized, these four themes both reflect the comprehensive plans and are consistent with the underlying goals of the Treasure Valley Futures project itself as defined by the Federal Highway Administration’s Transportation and Community and Systems Preservation (TCSP) Pilot Program. These four themes that combine the comprehensive plan and TCSP goals and were used as the basis for evaluating various types of development project on the bus tour are:
• Sustainability
• Livability
• Accessibility
• Mobility

Sustainability – broad-based/holistic consideration of growth impacts focusing on long-term/cumulative effects. A sustainable community can be defined as having succeeded in maintaining/improving the economic, environmental and social characteristics that comprise quality of life for its residents, so that they can continue to lead healthy, productive and enjoyable lives there. Features of sustainability include:

Balance
Diversity
Ecology
Flexibility
Holism
Integration
Symbiosis
Systems

Livability – more specific consideration of growth impacts focus on near-term/immediate effects that protect the local natural environment and increase everyday quality of life. Livability is enhanced through the promotion of compact, multi-dimensional land use patterns that: ensure a mix of uses, minimize the impact of cars, and promote walking, bicycling, and transit access to employment, education, recreation, entertainment, shopping, and services. Features of livability include:

Preserving green spaces
Easing traffic congestion
Restoring a sense of community
Promoting collaboration among neighboring communities
Enhancing economic competitiveness

Accessibility – rationalizing the land use/travel pattern by enhancing relative proximity. Whereas “mobility” implies that movement is an end in itself rather than a means to an end, “accessibility” may be defined as the ability to reach goods, services, activities and destinations. Accessibility represents the ability to get to a specific destination or activity, stressing the relationship between the spatial locations of common destinations and the spatial locations of the people seeking those destinations. Features of accessibility include:

Transportation mode choices
Intensify land utilization in designated activity centers/nodes/corridors
Diversity of residential product types
Diversity of non-residential/commercial land uses
Proximity between diverse land use types

**Mobility** – improving the efficiency of the transportation network by enhancing system capacity. “Mobility” may be defined as the speed and distance at which we can move people, goods, and services. Mobility applies to all modes of travel and to all segments of the community, and stresses the provision of improved transportation networks capable of bringing people to the destinations that they seek. Measuring mobility recognizes that transportation can often be best improved by encouraging a shift to more efficient travel modes, including public transit, ridesharing, bicycling and even walking. Features of mobility include:

- Moderate travel time and cost
- Numerous travel options

**BUS TOUR FINDINGS**

**Looking at the Stops.** At each of four places along the bus tour route, tour participants got off the bus, walked around a development project, and ranked that project based on the SLAM criteria using a scale of 1 through 5 as well as ranking how well they liked the place overall (1 = poor, 5 = excellent). Then after the tour was over, people were asked about their general impressions of the places they saw and what they learned for the tour overall. The complete results of this evaluation process are included in Appendix E, however, a summary of the findings from each stop are shown below. Note that the first “stop” on the tour was the Boise Depot. Since this was the also the tour’s starting point, tour participants did not evaluate Stop 1, only Stops 2 though 5.

**Stop 2: Oak Park Village (intersection of Cherry and Vista, Boise).** This is a mixed-use project that includes 44 market rate townhouses, 200 “affordable” apartments, neighborhood-serving retail, office space, a day care center, a Headstart center and a police substation. This project was selected for the tour because it is relatively dense compared to the rest of the region and includes a mix of uses that allow people to easily walk from their houses to places where they can shop, work, and/or receive necessary services such as childcare.

**SLAM Evaluation:** Oak Park Village received the most favorable responses of any on the tour, with overall likeability rated as 3.7 out of 5. The stop received aggregate rankings in sustainability, accessibility, and mobility just under 4 and a livability ranking of approximately 3.5. The stop scored the highest in efficient use of resources (4.2) and lowest in preserving green spaces (3.1). Although several respondents commented positively on the orientation of the townhouses to the street, a greater number commented that the residential development overall did not seem well-integrated into the surrounding neighborhood. A lack of sufficient green/park space was one of the more frequently mentioned deficiencies perceived in the development, as was the perceived lack of neighborhood-serving retail in the commercial component of the development.

**Stop 3: The Intersection of Federal Way and Gowen Road, Boise.** This is a key intersection in a section of Boise that was primarily built out in the 1980s with the intent of creating high quality residential neighborhood, within close proximity to the Micron plant, a major job center. The area also includes a community serving shopping center anchored by a major supermarket. However, as the Tour Evaluation Sheet points out,
these land uses, while in close proximity to each other, are not particularly well integrated so that each land use, i.e., housing, is not clearly connected to other types of land uses, i.e., the shopping center. So, unlike Oak Park, people cannot easily walk from one place to another.

SLAM Evaluation: The Federal Way/Gowen Road intersection received a significantly lower overall likeability score of 2.1 out of 5 than Oak Park. The stop received aggregate rankings slightly greater than 2 in sustainability and accessibility, and slightly less than 2.5 in the categories of mobility and livability. The stop scored the highest in enhancing economic competitiveness (3.0) and lowest in restoring a sense of community (1.8). The most common complaints about this stop focused on the perception that the various land uses in the area are too separated and that the scale of development here favors an automobile-orientation rather than a pedestrian-orientation. However, several respondents felt that there was still potential to plan and develop this area in the future so that accessibility could be improved and links between land uses strengthened.

Stop 4: Crossroads Shopping Center (intersection of Eagle Road and Fairview Avenue, Meridian). To some degree, this intersection is similar to the previous stop in that the adjacent land uses include a mixture of retail, housing, and offices. However, unlike the Federal Way/Gowen Road intersection, all of the land uses are relatively close together. The Crossroads Shopping Center includes 440,000 square feet of retail space housing mostly “big box” tenants. Across the street is the new 250,000 square foot regional Blue Cross regional headquarters, and just behind the shopping center is a residential development with both single- and multi-family homes.

SLAM Evaluation: Despite the mix of uses, this stop received the lowest overall likeability score of any stop on the tour, with overall likeability rated as 1.9 out of 5. The stop received aggregate rankings in sustainability, livability, and accessibility right around 2 and a mobility ranking of slightly greater than 2. The stop scored the highest in enhancing economic competitiveness (2.8) and lowest in restoring a sense of community (1.6). As with the previous stop, a common observation about Crossroads was that the various land uses in the area are too separated and that the scale of development here favors an automobile-orientation rather than a pedestrian-orientation. Many felt that project approvals at the shopping center should have taken pedestrian safety and ease-of-travel into consideration, and that transit connections should be incorporated to make the center less automobile-oriented.

Stop 5: Idaho Center and the new BSU campus (Garrity Boulevard, Nampa). The Idaho Center is a regional entertainment and convention facility that seats 13,500 people in an indoor venue and 11,000 in an outdoor amphitheater. Adjacent to this facility is the new Boise State University (BSU) West Campus, which had not begun construction at the time of the bus tour, located on a 150-acre site that will eventually house as many as 30 new academic buildings. This location is well suited for such large regional serving facilities because it is easily accessible to Interstate 84. Although both sites are also immediately adjacent to the rail corridor that connects Boise to Nampa, neither facility is currently oriented to take advantage of this opportunity, should some form of transit be available on this line.
**SLAM Evaluation:** This stop received an overall likeability score of 2.4 out of 5. Aggregate rankings in sustainability were slightly greater than 2, the livability ranking was slightly below 2.5, accessibility ranked slightly less than 3, and a mobility ranking right around 2.5. The stop scored the highest in enhancing economic competitiveness and in intensifying land utilization in designated activity areas (2.8) and lowest in restoring a sense of community and in offering a diverse range of choices for living/working/playing (1.9). Almost all of the respondents for this stop noted that it is probably too early to pass judgment on the development, since the project is still in its infancy. Nevertheless, most stated that new development around the Idaho Center has great potential for creating a rail and/or multi-modal transit stop if properly implemented over the near term.

**Implications for Local and Regional Patterns**

In their own way, each of the four stops represents some type of mixed-use project that serves a regional function, and in three out of four cases, a local or community level function as well. All of the projects were located on major arterial streets, and all four had the opportunity to provide more than one type of transportation mode to access the site beyond just cars. In some cases, the additional transportation opportunities included pedestrians and/or bikes as well as buses, in the Idaho Center case there was also an option for some type of rail service. However, the only place where people can realistically arrive by more than just a car is Oak Park Village where it is easy to walk from the residential to the commercial areas of the project.

The only stop that got better than average rankings on the SLAM criteria, meaning that the development did a good job of reflecting the ideals incorporated in the valley’s comprehensive plan goals was Oak Park Village. All of the other places ranked below average on all of the SLAM criteria except for “enhancing economic competitiveness.” In all other ways, the three other stops were relatively unappealing places.

Although Oak Park Village is not a complete anomaly in the Treasure Valley, in many ways it is the exception to the overall pattern of development, rather than the rule. Houses are built at higher densities than almost all other homes in the valley; there are shops and jobs close by; and the project has been organized to facilitate walking rather than driving. On the other hand, the other three projects all have the potential to encompass many of the same features as the Oak Park Village, and yet, they don’t. Different land uses are not connected, people feel uncomfortable walking around, and there is no sense of creating a place for community.

In planning the areas around Federal Way and Gowen Road, the Crossroads Shopping Center, and the Idaho Center, people were clearly focused only on the regional function these places would serve, not on creating any type of balance between regional function and local place. As a result, these three projects, along with most places in the Treasure Valley will not add up into a coherent regional land use pattern. Instead, these places create a fragmented pattern of uses scattered across the landscape with no relationship to each other and no concern for people, only for drivers. Because these places rank so low on the SLAM themes, they represent a clear disconnect between the future Treasure Valley residents have envisioned for themselves when they select the goals for their community comprehensive plans and reality of what is coming.
TRAFFIC IMPACTS – LINKING LAND USE AND CONGESTION

One of the central evaluation themes was to manage growth in such a way as to help each community achieve its own vision for the type of place it wants to be. As part of the traffic evaluation, travel demand performance measures were used to help describe how the region would change under the trend scenario. This information was intended to help the community understand what the future may look like in terms of traffic conditions.

Table 17 below contains select travel demand performance measures for 2000 conditions and 2020 conditions with the trend scenario. In addition, Figure 12 shows plots of roadway segments with volume-to-capacity ratios equal to or greater than 1.0 for 2000 conditions and 2020 conditions with the trend scenario. Key conclusions related to this information are presented below.

The performance measures indicate that the COMPASS planning area will intensify its road use, but with little change in the main characteristics of travel.

Population and vehicles are projected to grow at a nearly even pace (33 percent and 34 percent, respectively). In other words, no trend toward more or less dependence on the automobile is evident.

Daily vehicle miles of travel (VMT) and vehicle hours of travel (VHT) are projected to grow at the same rate, which is another way of saying that average speeds are not expected to change. This occurs despite the fact that daily VMT is projected to grow 69 percent while the roadway system is projected to grow only two percent according to the 2020 roadway network files provided with the model. If this occurs, it means that much of the additional mileage will occur on parts of the roadway system that are operating well below capacity today and can absorb additional traffic without reducing travel speed. This conclusion applies to daily conditions and may not apply to peak hour conditions. During peak hour conditions, average speeds would likely decrease, especially in existing urbanized areas.

VMT/Person is projected to grow by 28 percent, even though Vehicle Trips/Person are projected to grow by only seven percent. The average trip lengths will grow longer because the new residential areas are further from the urbanized center of the region and will require longer drives to activity centers. However, the lengthening of trips is small in absolute terms (i.e., a little over one mile in terms of distance, or a little over two minutes in travel time).

Overall, this information suggests that development under the trend scenario will expand through the region in patterns that are similar to today. The results will be similar traffic conditions in outlying areas (i.e., suburbs), but a worsening of travel conditions in the urban center.
### Table 17: Traffic Demand Evaluation

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>2000 Baseline</th>
<th>2020 Trend Scenario</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>408,120</td>
<td>540,980</td>
<td>33%</td>
</tr>
<tr>
<td>Vehicles</td>
<td>380,960</td>
<td>510,970</td>
<td>34%</td>
</tr>
<tr>
<td>Vehicle Trips</td>
<td>1,227,98</td>
<td>1,744,480</td>
<td>42%</td>
</tr>
<tr>
<td>Vehicles Per Person</td>
<td>0.93</td>
<td>0.94</td>
<td>1%</td>
</tr>
<tr>
<td>Daily Vehicle Trips Per Person</td>
<td>3.01</td>
<td>3.22</td>
<td>7%</td>
</tr>
<tr>
<td>Average Trip Length (minutes)</td>
<td>12.09</td>
<td>14.38</td>
<td>19%</td>
</tr>
<tr>
<td>Delay Per Trip (minutes)</td>
<td>0.77</td>
<td>2.16</td>
<td>179%</td>
</tr>
<tr>
<td>Roadway Lane Miles</td>
<td>6,510</td>
<td>6,660</td>
<td>2%</td>
</tr>
<tr>
<td>Roadway Lane Miles Over Capacity [1]</td>
<td>100</td>
<td>420</td>
<td>320%</td>
</tr>
<tr>
<td>Roadway Lane Miles Per 1,000 Persons</td>
<td>15.95</td>
<td>12.31</td>
<td>-23%</td>
</tr>
<tr>
<td>Roadway Lane Miles Over Capacity Per 1,000 Persons</td>
<td>0.25</td>
<td>0.78</td>
<td>217%</td>
</tr>
<tr>
<td>Daily Vehicle Miles of Travel (VMT) [2]</td>
<td>8,201,80</td>
<td>13,881,360</td>
<td>69%</td>
</tr>
<tr>
<td>Daily Vehicle Hours of Travel (VHT) [3]</td>
<td>247,480</td>
<td>418,070</td>
<td>69%</td>
</tr>
<tr>
<td>Daily Vehicle Hours of Delay (VHD) [4]</td>
<td>15,820</td>
<td>62,780</td>
<td>297%</td>
</tr>
<tr>
<td>Daily VMT Per Person</td>
<td>20.10</td>
<td>25.66</td>
<td>28%</td>
</tr>
<tr>
<td>Daily VHT Per Person</td>
<td>0.61</td>
<td>0.77</td>
<td>27%</td>
</tr>
<tr>
<td>Daily VHD Per Person</td>
<td>0.04</td>
<td>0.12</td>
<td>199%</td>
</tr>
</tbody>
</table>


Notes:

[1] Over Capacity is defined as a volume to capacity ratio equal to or greater than 1.0. Volume and capacity data were obtained from the COMPASS travel demand model and are in terms of daily conditions.

[2] VMT = volume x distance

[3] VHT = volume x (distance/free-flow speed)

[4] VHD = volume x {(distance/congested speed) - (distance/free-flow speed)}
Figure 12: Roadways with Volume-to-Capacity Ratios Greater than or Equal to 1.00, 2000 & 2020

Source: Viper Software by Citilabs Licensed to Fehr & Peers Associates, Inc.
Wrapping It Up – What We Can Conclude

There are many lessons that the Treasure Valley Futures project can provide to the entire region. These lessons are not as much a summary of the quantitative information provided in the previous chapters, but a synthesis of the major ideas and themes that emerged from this work. Each of the points below suggests a new way to think about the Treasure Valley as one region while allowing each community the flexibility to develop its own response to the dynamic challenges growth will present over the next twenty years.

THE TREASURE VALLEY – IT’S ONE REGION!

One of the most significant accomplishments of the entire Treasure Valley Futures project has been to demonstrate that the Treasure Valley is truly one region and that all future planning for this entire area cannot afford to ignore the extensive interconnections among the two counties’ cities, town, and rural areas. Development in one place will impact every place else, if not today, then tomorrow. On the surface, this simple realization seems almost trivial. But, unless policy makers, citizens, and business leaders acknowledge that the Treasure Valley is a single region and that planning for the future must be done in a cooperative coordinated manner, there is no realistic way to effectively manage future growth.

VISION AND REALITY – THE BIG DISCONNECT

The Treasure Valley communities have articulated very clear visions for the kinds of places they want to be. Although the words vary, the ideas are very similar in the goals each community uses in its comprehensive plan. And yet, the projects that are getting built are not, for the most part, reinforcing those visions. There are many reasons for this disconnect and this analysis uncovers one central issue. The policies the cities are using to implement their comprehensive plans, including their zoning ordinances, are not structured to generate the outcomes envisioned by the goals in the comprehensive plans. Most of the comprehensive plans have goals calling for such things as compact development, preservation of agricultural land, fiscally responsible growth, etc. However, the Comprehensive Plan Buildout Scenario, which reflects existing land use policies in each community’s comprehensive plan, shows that land uses in the Treasure Valley would become increasingly dispersed if the cities continued to grow according to current policy. But, research from all over the country shows that dispersed land use patterns tend to work against the types of goals included in the comprehensive plans, not to reinforce them. The similarities between the Comprehensive Plan Buildout Scenario and the TVF Scenario are striking in that existing growth trends seem to be at least somewhat consistent with the comprehensive plan land use policies. But these
land use patterns would not, for example, support comprehensive plan goals addressing vibrant downtowns or the need to avoid scattered development.

This finding strongly suggests that each community in the Treasure Valley should evaluate its comprehensive plan to ensure that policies, programs, and other implementation tools are consistent with the goals outlined in the plan. This will allow each community’s vision for its future to drive land use decisions, not the simplistic standards that are often inherent to zoning ordinances, transportation models, and the other tools commonly used to regulate land use. Ideally, current planning regulating policies such as zoning ordinances would also be overhauled to make them consistent with the vision outlined in each community’s revised comprehensive plan.

THINK LOCAL PLACE AND REGIONAL PATTERN – LOOKING FOR BALANCE

All places in the Treasure Valley function in two ways. First, every place has a specific local context defined by the adjacent land uses, the street system that provides accessibility, and any significant natural features such as creeks or hillsides. But, secondly, places also fit into larger regional patterns. Residential neighborhoods provide housing for workers with jobs usually located in other parts of the region. Depending on their size, shopping centers can draw customers from the immediate neighborhood, or from as far as 10 to 15 miles away. Even parks can serve more than just the residents living near by. If new development fits well within its local context by complimenting adjacent land uses, providing connectivity and accessibility, and enhancing significant natural features; and contributes to a rational regional land use pattern, then it will make a positive contribution towards the Treasure Valley’s future quality of life. Too often land use decisions in the Treasure Valley consider each project as though it were an island unto itself. As Bus Tour participants learned, even places that serve a key regional function may not be nice places or fit well within the local context. Consequently, these places become missed opportunities. All stakeholders in the development process including property owners and developers, cities and local agencies (e.g., highway districts), and citizens and community groups need to work together to create new places that balance between local context and regional land use patterns.

SYSTEMS WORK TOGETHER, NOT SEPARATELY

Traditionally planning for individual systems, such as land use, transportation, sewer, and storm drainage, etc., is done as a discrete activity focusing on only one system at a time. Obviously, to the extent necessary some other factors are considered but there is no attempt to balance the consideration between the design of one system and the design of another system. For example, land use is included in the transportation modeling process. However, land uses are used as fixed inputs to the modeling process. Once these assumptions have been put into the model, they are rarely questioned or modified, even if the transportation model results may be undesirable. In such cases, where projected traffic increases are considered unacceptable, the policy response is typically to widen the streets or otherwise modify the road network. Rarely is any consideration given to thinking about ways to alter the land use pattern. The same
is true in designing virtually every other infrastructure system. When systems are designed this way, they often have negative unintended consequences.

The travel demand modeling based on the TVF scenario illustrates this exact problem in several ways. First, if the travel demand indices, such as vehicle miles traveled, are considered separately from their spatial impacts, i.e., without mapping where congestion will increase in 20 years, then this scenario looks like it will result in serious congestion problems. However, the map showing the number of places in 2020 with high congestion shows that all of these places will be concentrated in and around Boise, while the rest of the region will remain relatively unaffected. Thus, looking only at general transportation system measures of the growth impacts tells an incomplete and somewhat misleading story. Second, even if the transportation impacts are considered in terms of what places will be most impacted, the typical policy response to transportation impacts is to modify the transportation system. However, in this case, the level of investment and the types of modifications that would have to be made to alleviate the congestion around Boise may be politically as well as financially impractical. A much more effective response would be to modify the land use patterns in the outlying areas around the region and test the impact this would have on Boise’s road network.

This type of interactive planning involving multiple systems and, many times, multiple jurisdictions and agencies, will be key to a more successful future for the Treasure Valley. All agencies responsible for planning infrastructure systems must learn to work together and coordinate their efforts, both amongst themselves and with the local jurisdictions that set land use policies, to better support community goals and visions for future growth.

THE TREASURE VALLEY NEEDS MORE CHOICES

The vast majority of residential development in the Treasure Valley has been primarily single-family houses in standard suburban subdivisions, as has been the case in most other rapidly growing metropolitan areas in the U.S. These projects typically get built out at three or four units to the acre and are targeted to homebuyers with families whose incomes are around the regional norm. While these families need places to live, by only planning and building for this one demographic group, the Treasure Valley is ignoring several other critical segments of the housing market. Young working adults, seniors, and some smaller families also need places to live. Yet, these people often do not want to live in a single-family house with the responsibilities of maintaining a yard or cleaning multiple bathrooms. Communities in the Treasure Valley need to understand that limiting residential development to only one housing type, even if there is some variation in the price, will not serve their residents’ needs over the long term. By planning for and pushing developers to build a wider range of housing product types, including townhouses and stacked flats, each community will be giving its residents more flexibility and providing options for people as their housing needs change over time.

Building only single-family homes at relatively uniform densities precludes choices for the Treasure Valley in another way beyond making it difficult for a range of household types to live anywhere but in a single-family home. Standard suburban subdivision do not use
land very efficiently and the more land that gets used up for this development type, the less is available for open space, agriculture, habitat and watershed protection, etc. Providing more housing choices would also provide the opportunity to use land more efficiently, so that land is not being unnecessarily consumed by a development type that not everybody wants. Conserving some land now, rather than allowing a single type of development to be built uniformly across the Valley, will give people more choices about land use in the future.

IT TAKES GOOD INFORMATION TO MAKE GOOD PLACES

As the planning paradigm in the Treasure Valley shifts to an approach that integrates vision and policy, balances between local context and regional patterns, and considers infrastructure structure improvements holistically, new development will better reflect the goals that valley residents have for their future. However, planning is a dynamic process. The only way to make plans -- which are by definition static -- responsive to changing conditions, is to implement ongoing processes for collecting data about growth patterns and evaluating those patterns. These processes need to support the ability to monitor the relationship between community vision and development reality. If significant mismatches are occurring, policy makers will have to consider what course of action they want to take. This could include revising the community visions, or developing different plans or implementation strategies. Whatever policy decision is made in response to this situation will then be informed by real data, not just intuition or public opinion. Too often policy makers are put in the position of having to make key land use decisions without having such information. Under these circumstances, it is easy for special interests or a small group of vocal citizens to control the decision making process and the resulting development may not reflect the best long term interest of the entire community or region.

The Treasure Valley Futures project has harnessed a tremendous amount of information first to create and then to quantify and evaluate the scenarios. This type of data collection and assessment process should become an ongoing part of the planning process in the Treasure Valley. Although many of the smaller cities lack the resources to conduct such work on their own, COMPASS can continue to provide a leadership role in this effort. In particular, the process of defining and evaluating regional land use scenarios as a critical part of the transportation planning process will be invaluable both for setting better regional transportation policy, but also for suggesting ways in which local jurisdictions can rethink their land use patterns to create a true “SLAM dunk” for the valley’s future.

FIVE RULES TO LIVE BY

Regional planning is a complex process and takes many participants working in a cooperative and collaborative manner to make the process effective. This is a radical departure from the way land use decision used to be made, where only a few people made the key decisions and there was no consultation with or concern for any other community. The Treasure Valley Futures project only represents the very beginning of
what will hopefully be a long and constructive process to define when, where, and how communities will work together in developing an effective regional planning process that fits the political, cultural, and economic realities of the Treasure Valley. There are five “big ideas” that came out of the Treasure Valley Futures process that may be helpful in the future. These ideas are relatively simple and can serve as guidelines that every individual follows when they think about future growth and development in the valley. These rules are:

1. Development decisions in each community add up to a bigger pattern that affects the entire Treasure Valley.
2. Individual development decisions can work together to make good places, or they work against each other to create fragmented places. Every decision does one or the other.
3. We do shape our sense of community with every land use or infrastructure decision.
4. Good decisions about development require good information, and every decision needs a context.
5. Communication and coordination are key to good decision making.

WHERE DOES THE TREASURE VALLEY GO FROM HERE?

Because the Treasure Valley Futures project should not become an end in and of itself, careful consideration should be given to the next steps that all stakeholders in the planning process can take. A brief list of “next steps” is provided here. However, policymakers, staffs from all local jurisdictions and agencies, and community stakeholders should continue to develop this list in response to an ongoing dialog and to conditions as they change over time.

1. COMPASS should continue to work with each jurisdiction in the valley to track development on a regular basis. However, new units are currently tracked by TAZ which is a somewhat arbitrary geographic boundary. Using TAZ as the unit of analysis for measuring growth trends tend to “smooth” the information and make it harder to identify changes. In Ada County it is easy to track development at the parcel level and Canyon County is now developing a parcel database. Additional work should be done with local communities who use COMPASS data to determine how often these data are compiled and what form the reporting will take. One approach might be to map the data as well as provide it in tabular form as is currently done. In order to minimize the total cost and complexity of information management, standardized methods for data collection and reporting should be jointly developed and applied throughout the valley. Data are only useful if they are collected and presented in ways that will be meaningful to the users. Methods supporting consistent and comprehensive presentation and analysis of growth information should be implemented within each community and for the valley as a whole. In addition to basic development activity, other data that should be tracked on an ongoing basis include: vacant land supply, availability of utilities, new development by period (quarter or year), land not available for development, and, land in agricultural production. Development tracking information should be periodically reported to policy and decision-makers. Through
education and examples elected officials need to be appraised of the need and importance of accurate effective information to the public policy decision-making process.

2. COMPASS should consider revising its transportation modeling procedures in several ways. First, the modeling process should make a closer connection between public policy goals and modeling results by reporting how the travel demand model results fit with local and regional goals and policies, rather than using the data to shape only regional transportation policies. Second, the travel demand model should be updated to reflect more sensitivity to multiple modes, including bicycles and pedestrians. Third, the modeling process should be altered to incorporate “activity-based” land use data so there is a clear understanding as to both the total level of demand for transportation, and the reasons people are making these trips. Such information will allow for design of a more effective transportation system than one based only on demand. Fourth, regional land use scenarios should be incorporated into the regional transportation planning process. These scenarios must present a holistic picture of land use patterns throughout the valley and allow for more integrated land use and transportation planning. As part of this process, individual communities may be required to revise their land use plans to achieve desirable transportation outcomes. As part of this process, COMPASS and the local jurisdictions should give more consideration to the spatial relationship between jobs and housing. While it may not be feasible, or even desirable, for every community to have a numerical “balance” between jobs and housing, the location of jobs does affect the location of housing. Having a better understanding of how this relationship works and making explicit policy decisions based on this information will also help the valley develop better land use patterns and transportation networks and systems.

3. All jurisdictions should consider creating similar land use designations for their comprehensive plans and zoning ordinances. This will help COMPASS and the cities track development patterns more easily and build greater consistency into the land planning process.

4. Jurisdictions and agencies at all levels need to recognize the importance of a coordinated and comprehensive approach for information development, distribution, and sharing. No agency is an island and no public information is exclusive.

5. A State of the Valley Report should be issued each year. Effective use of current information management techniques enables such a report to be produced with a minimal effort.
Appendix A: Treasure Valley Futures Project History

PROJECT DESCRIPTION

From July 1999 until present, the Treasure Valley Futures (TVF) project looked at the link between transportation and land use in the Boise metropolitan area, a two county region in the southwestern Idaho. The project was supported by a $510,000 federal grant from the Transportation and Community and Systems Preservation Pilot program (TCSP), but the 23 project partners also made significant contributions with both in-kind and matching dollars totaling over $290,000.

The primary purpose of the project was to build the capacity of decision-makers from the public, private, and non-profit sectors, as well as the general public to understand factors driving the prevailing development pattern and to implement strategies that will lead to a more coherent, well-connected and well-designed regional pattern that serves multiple transportation modes.

The project scale encompassed two counties and 14 cities (six in Ada County and eight in Canyon County) in the Treasure valley. This is a group of typical western cities. Most of the development in these communities has occurred since World War II, is primarily auto-oriented, and is dispersed over a large geographic area. Although the region’s economy was primarily resource based historically, high technology related sectors have increasingly been attracted to this location because of the quality of life. As a result, the region has become a major growth center, with a 68% rate of growth for the decade of the 1990’s.

Local elected officials in the region had already begun working together to address the myriad of issues raised by that rapid growth. In 1997 they formed the Treasure Valley Partnership by signing an agreement pledging their support to work cooperatively toward achieving four regional growth management goals. At the same time, the need was identified for an educational and advocacy citizens organization to respond to the consequences of rapid growth. A non-profit citizens group, Idaho Smart Growth, emerged and its adopted goals mirror the concerns voiced by the elected officials agreement.

Additionally, the University of Idaho established an Idaho Urban Research and Design Center (IURDC) in the Boise Metro region to enable fifth year architecture students to examine the intersect between architecture and urban growth issues in a professional program setting. Finally, the local Metropolitan Planning Organization, Community Planning Association of Southwest Idaho (COMPASS), recently expanded to include the entire two county region, allowing this agency to better achieve its overriding mission of encouraging regional planning.

This synergistic series of events lead local leaders from these diverse interests to band together and begin work on the TVF project. There was an understanding from the
beginning of the need to include additional partners such as the region’s many highway district commissioners, environmental groups, other community groups, local health interests, and the development industry. The project ended up including 23 different partnering organizations and interests. The relationships formed during the process of completing the project have already begun to payoff in a more integrated approach to planning the region’s future.

The partners agreed to work together on this project toward a common set of goals as outlined by the TCSP program; 1) improving transportation efficiency, 2) reducing impacts of transportation on the environment, 3) reducing the need for future infrastructure investment, 4) ensuring more efficient access to jobs, services, and trade centers, and 5) encouraging private sector patterns that will support these objectives. Deeply held local support for the goals was confirmed by the consistency between the goals adopted by the project and the goals already in place in individual partnering organizations.

**PROCESS**

The planning process for TVF was designed to be educational; to define barriers prohibiting the TCSP and local goals from being reached and to identify a range of policy alternatives that can be incorporated directly into the existing land use and transportation policy framework. Rather than creating a regional plan and requiring all local actions to be consistent with that plan, the TVF process began by educating key decision makers about how decisions made in each jurisdiction impact neighboring jurisdictions within the region, and identifying specific local and small-scale implementation actions to create a cohesive regional picture. This process was designed to be effective in the Treasure Valley’s fragmented decision-making structure where the authority for land use, transportation and other infrastructure systems is spread out among a variety of elected bodies. The intent of the project was not to create a long-range regional growth management strategy, but to enable the cities and counties in the Treasure Valley to better understand the regional impacts of their decisions and to equip them with the tools to manage growth within their communities as each sees appropriate.

**BENCHMARKS**

There were six components, or benchmarks, in the project:

Introduce Local Policy Makers to the TVF Project – educate citizens and community leaders about the alternative ways in which communities within the Treasure Valley can grow.

Establish a Regional “Trend” Baseline – create a regional baseline to show how the region will build out following current development patterns.

Conduct an Implementation Barriers Analysis – identify specific local and state policies that impede orderly and cohesive planning, development and infrastructure construction from occurring.

Compile an “Alternative Choices Toolkit” – create a guide of alternative planning and building practices, including methods to overcome barriers identified in Benchmark 3.
Develop Local Demonstration Project Prototypes – create concepts for specific local communities to test urban design, architecture and landscape principles.

Conduct a Regional Forum on “Next Steps for the Treasure Valley” – report project accomplishments, identify next steps, and evaluate this phase of TVF.

COMMUNITY OUTREACH

Each benchmark included outreach to the general public as well as policy makers within the region. Throughout the project, presentations were made to the press, city councils, chambers of commerce and other interest groups. In addition, a barriers forum, seven demonstration projects, a bus tour throughout the region, and a final forum were held to educate the public.

ANTICIPATED OUTCOMES

At the beginning of the process, the project identified a number of outcomes for which to strive. As this project was an educational and planning process, the outcomes are qualitative rather than quantitative. The desired outcomes of the project were:

Increased awareness across the Treasure Valley region of how future growth can be more efficiently accommodated.

Identification of specific tools individual jurisdictions can use to affect compact land use patterns.

Identification of current barriers that could impede orderly future growth.

Greater cooperative collaboration among all participating partners.

PROJECT PARTNERS

Over 250 governmental organizations have an interest in one or both of the counties in the study area. There are also numerous citizen interest groups and academic institutions in the study area. The TVF project attracted 23 partner organizations who were willing to commit contributed funds or in-kind services to the project totaling over $290,000. Additionally many other groups were involved as outreach partners.

A policy group, including senior staff and board members of partnership agencies and local elected officials, was established to direct the overall process, approve activities, schedules, agreements and contracts. This group met monthly and oversaw the production of project documents and materials, especially products with policy implications. The policy group included representatives of the following:

Ada and Canyon County Chambers of Commerce
Ada and Canyon County Neighborhoods
Ada County Highway District
Boise State University
Canyon Highway District

COMPASS
Division of Environmental Quality
Housing Interests
Human rights/minorities
Idaho Smart Growth
Idaho Transportation Department
A technical group, consisting primarily of local agency and interest group staff, designed, coordinated, oversaw and in some cases carried out the project activities under the direction of the policy group. The technical group membership grew out of the core group, which helped design the grant. Members of the technical group led the working groups on each of the six benchmarks, and were liaisons with the general public and other agencies that were represented on the Technical or Policy groups. Technical Group members included:

- Ada County Development Services
- Ada County Highway District
- Boise State University
- Canyon County Development Services
- COMPASS
- City Planner, Ada County
- City Planner, Canyon County
- Development Community
- Division of Environmental Quality
- Idaho Smart Growth
- Idaho Transportation Department
- Transit Agency in Ada County
- Transit Agency in Canyon County
- Treasure Valley Partnership
- University of Idaho/Idaho Urban Research and Design Center

The membership of both groups changed throughout the course of the project as new groups expressed interest in the project. Some individual members were unable to make long-term commitments, but all of the partner organizations they represented stayed the course.

**ACTIVITIES**

Several events throughout the course of the project sought to involve both the general public and key decision makers, including elected officials and planning and zoning commissioners. These activities included:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Audience</th>
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<tr>
<td>Benchmark 1: Outreach presentations</td>
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<td>Benchmark 2: Bus Tour</td>
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<td>Benchmark 5: Demonstration Projects:</td>
<td>General Public, Key Decision Makers, Specific Local Interests At Each</td>
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Projects:
Ustick
Kuna
Meridian
Nampa
Star
Orchards and Emerald
Idaho Center/BSU West Campus

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<th>Project Site</th>
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<td>Benchmark 6: Final Forum</td>
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<td>Evaluation: Public Survey</td>
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**Collaboration**

Arguably, the most significant outcome from the project was the collaboration between the different agencies. The opportunity to build relationships between agencies was the single most positive aspect of the project reported in the post project survey. TVF brought together interest groups that had previously not worked together, and in some cases, worked against each other. As noted by one post project survey respondent, in addition to building trust between the agencies, the process provided a better understanding of the “constraints, regulatory boundaries, and fiscal responsibilities that many agencies/companies need to work under and allowed us to find ways to communicate and resolve many differences cooperatively.” The relationships built during this project provide the foundation for other collaborations in the future.

This has already been seen with some of the changes being proposed in the cities. There has been a significant increase in the number of policy decisions being made by transportation agencies, local governments, and other groups that directly support local as well as regional objectives addressed by the project. For example: cities in the region have contacted the Idaho Urban Research Design Center and Idaho Smart Growth as they work through changes to comprehensive plans and other planning issues, and as COMPASS embarks on its next round of regional transportation planning they are using a scenarios approach to derive alternatives.
TVF partners envision that the ultimate impact of this project will be to establish mechanisms for accommodating growth that allow individual communities to make their own decisions about land use within a clearly defined regional context. Planning activities among cities and counties will be better coordinated with the highway districts, as well as with the Idaho Department of Transportation and the Idaho Department of Environmental Quality and will include better representation by all affected stakeholders. This coordinated approach will allow communities to retain their unique identities, but also ensure that local decisions around future growth are synergistic, not fragmented within the regional context. Ultimately, this will provide better environmental protection, reduce water consumption, enhance air quality, minimize infrastructure investments, maintain farmland, and preserve the places that Treasure Valley residents value so highly.

**BENCHMARKS**

**Benchmark 1: Introduce Local Policy Makers to the TVF Project.**

Benchmark 1 was targeted at local decision makers, including highway commissioners, city council members, and planning and zoning commissioners, with the primary purpose of educating community leaders about how and where communities within the Treasure Valley can grow and the relationship between the local decisions they make and the regional implications.

Conducted between July 1999 and March 2000, this benchmark served as an introduction to the project for many Treasure Valley community leaders. A 10-minute slide/video presentation provided an overview of the project, including the project partners, benchmarks and goals. The presentations also encouraged participation in the project by stressing the role of community leaders in the process, and the consistency between the TCSP goals the project is striving for and the existing activities conducted by a number of entities in the Treasure Valley.

Over 40 visits to city, county, highway district and planning and zoning meetings were conducted. Presentations continued as requested during the remainder of the project resulting in a total of over 60 presentations by the projects end. The partners are committed to visiting each of those groups again in the coming year to present the information produced in Benchmarks 3 and 4.

**Benchmark 2: Establish a Regional "Trend" Baseline.**

The primary purpose of Benchmark 2 was to fully understand the consequences of growth expected to occur over the next 20 years. The benchmark included three tasks: survey similar growth management efforts throughout the nation to identify the fiscal, environmental, and transportation impacts of various future growth patterns; conduct a bus tour of existing development in the Treasure Valley to better understand the types of development; and to create and compare alternative growth scenarios for the region for the purposes of evaluating the impacts of various development patterns.
**Growth Management Survey:** A survey of growth management efforts taken in similar communities was conducted. The growth management studies surveyed included fiscal, environmental and transportation impacts on future growth patterns. The Toolkit of Alternative Choices, Benchmark 4, uses approximately 12 of the case studies to highlight the tools presented.

The case studies resulting from the growth management survey were appropriate case studies to highlight. Although some were regional examples and some related to one city, the examples were of similar type and size communities, such as: Portland, Oregon; Seattle, Washington; San Diego, California; and Austin, Texas. Often, when looking for “success stories” of growth management techniques, places like Portland, Oregon tend to be quoted as good examples. However, citizens and community leaders from other areas often do not believe that these are the best examples because the situations and history of land use planning are different and people “do not want to become Portland”. The TVF project should be commended for finding numerous examples of places that have practiced land use and transportation planning for decades and places that have a more recent history of such planning.

**Bus Tour:** The bus tour was held in October 2000 to show how individual places within the Treasure Valley work at the local level while also contributing to the overall regional pattern of growth and development. At various points along the tour, participants were asked to evaluate specific locations. This qualitative analysis was designed to help illustrate why there may be inconsistencies between the visions and goals each community has for itself and the reality of what is actually getting built today. A tour book was created to accompany the tour.

Mentioned in the post project survey as one of the project highlights, the bus tour was an excellent method for key stakeholders to better understand how the decisions they make every day impact the overall livability of the region. It provided a subtle, yet effective way, to explain how the vision for the region will not be met by the current actions of the decision makers.

Being able to see actual examples in person allowed participants to get a better feel of the transportation and land use connection and understand how the location and orientation of development can impact the overall development pattern. Pictures and narrative descriptions cannot offer the same level of understanding as a tour where people can place themselves in the actual environment being discussed. This approach also provided insight regarding the importance of other components, such as urban design, that impact the livability of a place.

The tour appropriately considered both positive and negative examples, and provided the participants with the opportunity to assess for themselves the sustainability of the various examples. By considering different land use problems and applying different land use principles, the participants were able to see the applicability of one principle in various situations. This will help them assess the various situations brought before them.
The layout of the guidebook for the bus tour worked well. It provided the right balance of explanation with the opportunity for participants to rank several sites using the SLAM themes (sustainability, livability, accessibility, mobility). In addition, it has continued to provide opportunities for evaluation as an individual exercise for people were not able to attend the original bus tour. (See Project Benchmark Products Notebook)

**Growth Scenarios:** Three scenarios will be created:

- **COMPASS 2020 Ada/Canyon Transportation Model:** based on long-range population and employment projections made by COMPASS through.
- **TVF Unconstrained Current Trend Through 2020:** showing where future development would occur in the Treasure Valley if growth patterns from 1994-2000 were to continue for the next 20 years.
- **Comprehensive Plan Build-Out:** explores the impacts of following the currently adopted policies and ordinances and completes transportation modeling analysis based on this pattern of buildout.

The three scenarios will be compared based using transportation measures that can be directly derived from the transportation model and various measures of land consumption, including the four following criteria:

- Land Supply
- Residential Growth
- Employment Growth
- Jobs and Housing

The final report for this benchmark will:

- Review Scenarios at Regional Scale
- Discuss Local Land Use Implications of Regional Scenarios

**BENCHMARK 3: CONDUCT IMPLEMENTATION BARRIERS ANALYSIS.**

Benchmark 3 studied existing local comprehensive plans, zoning ordinances, transportation plans, and other key policy documents to identify barriers limiting the ability for the region to meet the TCSP goals and local goals, such as clean air and water, protection of farmland and open space, maintaining and enhancing community character, mobility and access and the prudent and equitable use of tax dollars. Through a forum held in November 2000, specific policies were identified that impede orderly and cohesive planning, development, and infrastructure construction from taking place in the Treasure Valley.

The barriers forum involved approximately 100 community leaders representing 12 interest areas (i.e., agriculture, business, land development consultants, development/real estate, economic development, elected or appointed officials, finance, implementers, neighborhoods, underrepresented populations, utility or service providers, and large institutions). Working in small groups, they brainstormed barriers or obstacles that make it difficult to achieve the type of
quality of life desired in the Treasure Valley. Barriers were identified using the SLAM criteria (sustainability, livability, accessibility, and mobility) developed during this project.

The forum workbook, From Neighborhood to Region: Overcoming Barriers To Building Better Communities, analyzed four case studies of development in the region. For each case study, the development pattern was reviewed and the impact on the local and regional development patterns analyzed. Each case study was also evaluated using the SLAM criteria. The workbook provided a basis to begin the discussion of barriers to development. After a review of the case studies, the small groups identified barriers and suggested ways to remove these barriers and enhance regional cooperation to better achieve the region’s goals. Five major obstacles were identified through the brainstorming discussion: education; communication; level of detail; transportation; and partnerships. Solutions to address the barriers were identified, and an action plan, with potential partners and timeframes, identified. The ten actions were summarized in a Barriers Report: Areas for Action, produced in April 2001. The barriers identified in this benchmark were used as the basis of the toolkit created in Benchmark 4.

The barriers forum and workbook worked well to focus the discussion among community leaders. The case studies presented were relevant and explored a variety of different scenarios, both in size and scope. The participation in the forum was diverse, with a good cross section of community members.

**Benchmark 4: Compile an "Alternative Choices Toolkit"**

Benchmark 4 builds on Benchmark 3 by creating a toolkit of alternative planning and building practices that communities and individuals can use to overcome the barriers identified in Benchmark 3. The toolkit focuses on citizen involvement, the creation of land use and transportation plans, and strategies that support more efficient transportation and land uses. The toolkit includes ten different tools, with a description of why the tool is needed, who should be involved, how the tool works, when the tool should be used, how the tool improves development practices, legal basis for the tool and barriers to implementation.

A number of the tools also include case study examples. The toolkit was organized with the intention of being added to over time. The tools were chosen based on the barriers forum, growth trends and scenarios research. The ten tools highlighted include:

- Community education and involvement
- Comprehensive plans
- Circulation plans
- Area plans
- Design guidelines
- Principles of Smart Growth
- Mixed use financing
Pre-application process
Infrastructure standards
Site analysis

The toolkit is intended to be used by local decision-makers, developers, building industry professionals, agency staff, utility providers, economic development professionals, interested citizens and neighborhood groups. The toolkit may be used to:

aid with planning efforts at a regional, community and neighborhood scale;
provide educational information about alternative land use strategies;
assess proposed development applications; and
assist with site-specific design and planning.

The toolkit was presented in April 2001 at the final forum event, Benchmark 6.

The information provided in the toolkit is detailed, yet purposely presented in an easy to read format for the lay audience. The toolkit has a somewhat eclectic nature, as it is based on the needs identified by the barriers forum. Recognizing the varying degrees of capacity among the local jurisdictions, the degree of information presented in each tool varies. The community education and involvement tool provides an overview of tips and methods for involving the public.

Seen as a work in process, this document has provided an excellent start to a toolkit beneficial for elected officials, planning commissioners, developers and lay citizens alike. This document should be updated regularly and should add more innovative growth strategies as the region becomes more accepting and educated about the options available.

BENCHMARK 5: DEVELOP LOCAL DEMONSTRATION PROJECT PROTOTYPES.

Beginning in the fall of 1999 and continuing through December 2000, seven local areas were selected as demonstration design projects to test specific urban design, architecture, and landscape architecture principles. The following five primary TCSP goals were the basis for the demonstration projects:

improve efficiency of the transportation system;
reduce the impacts of the transportation system on the environment;
reduce the need for future costly infrastructure investments;
ensure efficient access to jobs, services, centers of trade; and
examine/encourage private sector development patterns, which meet the above purposes.

The seven sites were selected from proposals submitted by community groups, business associations, neighborhood associations, and cities. University of Idaho Architecture students and faculty were joined by other team members, local professionals, BSU students and faculty (Public Policy, Economics, Art), elected
officials, community members, business and property owners in a two to four month design process for each demonstration sites. Community issues and goals were discussed and incorporated with the goals of the TCSP Program.

One to three day design workshops were held for each project. During the workshops, hands-on activities provided the opportunity to create alternative land use and transportation plans for the sites through the examination of complex issues and discussion of various options. Solutions were proposed and reviewed and then presented for public comment at the end of each design project. Follow-up activities by the TVF team and communities have included Comprehensive Plan reviews, ordinance language proposals, developer contact, and action committee formation among others.

The demonstration project sites included:

**Old Townsite of Ustick** - Boise Creation of a neighborhood “heart” at the original historic townsite of Ustick including civic, retail, and residential elements in a pedestrian-supportive environment on a major transit route.

**Kuna Downtown** - Reinvigoration of Kuna’s central business district with civic additions such as a new high school, city hall complex, and museum. A visitors center for the National Birds of Prey Conservation area would be located just over a proposed thematic bridge to the south side, keeping activity close to the center of town and allowing balanced growth. Commuter bus service is designed to connect Kuna to other communities.

**Downtown Nampa** - Revitalization of downtown with a multi-level parking garage, development of alternative modes of transportation, future transit station at the rail yard, future city hall on the north side, mixed use implementation for downtown businesses (introduction of housing on upper levels of downtown buildings), and neighborhood center at the Old Stampede site.

**Meridian Old Town** - Redevelopment of old town Meridian, as well as areas south of the rail tracks, including provision for a transit station, new city hall complex, convention center, close-in housing choices to support a vital city center and future rail corridor transportation.

**City of Star** - City-wide envisioning for Star’s future with historic Star at the center and neighborhood centers at the periphery to support community life as well as future transit choices (primarily pedestrian and bicycling). Downtown Star design project included a public plaza/commuter transit stop fronted by a future city hall and surrounded by mixed-use retail/residential.

**Orchard and Emerald Revitalization** - Boise Revitalization of this inner-ring suburban shopping area with pedestrian oriented buildings, continuous sidewalks, public plazas, additional housing choices. A new rail-oriented village was located on the old rail spur to downtown.

**Idaho Center / BSU West Campus** - North Nampa Rail-oriented transit village on the site of the Idaho Center parking lots and immediate surrounding area, designed to add in entertainment, retail, office, housing, and civic amenities that
could support the Idaho Center and BSU’s West Campus in a long term sustainable pattern. (see www.tvfutures.org)

The demonstration projects have been a positive experience for almost all communities, but not without struggles, which are to be expected. All demonstration projects, except the Nampa projects, have produced tangible results and the communities have begun to implement some of the changes identified. According to the Idaho Urban Research Design Center, all communities except Nampa have contacted them for additional assistance. For example, Kuna is looking at changing its comprehensive plan; Ustick is writing an ordinance to create a special district; and Meridian is working on an urban renewal project.

Although the demonstration projects were ambitious in scope and size, the final recommendations were realistic and appropriate for the communities. For example, the recommendations for Star proposed a transit center for regional transit, but did not go as far as to recommend that Star have its own transit system which would not have been practical for a town its size. Another of the key elements of the Star demonstration project to note is the site inventory analysis that was conducted by the students. This analysis provided previously unavailable information about the existing assets in Star, the opportunities and constraints they present, and it provided the basis for creating feasible options for implementation. The student group working on the Star project also recognized that they cannot determine the future for Star, but that the community needed to create a vision for what type of town it wants to be in the future before this plan, or any plan, can be implemented.

**BENCHMARK 6: CONDUCT REGIONAL FORUM ON “NEXT STEPS FOR THE TREASURE VALLEY.”**

Benchmark 6 included a “final forum”, held in April 2001, to signify the end of the project. The forum reported the project’s accomplishments and presented the toolkit created as part of Benchmark 4. In addition, some of the existing conditions and trend data created under Benchmark 2 were presented.

The final forum provided the groundwork for future phases of the TVF project by identifying the next steps and recruiting volunteers to continue their involvement. The final forum was scheduled to coincide with the Grow Smart Idaho conference, which was co-sponsored by two of the project partners and began the following day.

The ideas embodied in the plan continue to carried forward since the end of the project with complementary educational forums and workshops. Three workshops on specific concepts of New Urbanism were held over the summer by project partners and the Congress for the New Urbanism. These covered Transit Oriented Development, Commercial Corridor Revitalization and Traditional Neighborhood Development. There is a Farm/City Forum and a Stormwater conference planned for early next year. The framework for continued collaboration by partners on other projects as opportunities arise. Most heartening, local officials have responded to imminent rapid development in one of the region’s small cities by supporting efforts to produce a specific area plan to guide the development pattern for the area. (Attachment G)
Appendix B: Treasure Valley Futures Project Participants

TREASURE VALLEY FUTURES POLICY GROUP

**Ada County Roadways**
- Dave Wynkoop, Commissioner
- Marlyss Meyer, Commissioner
  (Both from Ada County Highway District)
  (Marlyss left office late in the project.)

**Community Planning Association**
- Dave Bivens, COMPASS Board Member
  (Also Ada County Highway District Commissioner)

**Boise School Board**
- Bea Black, School Board Member

**Water Interest**
- Dan Brown, Engineer, United Water Idaho

**Nampa Chamber of Commerce**
- Dave Dykstra, Member
  (CEO, Windermere Real Estate)

**Housing Interest**
- Gary L. Gillespie, Administrator
- Brian Dale (Alternate)
- HUD Idaho State Office

**Canyon County Neighborhoods**
- Ed Falkenstien
  (Also Canyon County Planning and Zoning Commissioner)

**Boise State University**
- John Franden, Executive Assistant to the President of the University

**Ada County Neighborhoods**
- Sue Pisani
- Sally Halbach (Alternate)

**Boise/Garden City Chamber of Commerce**
- Mike Wilson, Member (Retired from business)

**Idaho Transportation Department**
- Jonathan Hennings, District Planner

**Idaho Smart Growth**
- Charles Hummel, FAIA, ISG Board Member
- Jane Lloyd, ISG Board Member (Alternate)

**Canyon Roadways**
- Ralph C. Little, Commissioner
- Virgil Isaacson, Commissioner (Alternate)
  (Both from Canyon Highway District No. 4)
Treasure Valley Partnership
H. Brent Coles, Mayor, City of Boise
Todd Lakey, Commissioner, Canyon County

Public Transportation Interest
Jerome Mapp, Board Member, Treasure Valley Regional Public Transportation Agency.
(Now called ValleyRide) (Also Boise City Council member)

Environmental Interest
Allison Miller, Department of Environmental Quality

TREASURE VALLEY FUTURES TECHNICAL GROUP

Idaho Smart Growth
Elaine Clegg, Co-Executive Director
Jon Barrett, Co-Executive Director

Community Planning Association of Southwest Idaho (COMPASS)
Charles Trainor, Project Manager

Builder Representatives
Dennis Clark, Capital City Development Corporation
Bill Clark, Clark Development
Eric Davis, Retail West Properties

Treasure Valley Partnership
Elizabeth Conner, Executive Director

Boise State University
Dean Gunderson, Facilities Planner

City of Nampa
Norm Holm, Planning Director

Ada County Highway District
Katey Levihn, Project Engineer

Canyon County Transit
Terri Lindenberg, General Manager

Division of Environmental Quality
Todd Maguire

University of Idaho Research and Design Center
Sherry McKibben, Director

Idaho Transportation Department
Mark McNeese, Bicycle and Pedestrian Coordinator

Ada County Development Services
Patricia Nilsson, Planner III

City of Boise, Planning Department
Hal Simmons, Principal Planner

Canyon County Development Services
Darin Taylor, Planner
RESIDENTIAL LAND AVAILABILITY ESTIMATES – SPATIAL DYNAMICS

Ada County Method

The Ada County Assessor’s database contains multiple entries for some parcels. This is due to the fact that certain parcels have parts that are taxed at different rates. An example of this is a parcel with 5 acres of residential property, 95 acres of agricultural property and 60 acres of open range. The important fields used for evaluation are PARCEL, ACREAGE, ZONECODE, TOTALVALUE and HOMEEDEXEMPT.

First Step: Start with only residential and/or agricultural parcels.

Second Step: Using the homeowners’ exemption field, determine if the parcel is the owner’s primary residence. If this field indicates that a given parcel is the location of a primary residence, the parcel is excluded. The exception to this is if the assessed acreage of the parcel with a homeowner’s exemption is greater than 13.5 acres, since such a parcel has the potential to be further subdivided.

Third Step: Determine if the parcel is part of a subdivision or not. Subdivided parcels are evaluated differently than parcels that have not been subdivided. Parcels within a given subdivision are compared to each other on the basis of assessed value per acre (VPA), as well as whether they are owned by a homeowners’ association or a mobile home park. Unsubdivided parcels are evaluated according to a more intricate series of factors including value per acre by parcel size class, parcel ownership patterns, and total assessed values.

Fourth Step for parcels that are part of a subdivision is to exclude:
parcels with comparatively high VPAs (2-3 times higher than neighboring parcels);
parcels owned by homeowners’ association;
and parcels belonging to mobile home parks.

Fourth Step for parcels that are not part of a subdivision is to exclude:
parcels that are not zoned for residential or a given set of agricultural land uses;
parcels less than one acre valued at more than $30,000 and parcels between one and 13.5 acres with VPA around $8,000 or greater (as a general starting point), EXCEPT for those parcels grouped together and owned by a developer;
parcels between one and 13.5 acres with VPA around $10,000 or greater (as a general starting point), EXCEPT for agriculturally-based properties and those owned by development companies;

and private single owner parcels of less than 13.5 acres with high total assessed values

See NOTE below

**Fifth Step:** All remaining parcels not previously excluded are considered available for residential development.

NOTE: Although it was based principally in a quantitative analysis of assessor’s data, this methodology included a certain amount of subjective judgment on the part of the analysts in the case of selected parcels and areas. In such cases, the assessor’s data provided a logical starting point regarding suitability for future residential development. However, since there are circumstances unique to groups and even single parcels that require scrutiny unique to that scenario, in such cases the quantitative data may have been supplemented or contradicted by the subjective judgment of the analysts.

Canyon County Method

The Canyon County Assessor’s database contains more detailed information about a parcel than that of Ada County. There are 3 fields provided for classification with a value field for each: CAT1, CAT2 & CAT3 and FCV1, FCV2 & FCV3. Categories for consideration of available land are as follows:

01 Irrigated Agriculture
02 Irrigated Pasture
03 Non-Irrigated Agriculture
04 Irrigated Meadow
05 Dry Grazing
10 Homesite Rural Lands
12 Rural Residential Tract
15 Rural Residential Subdivision Lot < 1 acre
18 Rural Land (non-farm)
19 Waste
20 Residential Lots < 1 acre In City
84-87 Manufactured / Mobile home categories. Excluded because none were found on tracts of land greater than 13.5 acres.

**First Step:** Start with only residential and/or agricultural parcels.

**Second Step:** Determine if the parcel is in residential or agricultural land use.**Third Step** for parcels that are in residential land uses is to include only parcels with no dwelling units (CAT1=rural residential tract/subdivision, rural non-farmland; CAT2=waste)

- parcels greater than 13.5 acres valued at less than $80,000 (CAT1=homesite rural lands)
- small parcels with low total assessed values (CAT1=residential lots/acreage in city)
Third Step for parcels that are in agricultural land uses is to include only:

- single-use agricultural parcels (CAT1=irrigated agriculture/pasture, dry grazing; CAT2=waste)
- multiple-use agricultural parcels (CAT1=irrigated agriculture/ pasture, non-irrigated agriculture; CAT2=irrigated pasture, non-irrigated agriculture, irrigated meadow, dry grazing; CAT3=non-irrigated agriculture, irrigated meadow, dry grazing)

Fourth Step: All parcels included under these categories are considered available for residential development.

NOTE: Although it was based principally in a quantitative analysis of assessor’s data, this methodology included a certain amount of subjective judgment on the part of the analysts in the case of selected parcels and areas. In such cases, the assessor’s data provided a logical starting point regarding suitability for future residential development. However, since there are circumstances unique to groups and even single parcels that require scrutiny unique to that scenario, in such cases the quantitative data may have been supplemented or contradicted by the subjective judgment of the analysts.

DEVELOPMENT OF RESIDENTIAL HOUSEHOLD COUNTS FOR 1994 AND 2000 – SPATIAL DYNAMICS

DATA SUMMARY

In order to make a prediction about the number of households and housing units that might be added in the future, it was first necessary to determine the current baseline of households and housing units in the Treasure Valley and to estimate the recent rate of housing construction. This analysis was based on county assessor’s records and on 1994 aerial photography provided by the Idaho Department of Water Resources.

GENERAL METHOD

Numerous data sets were reviewed and evaluated before determining which ones would provide the most reliable information and allow for consistent methodologies between the two counties and the two analysis years. The Idaho Power customer database and COMPASS’ building permit databases were initially thought to be the best available information for both counties and were geo-coded with the intent of using the results as the basis for the household counts. However, the results of the geo-coding were not satisfactory due to inaccuracies in the address-ranges and street-names of the road coverages. Consequently it was determined that the county assessor’s records and parcel databases would provide the most reliable spatial information for allocating households to TAZ’s. The challenge with this approach was distinguishing between residential and non-residential parcels, a task that required very time-consuming manual editing of the databases. The assessor’s records and the Idaho Department of Water Resources 1994 aerial photography were the basis for this analysis. Since the assessor’s files and parcel databases varied between
counties, different methodologies and queries had to be developed for each county. However, in all cases, the 1994 photography was used as a backdrop for evaluation of query results.

Canyon County Method

Point coverages were generated from Canyon County parcel data (first quarter 2000) and linked to the county assessor’s files. These coverages were then edited in order to identify households present in 1994. This involved two tasks: the first was identifying whether or not it was a residential parcel, and the second task was to determine whether or not it contained a housing unit in 1994.

**TASK:** Identify whether or not the parcel is in a residential land use.

Due to inconsistencies and incomplete data fields in the assessor’s database, each query had to be cross-referenced against other fields in order to distinguish between fields that had not been entered and those where a ‘0’ value was legitimate. For example, the database includes a field for unit counts but it was very obvious in looking at the photography and at other fields for a given record, that this data was not always captured in the database. Therefore, it was assumed that a unit count greater than 0 was correct, while a unit count equal to 0 needed to be cross-referenced against other attributes and the photography. Using the assessor’s database and photography, a series of database queries were conducted in order to isolate the residential parcels. The results of each query were reviewed in the database as well as relative to the aerial photography in an attempt to identify parcels that had been mischaracterized in the database or contained incomplete information.

**First Step:** Exclude all parcels with a total value less than $10,000 that had a unit count of 0 and were not identified as a mobile home site.

**Second Step:** Exclude tax-exempt parcels that are not part of an assisted living or affordable housing project.

**Third Step:** Exclude parcels where the total assessed value equals the value of the property without improvements, and the unit count is zero.

**Fourth Step:** Exclude parcels where the value per acre is less than $5,000, and the unit count equals zero.

**Fifth Step:** Exclude parcels identified as barren land.

**Sixth Step:** Exclude commercial and industrial parcels where the unit count equals zero.

**Seventh Step:** Exclude parcels where the combined value of the agricultural lands equals the total assessed value, and the unit count equals zero.

**Eighth Step:** Exclude parcels in new subdivisions with values considerably below those of surrounding parcels.

**TASK:** Determine which residential parcels contained housing units in 1994, specify number of units per residential parcel, and calculate residential densities by TAZ.
Once the likely residential parcels were isolated, the point coverages were systematically reviewed in detail against the photography to identify those parcels representing a housing unit in 1994. An item for ‘Year’ was added to the database in order to distinguish between 1994 and 2000 households. During this process additional points that had not been selected during the queries were eliminated when it was obvious that they could not represent a housing unit in either year due to a conflicting land use.

**Ninth Step**: Compare assessors’ data with aerial photography to determine whether or not residential parcels had been developed by 1994.

**Tenth Step**: Assign unit counts to unspecified residential parcels. Dwelling unit yields for all mobile home parks are based on an assumption of 7 units per acres, and yields for multi-family residential parcels are based on COMPASS’ building permit database.

**Eleventh Step**: Aggregate dwelling unit counts by TAZ and calculate gross residential densities.

**Ada County Method**

Conceptually, the same basic approach was used for Ada County although due to differences in the assessor’s databases, it was necessary to use different screening mechanisms. Point coverages for Ada County parcels from October 1994 were recovered from a Spatial Dynamics back-up tape and were used as the basis for the 1994 household counts. In order to further refine the identification of the residential parcels, the PFMP-LANDUSE and the COM-LANDUSE databases were recovered from a 1996 Spatial Dynamics back-up tape. These tables were the result of work completed by Spatial Dynamics for the Ada Planning Association (COMPASS). They provide parcel-based land use code look-up tables from the assessor’s ITC codes. Unfortunately, these databases are no longer maintained by the county so they can not be used for the 2000 household counts but they were applicable for 1994.

**TASK**: Identify whether or not the parcel is in a residential land use.

**First Step**: Include as residential all parcels containing a homeowners’ exemption.

**Second Step**: Exclude parcels with total assessed values less than $10,000 that do not have a homeowners’ exemption.

**Third Step**: Exclude tax-exempt parcels not associated with an affordable housing project.

**Fourth Step**: Include all parcels identified as being in single-family residential land uses based on the PFMP-LANDUSE data attributed to the 1994 parcel points.

**Fifth Step**: Include all parcels identified as being in multi-family residential land uses based on the COM-LANDUSE data attributed to the 1994 parcel points.

**TASK**: Determine which residential parcels contained housing units in 1994, specify number of units per residential parcel, and calculate residential densities by TAZ.
The results of the above selections were then evaluated against the aerial photography for a more detailed evaluation. Parcel data from the first quarter of 2000 was obtained from Ada County and related to the 1994 point coverage by the parcel number. A field was added for ‘Year’ and all those parcels identified in 1994 were attributed as such.

**Sixth Step:** Compare assessors’ data with aerial photography to exclude parcels that are obviously non-residential.

**Seventh Step:** Compare assessors’ data with aerial photography to determine whether or not residential parcels had been developed by 1994.

**Eighth Step:** Assign unit counts to unspecified residential parcels. Dwelling unit yields for all mobile home parks are based on an assumption of 7 units per acres, and yields for multi-family residential parcels are based on COMPASS’ building permit database. The building permit database was used for all multi-family units established between 1990 and 1999 and the COM-LANDUSE data, which tracks a unit count, was used as a cross-reference as well as a primary source for buildings that were in place prior to 1990.

**Ninth Step:** Aggregate dwelling unit counts by TAZ and calculate gross residential densities.

Description of Variables Used by Spatial Dynamics in Defining Residential Land Availability and Household Counts

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAZIMP_ID</td>
<td>Unique identifier obtained by intersecting the City Area of Impact boundaries with traffic analysis zones. Results in polygons.</td>
</tr>
<tr>
<td>TAZ</td>
<td>Traffic Analysis Zone.</td>
</tr>
<tr>
<td>CITY_IMP</td>
<td>City Area of Impact.</td>
</tr>
<tr>
<td>TOTAL_AC</td>
<td>Area of TAZIMP_ID polygon.</td>
</tr>
<tr>
<td>AVAIL_AC</td>
<td>Sum of acreages in assessor database of those parcels designated as available for future development and / or occupation. See attached sheet for further description as to how this designation was determined.</td>
</tr>
<tr>
<td>DENSITY94</td>
<td>Net density calculated (total housing units / total assessed acreage) in 1994.</td>
</tr>
<tr>
<td>DENSITY00</td>
<td>Net density calculated (total housing units / total assessed acreage) in 2000.</td>
</tr>
<tr>
<td>CPRES_AC</td>
<td>Area of polygon consumed by residential land use as designated by City and/or County Comprehensive Plan and clustered into Rural, Low Suburban, High Suburban and High Urban.</td>
</tr>
<tr>
<td>CPNRES_AC</td>
<td>Area of polygon consumed by non-residential land use as designated by City and/or County Comprehensive Plan and clustered into Commercial, Industrial, Institutional and Mixed Use.</td>
</tr>
</tbody>
</table>
DVRES_AC  Area of polygon consumed by residential land use as designated by Idaho Department of Water Resources in 1994 and clustered into Residential Farmsteads, Old Urban / High Density, New Subdivision and Rural.

DVNRES_AC  Area of polygon consumed by residential land use as designated by Idaho Department of Water Resources in 1994 and clustered into Commercial & Industrial and Urban Public Land.

ZIPCODE  USPS Zipcode assigned by where the majority of the polygon lies.

CENSUS90  Count of Housing Units from 1990 US Census polygons. (from the HUS field)

Additional data for the model includes the total household counts for 2020 based on the COMPASS household forecast: Ada County (174,321), Canyon County (55,408)
DEVELOPMENT POTENTIAL METHODOLOGY FLOW DIAGRAM

Treasure Valley, Idaho
IDWR Landcover
1994

- Residential Farmstead
- Rangeland
- Irrigated Cropland & Pasture
- Perennial
- Idle Land
- Land in Transition
- Abandoned & Other Agriculture

1994 Available Land

Spatial Subtraction / Elimination

Public Land (Federal & State)
- Roads
- Canals, Ponds & Floodways
- Dump
- Open Space
- Slope Protection

Available Land

- Ada County Parcel Centroids
  - Attributed as "POSSIBLE"
  - Ada County Assessor Database Evaluation Available Property Document
  - Attributed as "YES"

- Canyon County Parcel Centroids
  - Attributed as "POSSIBLE"
  - Canyon County Assessor Database Evaluation Available Property Document
  - Attributed as "YES"

Spatial Overlay

Taxed Acreage

Traffic Analysis Zones / City Area of Impact TAZ_IMP

Available Land for Development

Source: Spatial Dynamics
DEVELOPMENT POTENTIAL METHODOLOGY FLOW DIAGRAM (CONTINUED)

Ada County Assessors Database

Residential and / or Agricultural parcels

No Homeowners Exemption

Subdivided "R" Parcel

Parcel Type

Unsubdivided "S" Parcel

Available = "YES"

Compare with other parcels in the subdivision

Less than 1 acre

AND

Less than $30,000

Less than 13.5 acres

AND

Less than $80,000

Greater than 13.5 Acres

AND

Under $10,000 per acre

Owned by Developer

Owned by Agricultural Entity

Subjective Judgements that point to obvious vacant parcels

Un-Built

Not a trailer park

2-3 times lower in value

Less than 3 times lower in value

start

start
Canyon County Assessors Database

Evaluation of Assessment categories found in database CAT1 CAT2 CAT3 and value of assessment FCV1 FCV2 FCV3

Residential and / or Agricultural parcels

Residential

- No Dwelling Unit combinations of CAT1 = 12,15,18 CAT2 = 0,19
- or
  - Homosite with large lot CAT1 = 10 CAT2 = 0 CAT3 = 0 over 13.5 acres less than $80,000
  - or
  - Small lot with low value CAT1 = 20 CAT2 = 0 CAT3 = 0
  - or
  - Subjective Judgements that point to obvious vacant parcels

Agricultural

- Single use Agriculture combinations of CAT1 = 1,2,5 CAT2 = 0,19
- or
  - Multiple use Agriculture combinations of CAT1 = 1,2,3 CAT2 = 2,3,4,5 CAT3 = 3,4,5

Available = "YES"
EMPLOYMENT TREND AND BASELINE – STRATEGIC ECONOMICS

DATA SUMMARY
The purpose of this task was to take zip code-level employment trend data and allocate it to the various TAZs in the county. Employment was allocated based on commercial/non-residential acreage estimates supplied by Spatial Dynamics.

GENERAL METHOD
Using COMPASS’ five land use/employment categories (see category definitions and data dictionary below) historical zipcode-level employment data supplied by the Bureau of the Census was allocated to TAZs for three points in time to establish an employment baseline and trend. Employment was allocated from zipcodes to TAZs according to the acreage of non-residential land that each has relative to total acreage of non-residential land for the zipcode within which it lies. Employment was allocated for 1987, 1992, and 1997 in order to estimate growth rates for both the 1987-1997 and 1992-1997 time periods. Zipcode-level employment data at the 4-digit SIC level was supplied by the Bureau of the Census, and estimates of TAZ and sub-TAZ land area by land use data was supplied by Spatial Dynamics. Land use/employment categories were provided by COMPASS's Roni Gehring-Pratt as follows:

- Agriculture = 2-digit SICs 01 through 09
- Government = 2-digit SICs 40 through 49, plus 3-digit SICs 806 and 821
- Industrial = 2-digit SICs 10 through 39
- Office = 2-digit SICs 60 through 99, minus 3-digit SICs 806 and 821
- Retail = 2-digit SICs 50 through 59

Note: The Bureau of the Census Zipcode Business Patterns database does not track employment in public administration, therefore all "Government" employment in this analysis refers to either Transportation, Communications, Electric, Gas, And Sanitary Services or Hospitals/Schools. Because of the calculations performed to allocate employment from zipcodes to TAZs, some rounding of employment figures occurred, as shown below:
Total 1987 regional employment = 84,404 (rounded to 84,391)
Total 1992 regional employment = 114,839 (rounded to 114,817)
Total 1997 regional employment = 142,101 (rounded to 142,064)

Description of Variables Used by Strategic Economics in Defining Employment Trend and Baseline:

TOT87,92,97  Total employment for respective years
AGR87,92,97  Agriculture employment for respective years
GOV87,92,97  Government employment for respective years
IND87,92,97  Industrial employment for respective years
OFF87,92,97  Office employment for respective years
RET87,92,97  Retail employment for respective years
FUTURE COMMERCIAL AND RETAIL DEVELOPMENT POTENTIAL ESTIMATES - JANE SUGGS

DATA SUMMARY

Based on acreage numbers generated by Spatial Dynamics, the amount of future commercial/ non-residential development potential at build-out was estimated in order to provide an overview of the magnitude and nature of likely future development as dictated by the available land supply. Employment densities were also utilized in estimating the employment generation represented by build-out of the current commercial/non-residential land supply.

GENERAL METHOD

For industrial and agricultural land uses:
FAR = 0.20; average employment density = 1:500 SF
Likely build-out density = (0.20 x 43,560)/500 = 17.4 employees/acre

For office, institutional, government and mixed-use land uses:
FAR = 0.42; average employment density = 1:260 SF
Likely build-out density = (0.42 x 43,560)/260 = 70.4 employees/acre

For retail and commercial land uses:
FAR = 0.27; average employment density = 1:736 SF (except where noted)
Likely build-out density = (0.27 x 43,560)/736 = 16.0 employees/acre

FARs are averages of all usable Ada Co. records for that land use. Employee densities are typical from data supplied by COMPASS:
• 43 employees/acre for mix of commercial and office in a TAZ
• 44 employees/acre for mix of industrial and office in a TAZ

Description of Variables Used by Jane Suggs in Estimating Future Retail and Commercial Development Potential:
BOI011—St. Lukes Med. Center
BOI040—Boise State University
BOI049—Parkcenter
BOI071—Airport
BOI072—Airport
BOI074—Airport
BOI075—Airport
BOI076—Shopping Center
BOI078—Shopping Center
BOI082—Shopping Center
BOI089—Airport
BOI102—St. Alphonsas Med. Center
BOI131—Hewlitt Packard
BOI132—Boise Research
BOI137—Shopping Center
BOI154—Shopping Center
BOI154—Boise Town Square Mall
KUN311—CBD
KUN312—CBD
MER145—Shopping Center
MER146—St. Lukes Med. Center
NMP530—Karcher Mall
Appendix D: Land Use Allocation Model Methodology

OVERVIEW

Our approach to forecasting growth in the Treasure Valley began with Spatial Dynamics household estimates for 2000 (and corresponding population and vehicle estimates) and COMPASS’ employment estimates for 2000. A trend land use scenario was generated from these by allocating growth increments to traffic analysis zones (TAZs) using a gravity-type model. Growth was allocated in 5-year increments, starting in 2000 and going out to 2020. The target year for each allocation became the base year for the next allocation. Increments of growth were allocated to TAZs based on the amount of each land use at the beginning of the period, remaining available land of suitable type, and regional accessibilities. Accessibilities were recalculated at the end of each 5-year forecast period, by running the regional travel model TP+ and thereby accounting for changes in land use patterns and improvements to the roadway network during the preceding five years. The inventory of available land was reduced after each allocation to account for land absorbed by growth, and the diminished amount of available land became the base for the next allocation. Then the process was repeated for the next 5-year increment, and so on until 2020 was finally reached.

Unlike many land use allocation models (DRAM-EMPAL, for example), ours did not assume that equilibrium would be reached between land use and transportation at the end of each time period. In principle, equilibrium may never be reached because related land uses are always chasing each other. In this respect, our land use allocation model is comparable to Paul Waddell’s UrbanSim, a state-of-the-art integrated land use-transportation modeling structure that is getting lots of attention. Ours, of course, is less sophisticated and is not grounded in microeconomics.

The remainder of this section focuses on the derivation and implementation of final employment and residential models used in the forecasts.

EMPLOYMENT GROWTH MODELS

Based on 1992 and 1997 employment data, we estimated employment change models for retail, office, and industrial sectors. Employment change was modeled in terms of the base-year employment by sector, amount of land available for development with suitable comp plan designations (either nonresidential or mixed use), and regional accessibility indices based on the gravity model of TP+. Ours are simple Lowry-type land use allocation models that capture the effects of transportation system improvements via the regional accessibility indices.
No employment model could be estimated for the government sector because the vast majority of TAZs showed losses of government employment between 1992 and 1997. This makes the team wonder about the quality of the employment data. We chose to use COMPASS’ forecasts for this sector, as well as for the agricultural sector.

We ended up modeling employment growth as a power function (nonlinear equation with each independent variable raised to a power). Parenthetically, the team has never had much faith in nonlinear regression methods, as their coefficients don’t appear stable as variables are added and starting values changed. So instead of using nonlinear regression, we took logarithms of all variables and then estimated linear regression equations. This is equivalent to estimating power functions. To take logarithms, values must be positive. Thus, negative and zero values of variables were assigned small positive values (.01 for proportions, 1.0 for other variables). Employment changes between 1992 and 1997 were negative for many TAZs, and hence required adjustments. This little methodological slight-of-hand should not distort reality too much, as it seems unlikely that such a large number of TAZs actually experienced declines in employment between 1992 and 1997.

To calibrate our employment models, we had to estimate one independent variable ourselves, that being the amount of available (developable) land for each TAZ in 1994. The estimate of available land for 1994 was backed out of Spatial Dynamics’ estimate of available land for 2000. SD’s database provides developed residential acreage in 1994 and 2000, and developed nonresidential acreage in 2000. It does not provide developed nonresidential acreage for 1994, which is required to back out available land from the 2000 estimate. So developed nonresidential land in 1994 had to be estimated. To do so, the change in employment between 1987 and 1997 was divided by the employment density of each TAZ (as reported in an earlier Spatial Dynamics spreadsheet—where no density estimate was available, a value of 16 employees per acre was assumed). This gave us the change in nonresidential acreage between 1987 and 1997, which was prorated to get an estimate of change over the 6-year period from 1994 to 2000. Subtracting this from the 2000 developed nonresidential acreage produced an estimate of 1994 developed nonresidential acreage. Adding the amount of residential and nonresidential land developed between 1994 and 2000 to the amount of land available for development in 2000 gave us the amount of land available for development in 1994.

From this variable, two other variables were created: the amount of available land in 1994 suitable for residential development (based on comp plan proportions) and the amount of available land in 1994 suitable for nonresidential development (again, based on comp plan proportions). The latter was used as an explanatory variable in the employment equations, the former as an explanatory variable in the residential equations.

All regional accessibility indices were tested for their explanatory power. For office and industrial employment growth, home-based work trip accessibility index proved most significant; for retail employment growth, home-based “other” trip accessibility (accessibility for trips other than work and shopping) was most significant. This latter index measures accessibility broadly, accounting for accessibility of TAZs to households, retail employment, service employment, and office employment.
Our employment growth models took the form:
\[ \Delta \text{Sector Employment} = a \times \text{Sector Employment}^b \times \text{Available Land}_{\text{nonres}}^c \times \text{Regional Accessibility}^d \]

Model coefficients, t-statistics, and R²'s are presented for each model in Table 1. t-statistics are shown in parentheses; these are for the log-log forms of the equations. R²-statistics are also for log-log forms of the equations.

Models of retail and office employment growth, estimated from 1992-1997 employment data, have coefficients that are statistically significant and have the “right” signs (that is, have values in keeping with theory). They have decent explanatory power as well, reflected by their R²-statistics.

The model of industrial employment growth also has statistically significant coefficients with the expected signs, but has less explanatory power than the other two models. This seems reasonable for a sector regarded as footloose.

These models are the basis for 2005 employment estimates, using 2000 data as the base year; for 2010 employment estimates, using 2005 as the base year; for 2015 estimates, using 2010 as the base year; and for 2020, using 2015 as the base year.

Table 1. Models of Employment Growth

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Employment</td>
<td>2.36</td>
<td>.395</td>
<td>.181</td>
<td>.382</td>
<td>.47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(12.3)</td>
<td>(6.1)</td>
<td>(5.5)</td>
<td></td>
</tr>
<tr>
<td>Office Employment</td>
<td>2.06</td>
<td>.501</td>
<td>.160</td>
<td>.472</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(17.8)</td>
<td>(5.5)</td>
<td>(7.6)</td>
<td></td>
</tr>
<tr>
<td>Industrial Employment</td>
<td>1.68</td>
<td>.265</td>
<td>.302</td>
<td>.168*</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.4)</td>
<td>(8.1)</td>
<td>(2.2)</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the .05 level, two-tailed test. All other regression coefficients are significant at the .001 level or beyond.
RESIDENTIAL GROWTH MODELS

Residential growth models were derived in a manner similar to the employment models. Spatial Dynamics data divided housing units into six categories corresponding to different densities:

Multi-family: Less than 0.07 acres and housing count greater than one. (14+ units per acre)
Urban: Less than 0.13 acres (7+ units per acre)
High Suburban: 0.22 – 0.13 acres (4.5-7 units per acre)
Low Suburban: 0.75 – 0.23 acres (1.3-5.4 units per acre)
Rural: 0.76 – 10 acres (0.1-1.3 units per acre)
Agriculture: Greater than 10 acres (Less than 0.1 units per acre)

The six categories of housing were combined into three: urban (first two categories), suburban (next two categories), and rural (last two categories). Based on 1994 and 2000 household data by category, we estimated residential growth models for the three categories of housing. Housing unit change was modeled in terms of the base-year households by category, amount of land available for development with suitable comprehensive plan designations (either residential or mixed use), and regional accessibility indices based on the gravity model of TP+. Home-based “other” accessibility proved most significant for urban and rural residential development; home-based work accessibility proved most significant for suburban residential development. In addition, a dummy variable representing the availability of municipal water and sewer service in a given TAZ was tested and proved significantly related to residential growth in two categories: urban residential and suburban residential.

Once again, log-log transformations were performed so as to estimate power functions. The resulting models were equivalent to those estimated for employment, but for the inclusion of the municipal water and sewer variable. Our residential growth models took the form:

\[ \Delta \text{Households} = a (\text{Households})^b (\text{Available Land}_{\text{res}})^c (\text{Regional Accessibility})^d (\text{Municipal Water/Sewer})^e \]

Model coefficients, t-statistics, and R²s are presented for each model in Table 2. t-statistics are shown in parentheses; these are for the log-log forms of the equations. R² statistics are also for log-log forms of the equations. These models are the basis for year 2005 and later household forecasts.
Models of urban and suburban residential growth have coefficients that are statistically significant and have the "right" signs. They have adequate explanatory power as well, reflected by their $R^2$-statistics.

The model for rural residential growth differs from the other two models in these respects. First, the availability of municipal water and sewer service did not prove significant. That makes sense, as these low-density residential categories will mostly be served by well and septic. Second, regional accessibility proved inversely related to growth; all else being equal, more remote locations are more likely to experience growth at these very low densities than are more accessible locations.

Table 2. Residential Growth Models

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Residential</td>
<td>0.82</td>
<td>.241</td>
<td>.132</td>
<td>.316</td>
<td>.700*</td>
<td>.21</td>
</tr>
<tr>
<td></td>
<td>(7.7)</td>
<td>(4.0)</td>
<td>(3.2)</td>
<td>(2.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suburban Residential</td>
<td>0.18</td>
<td>.398</td>
<td>.381</td>
<td>.426</td>
<td>1.52</td>
<td>.38</td>
</tr>
<tr>
<td></td>
<td>(11.2)</td>
<td>(10.3)</td>
<td>(4.5)</td>
<td>(4.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Residential</td>
<td>0.65</td>
<td>.332</td>
<td>.176</td>
<td>-.207</td>
<td>--</td>
<td>.68</td>
</tr>
<tr>
<td></td>
<td>(10.4)</td>
<td>(7.7)</td>
<td>(-4.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the .05 level, two-tailed test. All other regression coefficients are significant at the .001 level or beyond.

MODEL IMPLEMENTATION

Land use allocation models were developed for use in travel demand forecasting. In TP+, the region’s travel demand forecasting model, land use data for the year of interest are contained in the demolu.dat file. To create the 2000 land use file, demolu.dat.2000, four steps were required:

COMPASS' external productions and attractions for 1997 were assumed to be correct, and simply copied into the file.

Household and employment estimates by TAZ were prorated so as to sum to regional control totals.

Average household sizes and vehicle ownership rates from COMPASS' 1997 file were applied to household estimates by TAZ.

Population by TAZ was prorated to equal the regional control total.

To create the 2005 land use file, demolu.dat.2005, from the 2000 land use file, demolu.dat.2000, the following steps were taken:
Changes in regional control totals between 2000 and 2005 were computed from COMPASS’ demolu.dat files for those two years. This was done for households and three employment sectors -- retail, office, and industrial.

Growth allocation models were run using 2000 households, employment, and accessibility indices. These models yielded estimates of household and employment growth by TAZ between 2000 and 2005.

These estimates of household and employment growth between 2000 and 2005 (from 2) were adjusted proportionally to equal the changes in control totals (from 1). This was done for each employment sector individually.

Adjusted estimates of household and employment growth (from 3) were added to 2000 base year estimates to obtain forecasts for 2005.

COMPASS’ public employment, agricultural employment, and external productions and attractions for 2005 were assumed to be correct, and simply copied into the new demolu.dat file for 2005.

Average household sizes and vehicle ownership rates from COMPASS’ 2005 demolu.dat file were applied to household projections by TAZ in the new demolu.dat file.

This process was then repeated, each time with new estimates of regional accessibility, through the target year, 2000.

COMPARISON TO COMPASS FORECASTS

Figure 1 shows activity levels by land use and TAZ for the base year 2000. Figure 2 shows our (TVF’s) forecasts for 2020. Figure 3 shows changes between 2000 and 2020. For ease of comparison, Figures 4 and 5 present COMPASS’ forecasts by land use and TAZ for 2020, and COMPASS’ changes between 2000 and 2020. COMPASS’ numbers are rather different than ours.

For the three employment sectors, we used COMPASS’ base year employment estimates by TAZ, and COMPASS’ control totals for 2020. So the differences between our 2020 numbers and theirs are entirely due to different spatial allocations of growth. Our forecasts are based on land use models, estimated with historical data, which allocate growth according to (1) base levels of each land use, (2) amount of available land with suitable comp plan designations, and (3) accessibility of zones to existing development, with different accessibility measures used for different land uses. For households, our base year allocations came from Spatial Dynamics and were different from COMPASS’, very different at the TAZ level and slightly different in the aggregate. The different forecasts for 2020 thus reflect both a different spatial distribution to begin with and a different allocation of growth. This is why COMPASS’ 2020 household forecasts show negative growth for a few TAZs; they are being compared to Spatial Dynamics 2000 base year estimates, not COMPASS’.
TP+ (Transportation Planning Plus) is a travel demand forecasting package developed by Citilabs, a nationally recognized firm. More information on TP+ can be found at http://citilabs.com/v.tp/tp.html

DRAM. DRAM, the Disaggregated Residential Allocation Model, forecasts residential locations by allocating employees (located by their place of work) to residential zones on the basis of: (1) the residential attractiveness of different residential zones, and (2) travel times and/or costs between the work and residential zones. The zones' attractiveness is based on: (1) the extent of the current vacant and developable land, (2) the percentage of the developable land which has been developed, (3) the quantity of the current residential land, and (4) the socio-economic status of the zone's current residents. The relative importance of these variables for a particular application is determined by the model calibration process. The model is a modified version of the standard singly constrained spatial interaction (or "gravity") model that incorporates a multivariate, multi-parametric attractiveness function and consistent procedures for specifying residential zone and/or employment sector-specific constraints.

EMPAL. EMPAL, the EMPloyment Allocation model, forecasts employment locations by allocating households (located by their place of residence) to alternative work zones on the basis of: (1) the employment attractiveness of different zones (2) travel time and/or cost between home and work, and (3) the current location of the region's residents and workers. The relative importance of these variables is determined by the model calibration process. Like DRAM, EMPAL is a modified version of the standard singly-constrained spatial interaction model. The modifications introduced into EMPAL are: (1) a multi-parametric attractiveness function, (2) procedures for specifying zone- and/or sector-specific constraints, and (3) a variable which relates the future employment in a zone to its current employment. (Source: EMPACT Project. Kent State University. http://gis.kent.edu/gis/EMPACT/lit_urb_md01.htm

UrbanSim is a software-based simulation model for integrated planning and analysis of urban development, incorporating the interactions between land use, transportation, and public policy. More information on UrbanSim can be found at (http://www.urbansim.org/).
Treasure Valley Futures - Growth Allocation Process

- Dummy Variables for Utilities by TAZ
  Residential Only
- Vacant Land by Residential and Non-Residential by TAZ
- Allocate Growth for Next Five Year Period
- Recompute Vacant Land by TAZ
- Household and Population File
- Office, Retail and Manufacturing Employment File
- Run Traffic Forecast Model for Next 5 Year Horizon
- Recompute Accessibility Indices
- Run Iteration 4 times
  2000-2005
  2005-2010
  2010-2015
  2015-2020
- External Productions and Attractions File Exogenous - COMPASS
- Roadway Network File Exogenous - COMPASS
- Government and Agricultural Employment File Exogenous - COMPASS
Appendix E: Bus Tour Survey Results

Overview

On October 13th, approximately 55 residents of Ada and Canyon Counties attended a bus tour of the Treasure Valley region and participated in an evaluation exercise designed to outline critical growth issues in the region. These participants represented a full cross-range of decision-makers and planning activists in the region, including elected officials, planning and zoning commissioners, community leaders and concerned citizens, city/county staff, and members of the business community. The bus tour participants were taken on a tour of recent and older development in the Valley and asked to rate what they saw according to a checklist of evaluation criteria organized around the themes of sustainability, livability, accessibility, and mobility. In addition to discussing the land use and planning issues embodied in the “areas of interest” making up the bulk of the bus tour route, participants responded to the evaluation criteria at four “stops” that exemplified the most pressing and relevant planning issues shaping the Treasure Valley. By evaluating the bus tour stops according to the qualitative criteria outlined in their tour guide materials, the participants were able to identify which land use and planning issues applied to each of the stops and to prioritize the most pressing of these issues for consideration in the upcoming scenarios analysis study. Additionally, the participants were asked to evaluate the suitability of the bus tour route as well the efficacy of topics that the tour materials covered.

Bus Tour Stops Results

The bus tour consisted of five “stops” and eight “areas of interest.” The first stop was the Boise Depot, where the tour began and finished. The Depot served more as a contextual point of departure than an example of any particular planning issue, and as such was not rated according to the qualitative evaluation criteria.

**Stop 2 (Oak Park Village)** received the most favorable responses of the stops on the bus tour, with overall likeability rated as 3.7 out of 5. The stop received aggregate rankings in sustainability, accessibility, and mobility just under 4 and a livability ranking of approximately 3.5. The stop scored the highest in efficient use of resources (4.2) and lowest in preserving green spaces (3.1). Although several respondents commented positively on the orientation of the townhouses to the street, a greater number commented that the residential development overall did not seem well-integrated into the surrounding neighborhood. A lack of sufficient green/park space was one of the more frequently mentioned deficiencies perceived in the development, as was the perceived lack of neighborhood-serving retail in the commercial component of the development.
Stop 3 (Federal Way and Gowan Road) received a significantly lower overall likeability score of 2.1 out of 5. The stop received aggregate rankings slightly greater than 2 in sustainability and accessibility, and slightly less than 2.5 in the categories of mobility and livability. The stop scored the highest in enhancing economic competitiveness (3.0) and lowest in restoring a sense of community (1.8). The most common complaints about this stop focused on the perception that the various land uses in the area are too separated and that the scale of development here favors an automobile-orientation rather than a pedestrian-orientation. However, several respondents felt that there was still potential to plan and develop this area in the future so that accessibility could be improved and links between land uses strengthened.

Stop 4 (Crossroads Shopping Center) received the lowest overall likeability score of the stops on the bus tour, with overall likeability rated as 1.9 out of 5. The stop received aggregate rankings in sustainability, livability, and accessibility right around 2 and a mobility ranking of slightly greater than 2. The stop scored the highest in enhancing economic competitiveness (2.8) and lowest in restoring a sense of community (1.6). As with the previous stop, a common observation about Crossroads was that the various land uses in the area are too separated and that the scale of development here favors an automobile-orientation rather than a pedestrian-orientation. Many felt that project approvals at the shopping center should have taken pedestrian safety and ease-of-travel into consideration, and that transit connections should be incorporated to make the center less automobile-oriented.

Stop 5 (Idaho Center and the new BSU campus) received an overall likeability score of 2.4 out of 5. The stop received an aggregate rankings in sustainability slightly greater than 2, a livability ranking slightly below 2.5, an accessibility ranking slightly less than 3, and a mobility ranking right around 2.5. The stop scored the highest in enhancing economic competitiveness and in intensifying land utilization in designated activity areas (2.8) and lowest in restoring a sense of community and in offering a diverse range of choices for living/working/playing (1.9). Almost all of the respondents for this stop noted that it is probably to early to pass judgment on the development, since the project is still in its infancy. Nevertheless, most stated that new development around the Idaho Center has great potential for creating a rail and/or multi-modal transit stop if properly implemented over the near term.

Bus Tour General Comments

At the end of the bus tour, participants were asked for their feedback on the structure and efficacy of the tour itself as a means of exploring the growth patterns shaping the Treasure Valley. Below are their answers to the various questions asked about the general quality of the bus tour.
“Did you learn anything new about growth patterns in the Treasure Valley?” The overwhelming majority of participants responded that they did in fact learn something new about growth patterns in the Treasure Valley. Here are some of their comments:

The East-West concept vs. North-South.

Hadn’t thought about topography south of 184 compared to north. Hadn’t realized large amount of vacant land along Franklin Rd corridor.

Infill happens over time, probably despite the “wishes” of the original residents.

Learned how current market forces are prompting Big-Box retail/commercial growth. Older parts of Boise did not have Big-Box approach. These areas are more appealing but not competitive.

Fairview is in big trouble, especially with new residential development (Fairview/Eagle) interfacing and functioning with transportation problems.

We have too much room and are spreading too far. We need to be more compact and land-preservation minded. Comp plans, zoning ordinances need to be re-written and strengthened.

“Was the information presented during the tour complete enough?” The overwhelming majority of participants responded that they felt the information presented during the tour was complete enough. Here are some of their comments:

Yes. Excellent Land Use/Transportation focus. Dena did an excellent job of relating the two.

I thought the booklet coupled with the tour guide triggered different perspectives on planning.

It was nice to get the views of an out-of-towner

Here are some of the comments regarding possible changes to the format and substance of future tours:

Book is excellent. It would have helped to have it ahead of time. Some comments of participants were incomplete and needed further discussion.

Hard to include everything in 2 hrs. Perhaps next time we could incorporate West Boise.

No. Need discussion of planning for industrial growth

Maybe. We had local experts on the tour! They should have discussed w/us the history, not a consultant from outside of area!

Somewhat of a shotgun scatter pattern of issues at times. Not clear if there is one basic theme or principle to bring with me.

“Do you think the SLAM themes are an effective way to evaluate growth? If not, what evaluation criteria should be used instead?” The overwhelming majority of participants
approved of the SLAM themes as a means of evaluating growth in the Treasure Valley. Here are some of their comments:

The 4 criteria provide a great framework but perhaps there is a need for more specific measures within each of the 4 criteria

Excellent way to evaluate growth

I like the ideas/implementation will be tough!

It seems to provide a good framework but no formula can catch it all.

Here are some of the comments regarding possible changes to the evaluation criteria:

Fairly good. Too heavy a residential bias to deal with Crossroads area where existing problems/situation may preclude much redevelopment

They are o.k., but slanted toward residential in a way which makes evaluation of some areas problematical.

Limited. How do you apply livability to a major retail center? Major retail must be large to survive

Need to include residents' perspective of how well they like where they live. What's good, what's bad.

A=Availability

“Were there other issues you would have liked the tour to address?” Here are some comments from the tour participants:

How to network more with the whole community to build a plan

Pointed out lots of problems but RR isn’t going to solve problems-need commitment from elected officials

waterways, water systems, air quality.

Better understanding of physical constraints

Felt other stops for evaluation might have been better (too many newly developing examples used)- provided greater variety of examples. For example, some more mature west Boise neighborhoods would seem to have demonstrated SLAM principles moderately well.

Reinvestment in brownfields

Econ Dev in area viewed by local experts

Industrial development

Focus was heavily weighted towards land use issues. The transportation implications and considerations were understated.

Maybe the Eagle/Star area where folk want privacy-2-5-15 acre lots and animals

Infrastructure requirements. Energy requirements.
Options for solutions-effective responses

How to protect residents who live along truck routes. Push for off-street sidewalks to protect others. Alternatives for transportation.

I am very concerned about neighborhoods being able to walk to their local shopping centers. We have no sidewalks on Overland (truck route) between Cloverdale and 5 mile. It is very dangerous; we need off street sidewalks.

Urban sprawl vs. turn of the century development.

“Do you have additional questions about the issues raised by the tour? What are they?”

More detail regarding the future rail system linking Treasure Valley communities. The Regio Sprinter is unacceptable. Look at the rail system developed in Salt Lake City.

Utilizing canals, abandoned RR tracks for connectivity/open space/recreation areas.

Can we preserve farmland?

Would like to see focus on features that provide identity to a place.

How to overcome neighborhood opposition to infill

Rail implications are obvious. Exploring inter-line node issues would be fun.

How does rail interact at streets? Do we need grade separated crossings-etc?

Different subject but related-how to base tax incentives etc. to implement these ideas

Do we have the institutional capacity to really manage growth? The political will???

Like to see more emphasis on ways to preserve existing lifestyle as new growth occurs (design elements that can do this with changes in uses)

Do regional shopping centers have a place? Should they be integrated or separated?

What policies should replace the 5-acre minimum lot size in rural transitional land?

“Do you think we should repeat this tour and invite other people to attend, and if so, who?”

Neighborhood association representatives and more concerned citizens with elected officials. Follow up with Q&A lunch for the 2 to communicate with each other.

Everyone talks in Treasure Valley but nobody listens.

More neighborhood reps, city planning staff, public works, major corporation CEO’s in area, school district boards, major development (retail & residential) people.

I wish my City Council would join us!

More neighborhood reps, developers. Mandatory attendance for P & Z’s

School principals and health professionals.

Heads of neighborhood associations, subdivision associations; persons that have provided significant testimony in public hearings on land use.
More elected officials, especially all ACHD commissioners and staff. P&Z/elected officials from Meridian and Nampa. Include a mix of developers, large landowners and citizens.

Other planning and social agency staff that work with growth issues, like FamSer @ IH&W, EPA, DEQ, non-profits

More economic development people

Business leaders, radio talk show hosts, service clubs, educators

P&Z people, developers to understand why variances etc. are often not good, commercial developers to think of new ways to design their sites.

State legislators

NIMBYs

Neighborhood work groups

Citizens/homeowners associations

School district, all City council, P&Z decision makers, Chamber economic people, ITD ACHD-transportation decision makers, selected citizens

School board members, chamber of commerce, local economic development groups