

# Chapter 2: Demographics, Scenario Planning, and the Future of the Region

## 2.1 Regional Profile

The Albuquerque Metropolitan Planning Area (AMPA) is geographically situated in central New Mexico and encompasses 3,095 square miles. Within the AMPA lie Bernalillo County, Valencia County, and the majority of the populated portion of Sandoval County, 11 incorporated places, eight Pueblos and the To'hajiilee Navajo Reservation. Approximately one-sixth of the land within the AMPA is protected open space including city or county open spaces, state parks, and lands owned and managed by federal agencies including the U.S. Fish and Wildlife Service, National Park Service, and U.S. Forest Service. The AMPA is bisected by the Rio Grande, which supports the Bosque ecosystem, irrigates farmland, and carries water for household consumption.

The AMPA contains New Mexico's largest concentration of population and jobs. As of 2012, it is home to approximately 879,000 people and 389,000 jobs, which represents 43 percent of the state's population and about 48 percent of its jobs. Table 2-1 illustrates how existing population, housing, and employment are distributed by county within the AMPA.

Bernalillo County is the most populated county in the state and serves as a hub of social and economic activity. Major employers in the county include the University of New Mexico (UNM), Central Community College of New Mexico (CNM), Sandia National Laboratories, and Kirtland Air Force Base.

Sandoval County is the fastest growing county in the state due to rapid development within the City of Rio Rancho. The county contains a mix of semi-urban, suburban and rural settings and is home to Intel Corporation, University of New Mexico and Central New Mexico Community College campuses, Sandoval County Regional Medical Center, Presbyterian's Rust Medical Center, and several Pueblos.

**Table 2-1: AMPA Population and Employment by County**

	Bernalillo County	Sandoval County *	Valencia County	Total
Population	675,548	126,490	77,363	879,401
Share	77%	14%	9%	100%
Housing	287,318	48,600	30,313	366,231
Share	78%	13%	8%	100%
Employment	341,452	31,829	15,700	388,981
Share	88%	8%	4%	100%
<i>* Sandoval County numbers reflect the portion in the AMPA only.</i>				

Valencia County is the location of the state’s newest Urbanized Area, the Los Lunas Urbanized Area, which was designated following the 2010 Census. Valencia County’s economy is rooted in agriculture and much of the valley continues to be farmed today, while several key centers including the Village of Los Lunas and the City of Belen have flourished as both residential and commercial communities.

The City of Albuquerque is the region’s largest incorporated place in the AMPA as well as the most densely developed. The City of Rio Rancho is the second most populated municipality, while the Town of Bernalillo ranks second in density.

**Table 2-2: Population and Density for Incorporated Places within the AMPA, 2012**

Incorporated Places	Population	Land Area (square miles)	Population per Square Mile
Albuquerque	555,417	189.2	2,936.4
Belen	7,255	17.8	408.3
Bernalillo	8,413	5.2	1,608.6
Bosque Farms	3,889	3.9	997.2
Corrales	8,453	11.0	767.8
Los Lunas	15,168	15.7	966.7
Los Ranchos de Albuquerque	6,087	4.3	1,402.5
Peralta	3,643	4.4	820.5
Rio Communities*	5,625	7.6	743.1
Rio Rancho	90,818	103.9	874.1
Tijeras	547	1.2	463.6
<b>Incorporated Population</b>	<b>705,315</b>	<b>364.2</b>	<b>1,936.6</b>

\* Rio Communities population is derived from the Census Designated Place boundary.

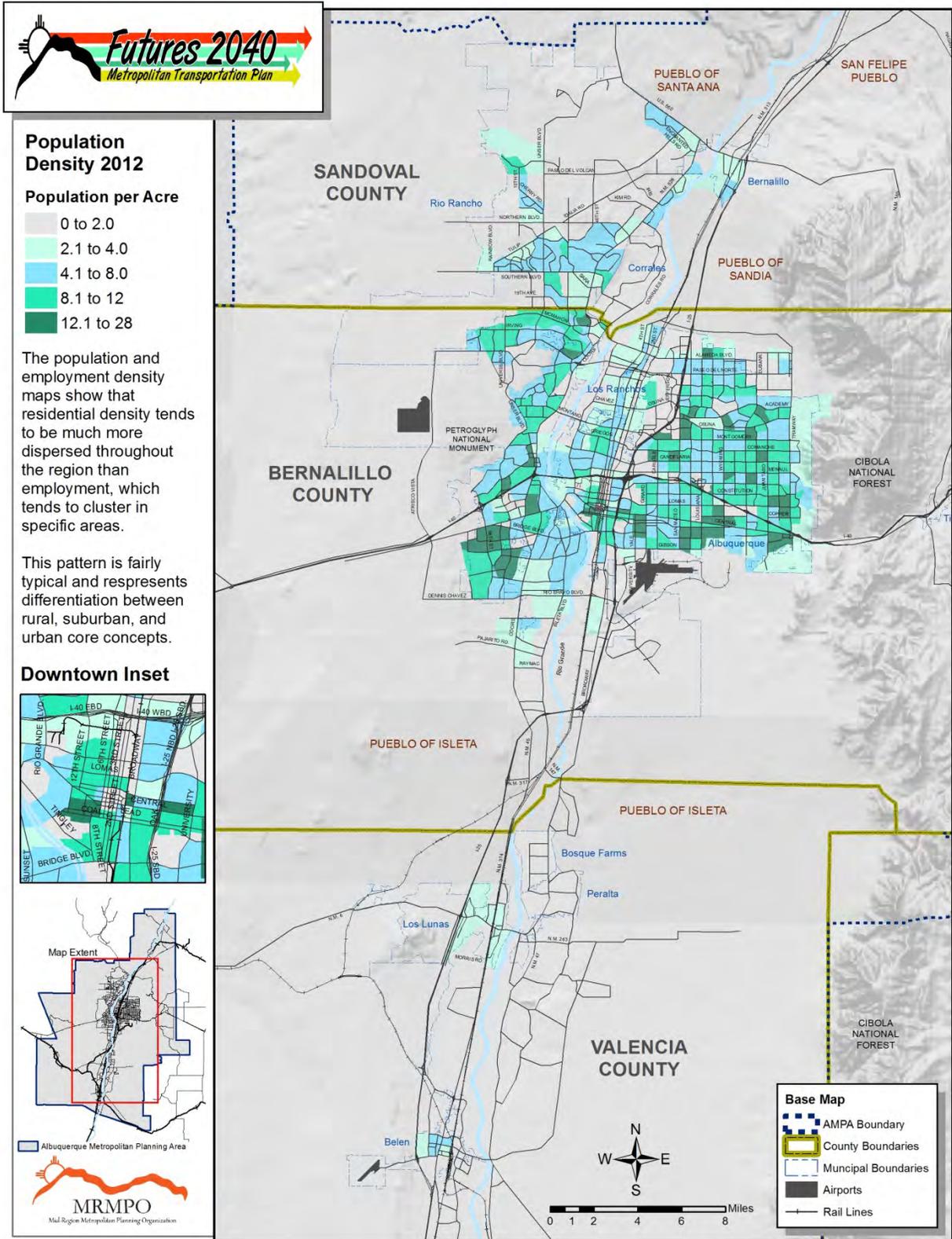
Source: US Census Bureau, Population Estimates, American Community Survey

Maps 2-1 and 2-2 show concentrations of residential and employment activity within the AMPA in 2012. These maps are based on Data Analysis Subzones (DASZs), which is a unit of geography often used by transportation planners. DASZs are the equivalent of small subareas that are relatively homogeneous in nature, are usually bounded by transportation corridors, and provide a standardized geography for displaying information.

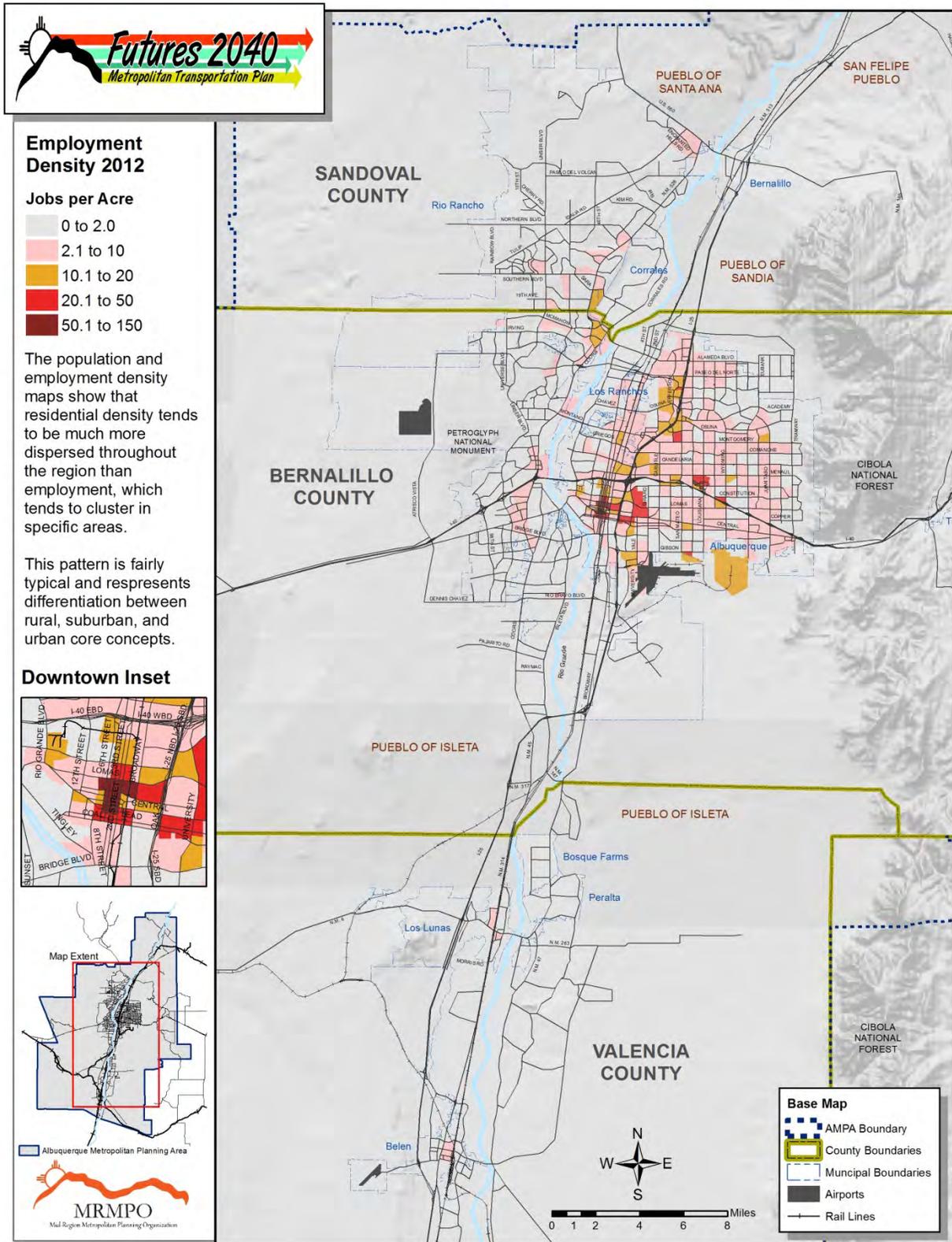
Residential development is dispersed throughout the region with varying densities. Within the City of Albuquerque, Downtown Albuquerque and the near northeast and southeast parts of the city constitute some of the earliest and most dense neighborhoods. Following 1960, the city expanded into the far northeast heights as well as west of the Rio Grande. The Southwest Mesa experienced rapid growth of dense residential subdivisions during the early to mid-2000s. To the north, the City of Rio Rancho incorporated in 1981 and experienced fast-paced growth over the following three decades.

Employment concentrations form many of the region's activity centers and serve as major destinations for residents throughout the region. These areas appear on Map 2-2 in darker shades of red and include North I-25/Journal Center, Downtown Albuquerque, UNM/CNM, Sunport, Kirtland Air Force Base, ABQ Uptown, Intel, and Cottonwood. Other employment destinations in the region include Rio Rancho City Center, Atrisco Business Park, Cordero Mesa, Los Morros Business Park, and Los Lunas and Belen town centers, among others. The majority of all jobs, approximately two-thirds or 142,000 jobs, lie outside of employment centers and are scattered among the region's corridors and neighborhoods.

Map 2-1: Population Density by DASZ, 2012



Map 2-2: Employment Density by DASZ, 2012



## 2.2 Historical Growth

Since 2000 the AMPA has experienced dramatic shifts in growth rates and development patterns. A large part of the last decade brought rapid growth and significant expansion that further fueled a dispersed population. The 2035 MTP reported that between 2000 and 2008 the AMPA grew by 128,000 people, a rate of two percent per year, and consumed 20,000 additional acres for residential use. At the same time, the AMPA gained approximately 32,000 new jobs. The Great Recession slowed growth substantially as population levels between 2008 and 2012 rose by an average of just one percent per year. Over the same period, the metropolitan area lost an estimated 23,800 jobs. Employment loss and economic stagnation continues to be one of the key challenges facing the region today.

**Figure 2-1: Population and Employment Growth, 2000-2012**

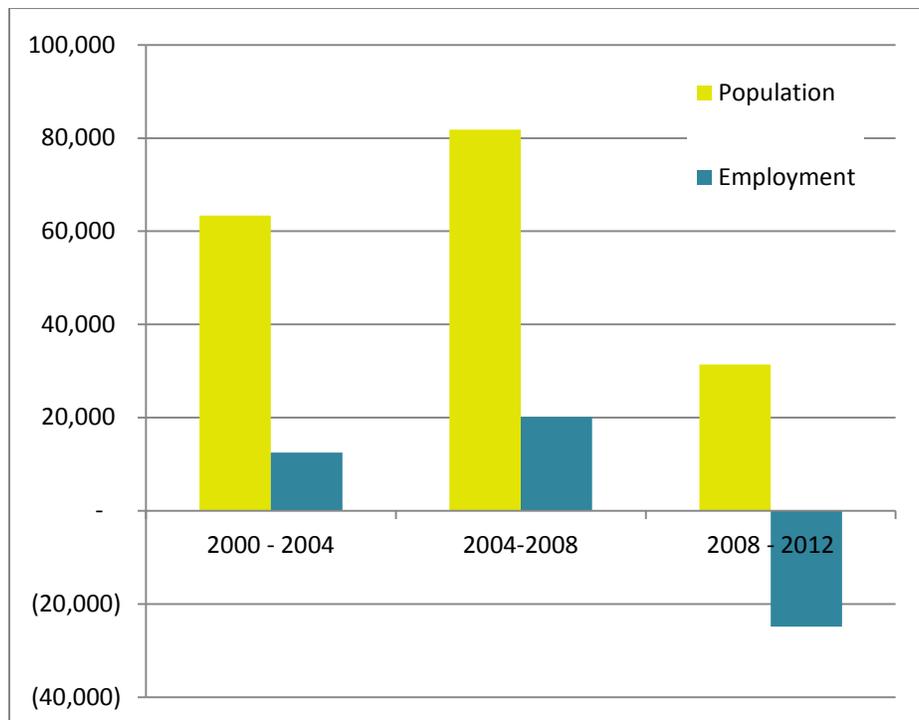
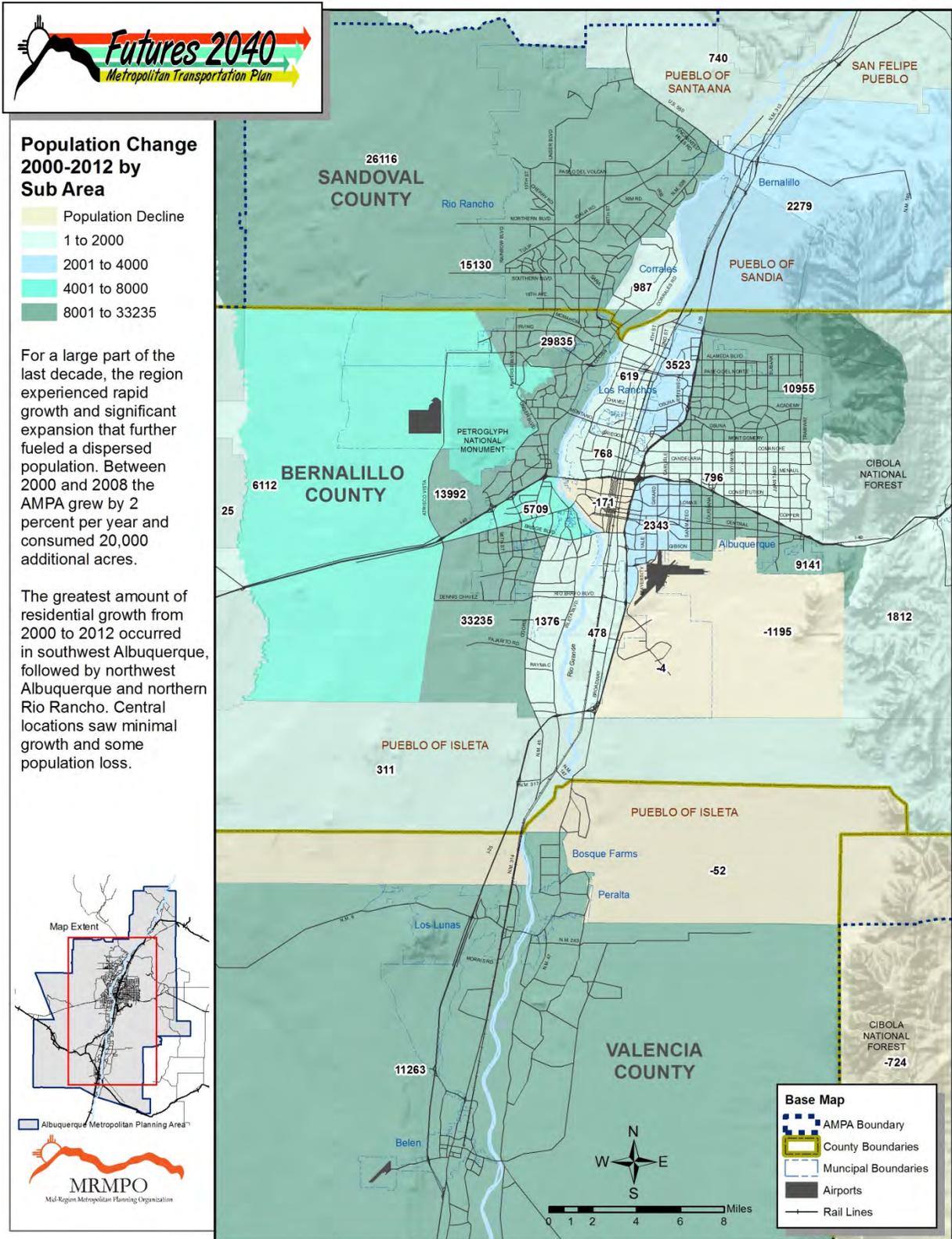
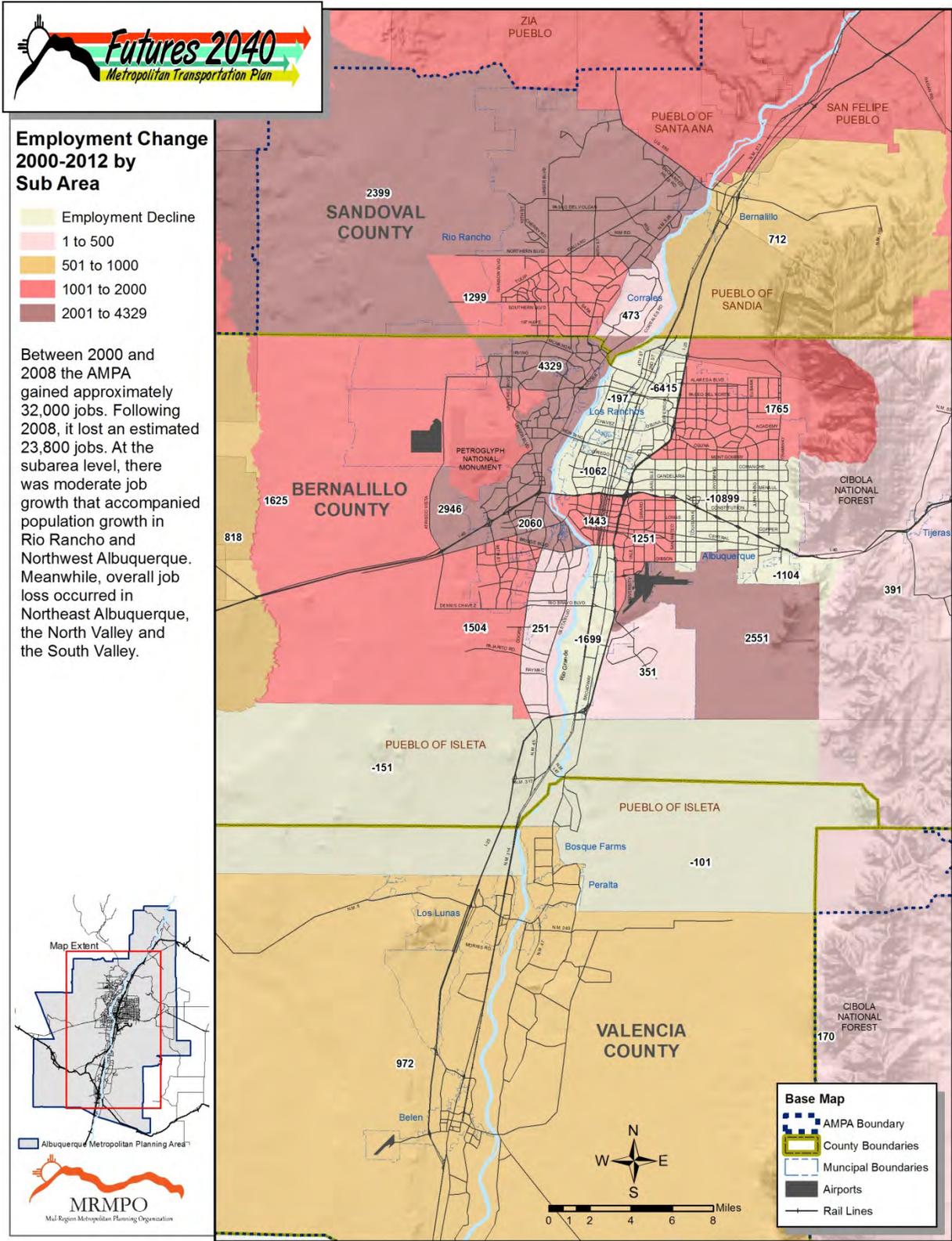


Figure 2-1 illustrates the incremental pace of growth over the past 12 years. In the first four years of the decade population growth was strong and employment growth was stable. Between 2004 and 2008 rapid population growth continued as housing construction peaked along with employment. Following 2008, population growth slowed and overall employment dropped to levels not seen since 2000. Maps 2-3 and 2-4 depict population and employment change by subarea in order to show concentrations of new growth, and loss, within the AMPA since 2000.

Map 2-3: Population Growth by Sub-Area, 2000-2012



Map 2-4: Employment Growth by Sub-Area, 2000-2012



The greatest amount of residential growth from 2000 to 2012 occurred in southwest Albuquerque, followed by northwest Albuquerque and northern Rio Rancho. Central locations including the North Valley, South Valley, and Southeast and Near Northeast Heights saw minimal growth and some population loss as a result of few new homes built and smaller household sizes. Job growth was slow but in general accompanied population growth in Rio Rancho and northwest Albuquerque. Job growth was dismal in southwest Albuquerque where one new job was gained for every 22 new people. At the same time, job loss occurred throughout the core, which in the context of overall job loss in the metro area is to be expected given that these are the same areas with the greatest concentration of jobs. It is notable that Downtown Albuquerque and the area east of Downtown remained on the positive side of employment growth over the decade due to key projects that brought jobs into the area, including the new courthouse buildings and expansions at UNM Main Campus, a new Children’s Hospital at UNMH and CNM expansion.

*Jobs-Housing Balance*

The subject of river crossing congestion was highlighted throughout the 2035 MTP and continues to inform conversations related to future growth and transportation in the region. Jobs to housing balance, displayed as a ratio (jobs/housing), is a useful metric for understanding and anticipating travel demand, particularly across the river. Ratios above one are considered a healthy balance, and it is generally assumed that a higher jobs-housing ratio equates to more opportunities to live close to work and shop close to home, thereby enabling shorter driving distances.

**Table 2-3: Jobs-to-Housing Balance East and West of the Rio Grande**

<b>Jobs-Housing Ratio</b>	<b>2000</b>	<b>2004</b>	<b>2008</b>	<b>2012</b>	<b>2000-2012</b>
<i>East of the Rio Grande</i>	1.6	1.51	1.5	1.39	-0.21
Housing	199,242	209,484	215,080	219,694	10%
Jobs	319,099	317,060	323,496	306,296	-4%
<i>West of the Rio Grande</i>	0.67	0.68	0.65	0.56	-0.11
Housing	94,808	112,495	137,652	146,537	55%
Jobs	63,647	76,820	89,307	82,685	30%
<b>AMPA Average</b>	<b>1.3</b>	<b>1.22</b>	<b>1.17</b>	<b>1.06</b>	<b>-0.24</b>

Table 2-3 shows that the ratio of jobs to housing throughout the AMPA has declined in recent years. The primary cause for the decline is job loss. The table also illustrates an imbalance between jobs and housing west of the Rio Grande where homes outnumber jobs by nearly two to one. Considering that there is an average of 1.18 workers per household, this means that the majority of Westside workers are commuting across the river for work. It is clear that although the Westside has been successful in attracting jobs over the past decade, rapid housing growth has outpaced job growth further widening the existing jobs-housing imbalance.

## 2.3 Regional Growth Forecast

Every metropolitan transportation plan begins with a growth forecast. By identifying the likely origins (homes) and destinations (work, shopping, and recreation sites) of trips, as well as the paths that connect them, planners are able to anticipate future transportation needs. Forecasts must be built upon the most recent information available in regards to both demographic and economic trends. This need is exemplified by the events that followed the Great Recession of 2008. Since the recession the AMPA has experienced changes in growth trends, including slowed birth rates, a decline in migration, and job loss. This updated information has been integrated into the assumptions that underlie a revised population and employment forecast for the *2040 MTP*. Tables 2-4 and 2-5 illustrate the population and employment forecasts for the AMPA.

**Table 2-4: AMPA Population Forecast**

	<b>Bernalillo</b>	<b>Sandoval*</b>	<b>Valencia</b>	<b>AMPA</b>
2012	675,548	126,490	77,363	879,401
2040	987,080	203,128	127,715	1,317,923
<b>30 Year Growth</b>	<b>311,532</b>	<b>76,638</b>	<b>50,352</b>	<b>438,522</b>

\*The small portion of Sandoval County outside of the AMPA has been excluded.

The AMPA is projected to grow by 438,500 people, or 50 percent, over the next 28 years. Approximately 71 percent of that growth will take place in Bernalillo County, while Sandoval County will capture 17 percent and Valencia County will capture 11 percent. At the regional level, the forecasts contained in the *2040 MTP* are based on projections from the Geospatial and Population Studies (GPS) department at the University of New Mexico. The projection technique is based on historical birth rates, mortality rates, and migration patterns, and has proved accurate over the long-term.

**Table 2-5: AMPA Employment Forecast**

	<b>Bernalillo</b>	<b>Sandoval*</b>	<b>Valencia</b>	<b>AMPA</b>
2012	341,452	31,829	15,700	388,981
2040	473,037	72,569	25,563	571,169
<b>30 Year Growth</b>	<b>131,585</b>	<b>40,740</b>	<b>9,863</b>	<b>182,188</b>

\*The small portion of Sandoval County outside of the AMPA has been excluded.

Employment growth is expected to slightly lag the pace of population growth, with a 47 percent increase in jobs expected by 2040. Bernalillo County is expected to capture 72 percent of that growth, Sandoval County will capture 22 percent, and Valencia County will carve out 5.4 percent of the new jobs to the AMPA.

### Shifting Age Dynamics

The forecast is noteworthy not just for the total levels of population growth, but the shifting age dynamics. In particular, New Mexico is expected to transition from one of the youngest states to perhaps one of the oldest. The population pyramids shown in Figures 2-2 and 2-3 demonstrate the changing age composition over time. For ease of comparison, the following data considers all of Valencia, Bernalillo, and Sandoval Counties, including the relatively small population in Sandoval County outside of the AMPA boundaries. Whereas the population bulges formed by the Baby Boomer (persons approximately 50 to 68 years of age) and Millennial (approximately 14 to 32 years of age) generations can be clearly observed in 2012, the distribution of population by age groups is less pronounced in 2040.

**Table 2-6: Population by Age Group, 2012 and 2040**

Age Group	2012	2040	Change
Less than 15 Years	20%	18%	-2%
15-64 Years Old	67%	61%	-6%
65 Years and Older	13%	21%	+8%

The population pyramids reveal a considerable increase in the senior population (65 years and over), which grows from 13 to 21 percent of the population as the Baby Boomers continue to age and as life expectancy increases (see Table 2-6). These numbers represent a substantial level of growth: the total number of residents age 65 years and over grows from 117,600 to 278,300, an increase of 137 percent. Although the share of youth (age 15 years and under) shrinks slightly as a percentage, the number of residents increases from 183,000 to 241,400. As a result, the working age population will continue to decline as a share of the overall population.

The dependency ratio measures the number of dependents per 100 workers. Dependents are considered persons not typically in the labor force (youth and seniors), and workers are assumed to be those most likely in the labor force (ages 15 to 64). While this is somewhat crude (not everyone between 15 and 64 is in the labor force and not everyone over 65 retires), it is nonetheless a useful measure to gauge potential pressure on the work force and other economic indicators. The projection shows that today there is about one dependent for every two workers. In the future this is expected to increase significantly to nearly two dependents for every three workers.

There are important implications of these age dynamics on travel patterns and transportation needs. In particular, changes in labor force participation rates mean that commuting trips in the peak period will form a smaller percentage of daily trips compared to today, although the total number of commuting trips in the peak periods will increase as the population grows. Overall, there will likely be changes in traffic patterns as trips are dispersed across the day. Similarly, changing age dynamics will impact the types of trips that are taken, including an increase in trips related to healthcare and medical assistance and greater reliance on some form of public transit as some residents may no longer be able to drive themselves

Figure 2-2: Population Pyramid, 2012

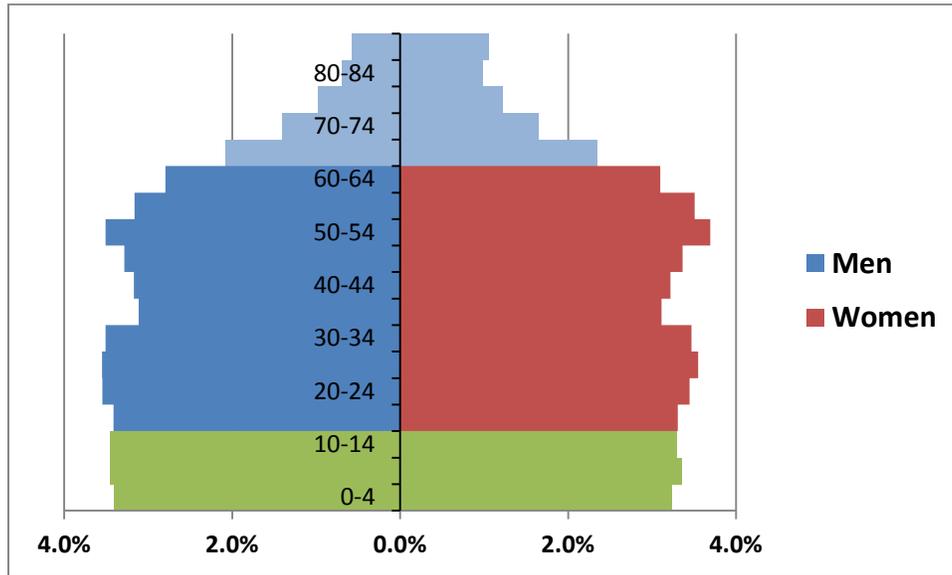
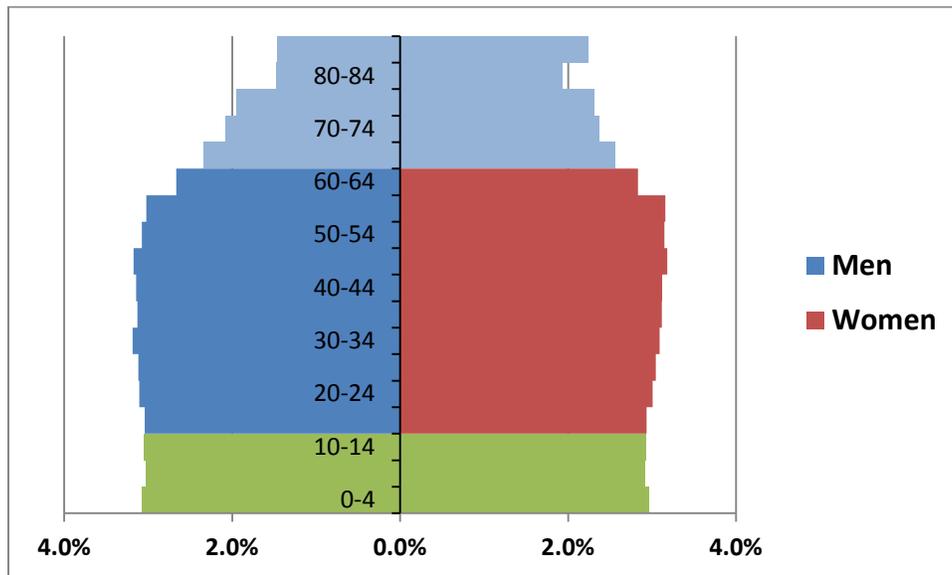


Figure 2-3: Population Pyramid, 2040



## 2.4 Trend Scenario

Understanding historical growth is critical for projecting land use patterns and anticipating future growth. Certainly, preferences and policies change and unforeseen events do occur and result in shifts in development patterns. However, the forecast must be based on existing trends as they relate to population, land use, and employment, and it must be rooted in current plans and policies. This is why the MTP forecast is referred to as a “trend scenario” – it is essentially a depiction of how the region will likely grow if it continues to develop in a similar manner as it has in the past under today’s regulatory framework.

The Trend Scenario for this MTP was developed using several key sources of information. The forecasting process began with the GPS county-level population projections for the year 2040 which were aggregated to the four-county level to set a regional 2040 target for population. MRMPO supplemented the GPS projections with a 2040 employment forecast using a regional economic model. Next, local zoning regulations, existing land use information, current development projects, and development constraints such as open spaces, waterways, and federally protected lands were compiled into spatial databases. MRMPO feeds these inputs into a regional land use model that geographically distributes growth based on a combination of historical growth patterns, allowable use, remaining capacity, and site attractiveness measures. Finally, interviews with developers, planners, and others were held to check assumptions and solicit feedback on draft forecasts. This process spans two years and relies on a considerable amount of input from the planning, transportation, and development communities in the form of personal interviews, workshops and committee meetings.

The Trend Scenario assumes a financially constrained roadway and transportation network as proposed by member governments between the base year (2012) and the forecast year (2040). It is important to note that the *2040 MTP* contains a more limited set of roadway expansion projects than the *2035 MTP*, as a greater share of regional monies are likely to be directed toward maintenance and preservation than in the past. In this scenario the transit network is expected to see limited service expansion, as well as the implementation of the Albuquerque Rapid Transit on Central Ave. Operational funding required for other major transit projects has not been identified and such services are not included in the scenario.

The Trend Scenario socioeconomic forecast is described using large sub-regions that include 1) City of Albuquerque, east of the Rio Grande; 2) City of Albuquerque, west of the Rio Grande; 3) remainder of Bernalillo County, which includes unincorporated communities as well as the Villages of Los Ranchos and Tijeras; 4) City of Rio Rancho; 5) remainder of Sandoval County that is within the AMPA; and 6) Valencia County.

**Table 2-7: Housing Distribution by AMPA Sub-Region, 2012 and 2040**

Sub-Region	2012 Housing Units		2040 Housing Units	
	Total	Share	Total	Share
East Albuquerque	172,499	47%	240,088	44%
West Albuquerque	67,477	18%	94,336	17%
Remainder of Bernalillo County	47,342	13%	82,702	15%
Rio Rancho	34,588	9%	58,469	11%
Remainder of Sandoval County	14,012	4%	17,976	3%
Valencia County	30,313	8%	53,240	10%
<b>Total</b>	<b>366,231</b>	<b>100%</b>	<b>546,811</b>	<b>100%</b>

*\*Numbers are based on an aggregation of DASZs and not municipal boundaries.*

At the sub-regional level, the existing housing distribution will remain similar over the forecast period. The biggest gains in housing shares in the AMPA are seen in Rio Rancho, remainder of Bernalillo County, and Valencia County, each of which sees an increase in share by two percentage points. East Albuquerque and west Albuquerque add 67,500 and 27,000 homes respectively but both decrease their share of housing in the metropolitan area.

**Table 2-8: Employment Distribution by AMPA Sub-Region, 2012 and 2040**

Sub-Region	2012 Employment		2040 Employment	
	Total	Share	Total	Share
East Albuquerque	250,705	68%	341,838	63%
West Albuquerque	32,755	9%	54,140	10%
Remainder of Bernalillo County	57,992	16%	76,954	14%
Rio Rancho	19,650	5%	54,071	10%
Remainder of Sandoval County	12,179	3%	18,603	3%
Valencia County	15,700	4%	25,563	5%
<b>Total</b>	<b>388,981</b>	<b>106%</b>	<b>571,169</b>	<b>104%</b>

*\*Numbers are based on an aggregation of DASZs and not municipal boundaries.*

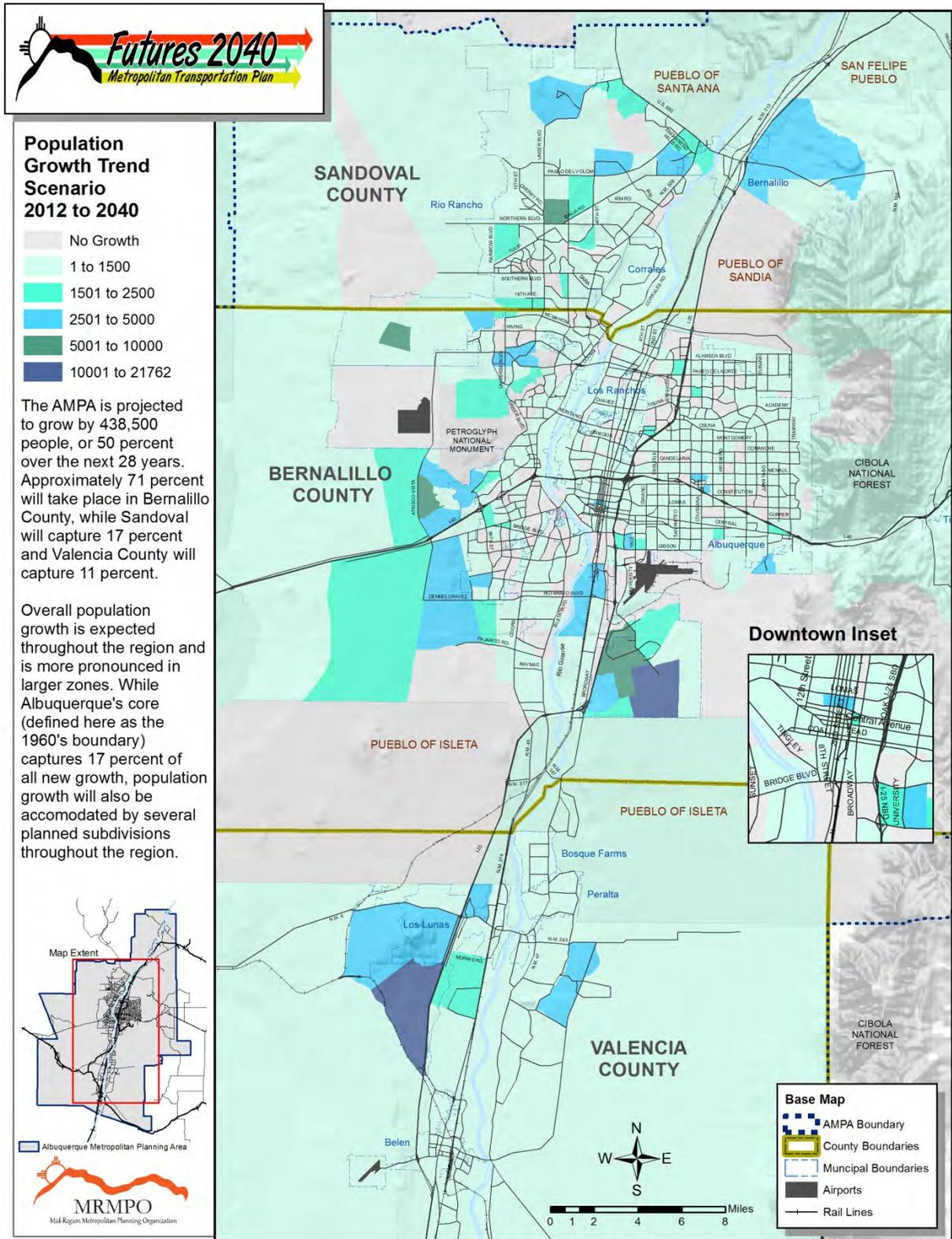
In terms of employment distribution by sub-region by 2040, east Albuquerque and the remainder of Bernalillo County will decrease in their shares of overall jobs, while the employment shares for west Albuquerque, Valencia County and Rio Rancho will increase. Rio Rancho's job growth represents a significant shift to its current imbalance between housing and jobs as it becomes more attractive as an employment destination as the metropolitan area expands.

Maps 2-5 and 2-6 illustrate forecast population and employment growth by DASZ. The maps depict absolute numbers and are not normalized by acres. While this is a useful way to visualize future growth because it emphasizes areas that are expected to change most in character, less obvious are the smaller DASZs that contain a high level of existing development and see increases in density. These maps should be used in combination with the zone-level datasets in order to get a full picture of the forecast.

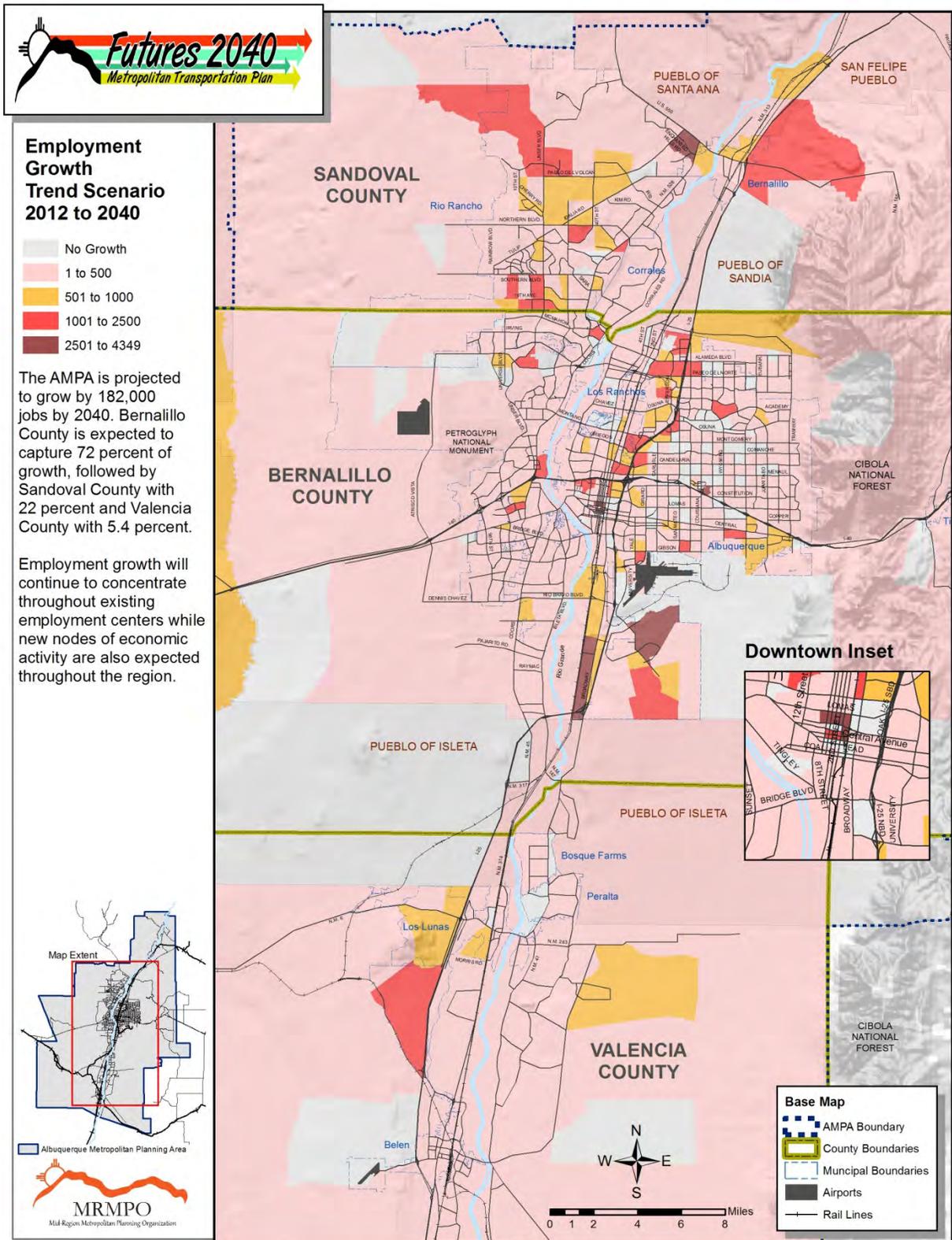
### *Using the Trend Scenario*

The Trend Scenario is available to the planning and transportation community so that plans may be developed with consideration of what the future may look like if current conditions persist over the horizon period. However, the socioeconomic forecast associated with the Trend Scenario does not represent a certain future. Rather, it represents a most likely growth scenario based on adopted plans and policies. This is an important distinction, and it is one of the key reasons that the MTP is updated every four years. There are many uncertain conditions in the region's future, be they related to the wider economy, development market forces, demographic trends, availability of natural resources, fiscal constraints, or a change in regional priorities. These uncertainties should be considered alongside the Trend Scenario when it is being referenced.

Map 2-5: Population Growth for the Trend Scenario, 2012-2040



Map 2-6: Employment Growth for the Trend Scenario, 2012-2040



## 2.5 Scenario Planning Process

### *Rethinking the Future*

While the years following 2008 were devastating to the economy, the pause from growth presented an opportunity for regional stakeholders to look back on historical development patterns and consider what they would like to see in the future in terms of a shared vision. Much of this dialogue has been captured in MRMPO's scenario planning activities documented throughout this plan. As it relates to where people live and work, it was revealed through the workshops held as part of the scenario planning process that priorities are shifting from infrastructure expansion to targeted investments, and that network connectivity, activity centers, and a creative mix of uses have become important parts of the conversation going forward.

One key element behind the shift in dialogue is a growing understanding of how demographics are shaping market demands. The Millennial generation, roughly between the ages of 14 and 32, number approximately 240,000 in the AMPA. National and local surveys indicate that this generation's preferences are changing housing and land use patterns. That is, more than past generations, Millennials express a strong interest in urban lifestyles and a desire to live closer to jobs and amenities. They are also more likely to take transit and non-motorized modes than other generations (see Chapter 3.1 for more details).

In addition, the Baby Boomer generation, with a population of over 200,000 in the AMPA, will also continue to impact transportation and development patterns. While many Boomers will "age in place," others will relocate and demand smaller dwellings and easier access to services and amenities. For some, aging will bring the loss of the ability to drive, and for those people, as well as those with low incomes or physical disabilities, access to transit will be critical.

Another factor in this conversation is a raised awareness about dwindling financial resources during a time of growing need. Tighter budgets have led to an increased emphasis on collaboration, creative financing strategies, and discussions about how to form public/private partnerships in order to maximize return on investment. Understanding that there is not enough money to realize every desired project, public officials are emphasizing catalytic projects that are likely to leverage existing infrastructure and help to connect the dots between major activity centers and transit nodes. While these are relatively new discussions, they are already playing out in meaningful ways: Innovate ABQ, an effort that brought together the City of Albuquerque and the University of New Mexico to plan the transformation of a key site in Downtown Albuquerque into a learning and technology campus, is one key example. The Albuquerque 2030 District, a private sector led effort that aims to "reduce the environmental impacts of building operations and construction while maximizing Albuquerque's economic viability and profitability for building owners, managers, and developers" is another. It is likely that this new way of doing business will play a large role in shaping how and where the region develops in the future.

Finally, there is the ongoing concern over the issue of congestion along the river crossings. While roadway expansion can and should still occur to a certain degree, given the expected levels of future

congestion and reduced amount of funding available for transportation it will be impossible to “build our way out” of these conditions. Rather, a combination of strategies will be required to tackle this issue, and land use will be an important tool in the toolbox. There is a call for more jobs on the Westside to serve the residents there and help foster a “reverse commute,” while residential density in proximity to transit can be key to creating opportunities for multi-modal transportation options.

These factors are among several that underlie the call from member agencies to consider an alternative to the Trend Scenario. The remainder of this chapter describes the scenario planning process and the components of the Preferred Scenario, which represents a set of guiding principles for shared land use and transportation decisions over the coming decades in the AMPA.

### *Defining Scenario Planning*

MPOs must develop a trend scenario for their regional long-range transportation plans that considers how development will unfold based on existing plans and policies. Scenario planning allows planners to consider “what if” questions as they relate to land use and transportation decisions that may lead to a very different picture of the future. This type of planning allows for comparisons between different scenarios and has the power to inform decision-making related to transportation priorities, land use strategies, and infrastructure investments.

A comprehensive scenario planning process is accompanied by an evaluative component that draws upon performance measures in order to better understand the costs and benefits of various future development patterns on the transportation network, environment, and economy. Alternative scenarios may consider different land use patterns, different development mixes, and alternative transportation networks, thereby facilitating a direct link between land use and transportation planning. Evaluating the effect of these changes on key performance measures related to access and mobility better equips planners to understand how the regional may fare given different policy decisions. In some ways, scenario planning can be best described as a tool to better evaluate the trade-offs of different growth patterns.

Scenario planning enables a more proactive planning process and can be integral in developing strong collaboration among member agencies. Through a nearly two-year effort facilitated by MRMPO staff in concert with member agencies and other stakeholders, the region explored what the future could look like and what the impacts of different future growth scenarios might be.

#### ***State of the Practice***

Since 2004, the Federal Highway Administration (FHWA) has encouraged transportation-focused scenario planning as an approach that enhances the traditional planning process. This type of scenario planning is a technique designed to help citizens and stakeholders in the public and private sectors understand how demographic and land-use changes could potentially impact transportation networks in a state, community, region, or study area.

**- FHWA Scenario Planning Guidebook  
(February 2011)**

### *Building off the 2035 MTP*

The *2035 MTP* contained an initial attempt at scenario planning by looking at a “Compact Scenario” in addition to the Trend. This scenario included a simple analysis of the impact of changes in land use patterns on the transportation system by looking at what would happen if the region developed in a more compact form. There were significant, and positive, impacts on the transportation system when growth occurred differently (see Table 2-9). This exercise brought to the forefront the importance of looking at the impact of land use decisions on transportation outcomes. This analysis also demonstrated that there may be effective alternatives to building and maintaining costly new infrastructure to address congestion.

**Table 2-9: Travel Statistics from 2035 MTP and Compact Development Scenario, 2035 PM Peak Hour**

<b>PM Peak Hour</b>	<b>MTP 2035</b>	<b>Compact Scenario</b>	<b>Percent Difference</b>
Vehicle Hours of Delay	160,154	123,654	-23%
Vehicle Hours Traveled	228,812	189,354	-17%
Vehicle Miles Traveled	3,077,065	2,946,946	-4%
Average Speed	13.4	15.6	16%

### *Land Use and Transportation Integration (LUTI) Committee*

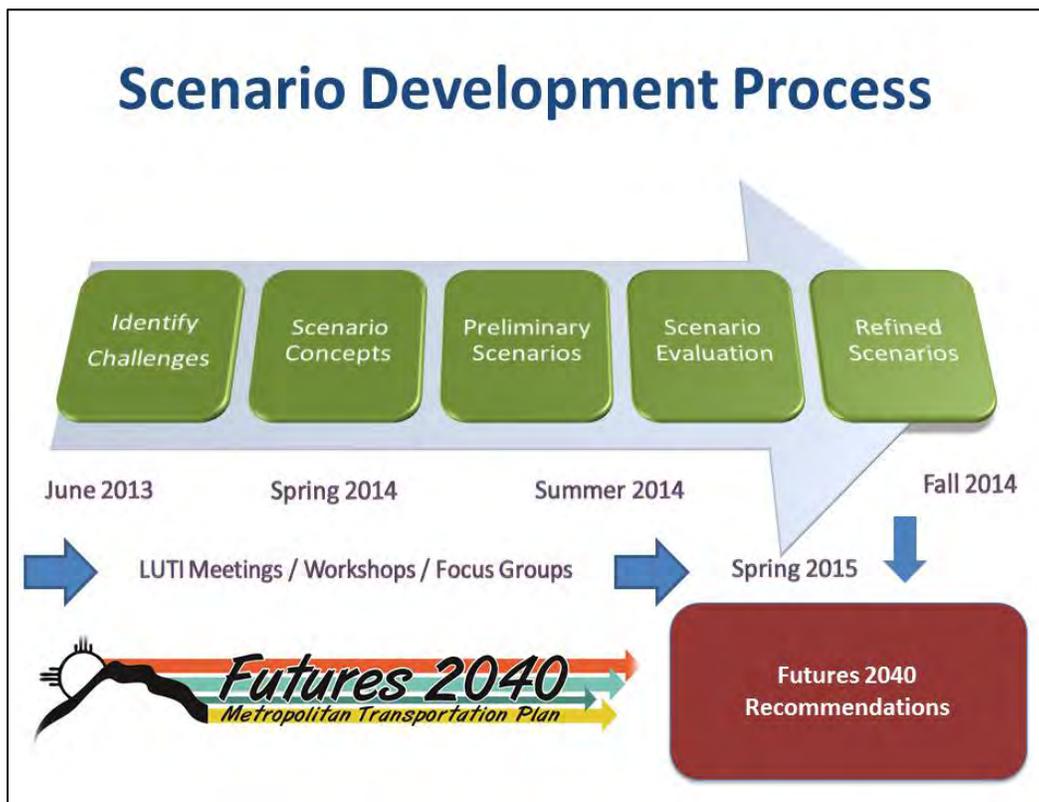
An integrated scenario planning process includes a wider variety of stakeholders and new metrics that help guide decision-making so that land use and transportation solutions are complementary. To support a more robust planning process and better integration of land use and transportation planning in the region, a Land Use and Transportation Integration Committee (LUTI) was formed in 2012 that includes planners and engineers from local jurisdictions, including Rio Rancho, Albuquerque, Los Lunas, Belen, Bernalillo County, the New Mexico Department of Transportation, Rio Metro, and ABQ Ride. This group meets regularly and became the steering committee for integrating scenario planning into the *Futures 2040 MTP*.

A successful scenario planning process relies on both an understanding of the current and future transportation networks (including roadways and transit) and an understanding of the current land use framework including zoning, metropolitan redevelopment areas, and expected development opportunities. For example, in order to develop more walkable areas there needs to be both well-connected street networks (transportation) and a mix of uses and density to support it (land use). LUTI provided a forum for land use and transportation specialists to ask questions of each other and work together to come up with ideas and solutions for regional challenges. In brief, the committee helped create connections at the professional level to discuss better ways to integrate land use and transportation plans, policies, codes, standards and design throughout the region, resulting in a more comprehensive planning process.

### Participation Process used for Scenario Planning

MRMPO developed a comprehensive public outreach process as part of the scenario planning efforts (see Figure 2-4). In addition to general public outreach, representatives from a variety of professions were brought into the process, including public health advocates, housing specialists, elected officials, natural resources experts, rural area representatives, neighborhood associations, economic development managers, and developers and business groups. In some cases interactive workshops were developed to discuss a range of topics, and in other cases small focus groups met to discuss pressing issues.

Figure 2-4: 2040 MTP Scenario Planning Process



Three intensive workshops were held throughout the process that included staff from member agencies who sit on MRMPO committees and public agencies involved in the Central New Mexico Climate Change Scenario Planning Project. The first workshop, a two-day event that took place in June 2013, was made possible by a technical assistance grant from the Federal Highway Administration and helped kick-start the scenario planning process. About 70 participants engaged in group discussions, keypad polling, and mapping exercises to provide input on the potential challenges and opportunities they envisioned for

the region's future. A panel of expert peers also participated in the workshop and helped lay the foundation for building a successful process.<sup>1</sup>

The next two intensive workshops took place in July and August of 2014. These workshops were made possible through a grant awarded to MRCOG that became the Central New Mexico Climate Change Scenario Planning Project. The Climate Change Project advanced the already occurring scenario planning process by providing additional analysis on the potential impacts of climate change on the region, including droughts, wildfires, flooding, and water availability. This project introduced a range of new stakeholders to the metropolitan transportation planning process and strengthened partnerships between MRMPO and many of the local agencies dealing with flood and fire risk, and other environmental impacts. See Chapter 3.14 for more on the project and the integration of climate analysis into the long-range planning process.

### *Identifying Regional Challenges*

A significant part of the initial outreach efforts was spent gathering information from a wide array of stakeholders regarding what they felt were the most pressing regional challenges and needs. MRMPO integrated results from similar discussions held over the course of several workshops related to transit-oriented development which were sponsored by the New Mexico District Council of the Urban Land Institute. Importantly, even though the exercises were facilitated by a transportation planning agency, water resource availability was identified as the most pressing challenge facing the region, followed by economic development. The information collected from these workshops, focus groups, and online surveys was synthesized into the key regional challenges and needs shown in Figure 2-5. MRMPO translated these challenges into “scenario concepts,” which provided an initial description, or narrative, of the different ways the region might grow and how to relate challenges into potential policies or strategies (see Figure 2-6).

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<sup>1</sup> The expert peers were Michael Skipper, Executive Director, Nashville Area MPO, and Rob Terry, Senior Regional Planner, Fresno Council of Governments (Fresno COG).

**Figure 2-5: Regional Challenges / Needs**

**Water Resources**

- Future water availability and delivery
- Water conservation and protection
- Understand how development patterns impact water use
- Aging infrastructure

**Economic Development**

- Job creation and diversification
- Retain families and young professionals
- Living wage and quality of life

**Diverse Housing / Transportation Options**

- Affordable housing in areas with a mix of uses and access to transit
- Housing choices that appeal to the workforce and an aging population
- Connectivity of roadways, transit, trails and paths
- Access, quality and safety issues among all modes

**Balance of Jobs and Housing**

- River crossing congestion
- Sprawl development without jobs strains the transportation system
- Some development types and locations are not feasible to serve with transit
- Jobs west of the Rio Grande

**Shared and Active Places**

- More examples of quality mixed-use developments
- Attractive public spaces to gather and socialize
- Underutilized activity centers
- Abandoned properties and vacant sites in key locations
- Frequency of transit service to major destinations

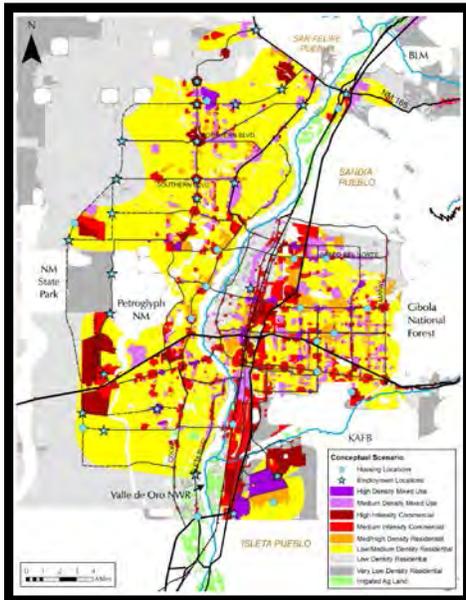
**Historic and Rural Preservation**

- Retain cultural heritage and neighborhood identity
- Balance rural character with urban growth
- Loss of open space and agricultural land
- Historic preservation of main streets and original town sites.

**Climate Change / Resiliency**

- Disconnect between development patterns and resiliency and climate impacts
- Awareness of changing temperature and precipitation on energy demands, transportation infrastructure, and fire/ flood risk
- GHG emissions impacted by fleet composition and land use

These challenges represent the synthesis of local feedback collected from thousands of surveys, hundreds of workshop participants, and dozens of focus group attendees.



**Figure 2-6: Scenario Concepts**

The maps show the following land uses:

- commercial (red)
- mixed use (purple)
- multi-family (orange)
- single-family (yellow)
- low density residential and rangeland (gray)
- irrigated agricultural land in (green)

↳ **Allowable Uses**

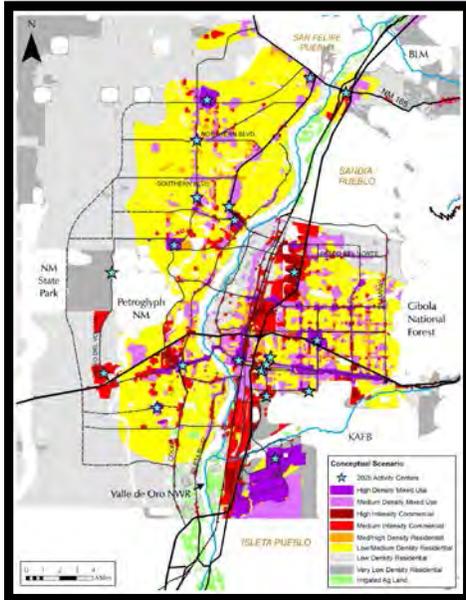
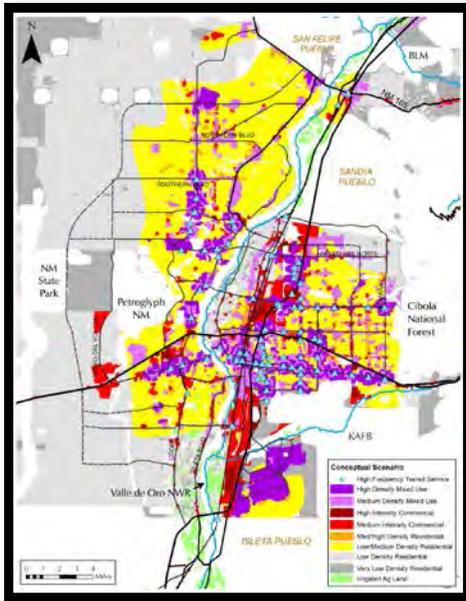
The Allowable Uses Scenario is a simplified Trend Scenario and is derived from existing zoning and comprehensive plans across the region. In effect, this scenario depicts what type of development can be pursued over the next 25 years under existing plans and policies. For modeling and visual purposes, aggregated zoning categories were developed. Policy information from various plans throughout the region was also referenced, including: the City of Albuquerque/Bernalillo County Comprehensive Plan, the Rio Rancho Development Vision, and the Valencia County Comprehensive Plan, with particular attention paid to identified centers and corridors.

↳ **Emerging Lifestyles**

The Emerging Lifestyles Scenario addresses changing socio-demographics and focuses on providing a range of housing and transportation options. It reflects a change in travel behavior and an interest in living closer to services and entertainment. Emphasis is placed on compact development in targeted centers and locations near transit to meet the housing demands of a range of age demographics. From a transportation perspective, this scenario reflects an increased preference for alternative modes, including public transportation. For modeling and visual purposes, parcels within a ¼ and ½-mile of existing and future high frequency transit stops were designated for medium-density and high-density mixed-use development and multi-family housing.

↳ **Balancing Housing and Jobs**

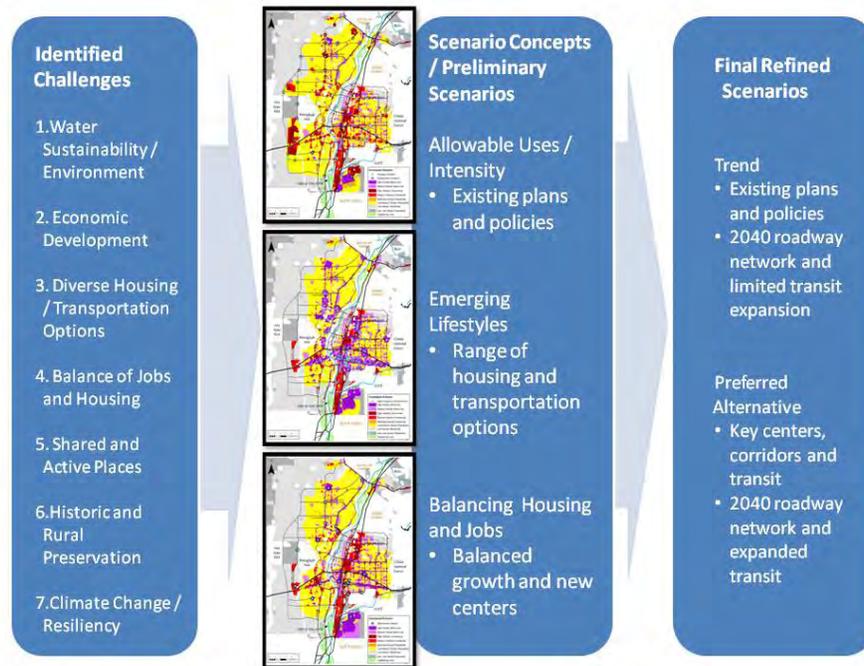
The Balancing Housing and Jobs Scenario responds to a desire expressed by multiple stakeholders across the region to see a greater balance between housing units and jobs in key locations. In this scenario new job growth and commercial development is the focus in Rio Rancho, west Albuquerque, village and town centers, and parts of unincorporated Bernalillo County. For modeling purposes, in addition to targeting commercial zoning near predominantly residential areas, housing is targeted around existing employment sites. New centers are also identified in Valencia County around the forthcoming Belen intermodal facility and UNM Valencia Campus.



## 2.6 Preferred Scenario

The initial scenario concepts explicitly addressed many of the regional challenges, particularly “Diverse Housing/Transportation Options,” “Balance of Jobs and Housing,” “Shared and Active Places,” and “Economic Development.” Other challenges were more appropriately evaluated as performance measures to assess how well the scenario addressed each challenge (e.g., “Climate Change/Resiliency,” “Water Resources,” and “Historic and Rural Preservation”). In addition, many of these challenges identified are addressed in the implementation recommendations for the Preferred Scenario.

**Figure 2-7: Translating Regional Challenges into Scenarios**



After reaching agreement with member agencies on the scenario concepts, MRMPO staff developed preliminary scenarios that could be modeled and evaluated. Performance measures were also developed to evaluate the costs and benefits of each scenario and to allow for direct comparison among the scenarios. Much of this work took place at the two intensive summer workshops in 2014.

The scenario development process was iterative: MRMPO staff would present scenarios to the public and member agencies before refining the scenarios and calculating performance measures. The ultimate goal of this process was to develop a preferred alternative, or in other words, an agreed upon refined scenario that best addresses regional challenges and identifies key locations for future development and transportation infrastructure investments over the next 25 years.

The scenario planning process revealed a broad set of future objectives, including: more transit service, a mix of uses in key locations, a better balance of housing and jobs, emphasis on existing water service areas, enhanced preservation of open space and sensitive areas like floodplains and crucial wildlife

habitat areas, and preservation of historic and cultural assets. Some of these objectives cannot be specifically addressed through land use scenarios. However, all are within the purview of local jurisdictions and can be addressed through locally implemented programs and policies. Some of the objectives voiced by stakeholders appeared in conflict on the surface; for example, the desire for dense, unique activity centers, as well as the preservation of the rural character of specific areas. It became clear through scenario planning efforts that these two interests can in fact support each other by targeting growth in key centers and minimizing impacts on agricultural and other sensitive lands.

After reviewing the performance measures related to the preliminary scenario concepts, stakeholders agreed that the Emerging Lifestyles Scenario should be the starting point for development of a single preferred alternative. However, many participants indicated a need for greater concentration of employment activities west of the river, an element of the Balancing Housing and Jobs Scenario. Feedback also reflected a greater desire for mixed uses east of the river and more proactive planning west of the river. Following the second workshop, MRMPO staff refined and finalized a Trend Scenario based on existing plans and policies and a Preferred Scenario based on a hybrid between the Emerging Lifestyles and the Balancing Housing and Jobs Scenarios.

### *Principles of the Preferred Scenario*

The Preferred Scenario is an alternative socioeconomic and land use forecast that is based on several guiding principles that were developed and refined through the collaborative scenario planning process. They are as follows:

- 1) Local land use policy decisions impact the larger region, particularly as they relate to transportation; therefore it is critical to link land use and transportation decision-making to effectively address regional mobility.
- 2) Future population growth and increased traffic congestion will contribute to a continued increase in transit ridership and a demand for service expansion.
- 3) Concentrated development within key centers and transit nodes create the mix of activity and connections that enable transit to succeed.
- 4) A diverse mix of uses coupled with appropriate design standards within key centers and transit nodes increase the potential for shorter trips and enhance the propensity for bicycle and pedestrian trips.
- 5) A greater emphasis on growing employment centers west of the Rio Grande will allow for more work, shopping and medical trips to occur locally, thereby alleviating congestion on river crossings.
- 6) A greater emphasis on affordable and diverse housing options in closer proximity to jobs, shopping, and medical facilities east of the Rio Grande will increase household location choices while reducing travel demand.
- 7) Changing demographic composition and preferences increase the likelihood that the guiding principles behind the Preferred Scenario will coalesce with consumer demand.

- 8) Development patterns that maximize the utility of existing infrastructure have the potential to equate to significant cost savings for local jurisdictions as it relates to service delivery and infrastructure costs.

### *Key Locations of Preferred Scenario*

The key locations identified through the development of the Preferred Scenario, including activity centers, transit nodes, and commercial corridors, form the backbone of the Preferred Scenario (see Map 2-7). These features were identified by the LUTI committee and presented at multiple stakeholder workshops for feedback and revision. These components should be considered a starting point for discussions following the release of the *2040 MTP* as they will clearly evolve over time as growth occurs and jurisdictions update local plans.

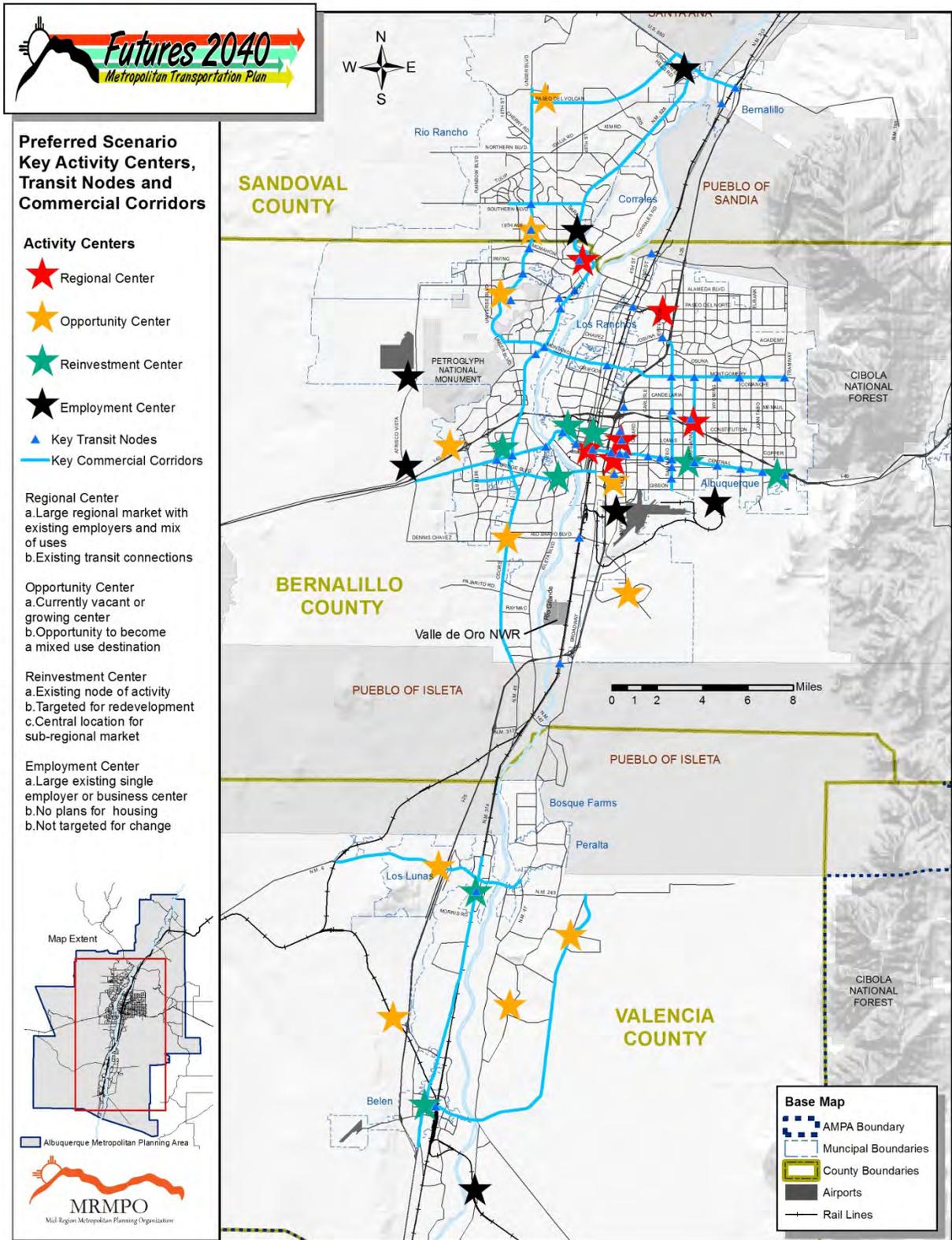
The key *transit nodes* refer to transit stops that are either currently or expected to have high frequency of service in 2040. Substantial input was provided by local transit planners. The *commercial corridors* do not necessarily have transit use on them, but have been identified by planners as active and highly traveled, and provide important connections in the multi-modal transportation system. Key *activity centers* are areas of concentrated employment and economic activity and are categorized by type in order to clarify the types of improvements that make sense given the character of the area. The activity center character types are described in Table 2-10.

The principles of Preferred Scenario and the key locations map will inform many aspects of the work performed at MRMPO and agencies in the region. Stakeholders also developed an initial list of recommendations for implementing the Preferred Scenario (see Chapter 5.3). The next step in the scenario planning process is to evaluate these locations in more detail and determine the specific mix of land uses, socioeconomic characteristics, and transportation infrastructure that would be appropriate for the location.

**Table 2-10: Activity Center Characteristics**

Type	General Characteristics	Location	Status
Regional Center	Large regional market with existing employers and mix of uses. Currently served by public transit.	CNM Main Campus	Existing
		Cottonwood Mall	Existing
		Downtown Albuquerque	Existing
		Jefferson St/North I-25	Existing
		North UNM	Existing
		Uptown	Existing
Opportunity Center	Growing center or one that is currently underutilized. Opportunity to become a regional mixed-use destination.	Coors and Rio Bravo	Future
		Belen Intermodal Center	Future
		Manzano Center (Valencia County)	Existing
		Mesa del Sol	Future
		Rio Rancho City Center	Existing
		Rust Medical Center	Existing
		South UNM	Existing
		UNM Valencia	Existing
		Volcano Heights (NW Albuquerque)	Future
		West Los Lunas	Existing
		Westland Village Center (North of I-40)	Future
Reinvestment Center	Existing hub of activity, but targeted for redevelopment or additional activity. Potential sub-regional center.	Atrisco Business Park	Future
		State Fairgrounds	Existing
		Downtown Belen	Existing
		East Gateway (East Central Ave)	Existing
		Five Points / Bridge Blvd	Existing
		Los Lunas Rail Runner Station	Existing
		North Downtown	Existing
		Sawmill District (Old Town area)	Existing
Employment Center	Business center or location of large single employer. No plans for housing or major changes in uses.	Atrisco Vista & I-40	Future
		Double Eagle II Airport	Future
		Intel (Rio Rancho)	Existing
		Kirtland Air Force Base	Existing
		US 550 / Rio Rancho	Existing
		Sun Ranch Industrial Park	Existing
		Sunport International Airport	Existing

Map 2-7: Key Locations for the Preferred Scenario



## 2.7 Modeling Land Use

MRMPO uses an integrated land use model (UrbanSim) and travel demand model (CUBE Voyager) system in order to forecast future growth and travel demand. These models are tools to help regional stakeholders understand the anticipated benefits and costs associated with different land use and transportation decisions. The Trend Scenario was modeled using inputs that reflect current conditions. The Preferred Scenario was developed using the inputs from the Trend as a starting point; however, key policy changes were simulated to reflect the guiding principles of the Preferred Scenario. Policy changes are represented within the land use and travel demand modeling environments using three specific levers: 1) zoning, 2) transportation networks, and 3) development incentives.

### *Zoning*

Zoning sets the parameters for development related to the land uses and densities allowed on a particular parcel. Developing alternative zoning required the selection of key locations in the region and redefining the growth potential in terms of allowable uses, maximum units per acre, and maximum buildable commercial space. Changes to allowable use affects what type of development may be built on the parcel. Changes to units per acre and floor area ratio (FAR) affect the remaining developable capacity for an area. While zoning dictates what type of projects and densities *could* occur in a specific area, the attractiveness of the site and market demand determine whether or not a parcel is actually developed.

The Trend Scenario assumes that future use and density on a parcel will conform to existing zoning regulations. In the Preferred Scenario, zoning was modified in key locations to allow for a greater mix of uses and higher intensities of development.

### *Transportation Networks*

Roadway projects identified by member agencies form the basis for future-year transportation networks. Alternative road and transit networks can support the development of an alternative scenario by coding new transportation links and introducing them into a travel model simulation. Alternative networks will have an impact on mode split, travel times, vehicle miles traveled, and land development patterns.

The Trend Scenario includes the fiscally constrained roadway network identified by member agencies for investment by 2040. The transit network assumed for the Trend Scenario includes the existing network and frequency of service plus the addition of Albuquerque Rapid Transit on Central Ave. The Preferred Scenario assumes the same financially constrained roadway network as the Trend. However, it assumes transit expansion through new sources of revenue, in particular an infusion of capital funding through the Federal Transit Administration's Small Starts program or an increase in the transit-specific gross-receipts tax (GRT) from 0.125 cents to 0.5 cents. The 3/8-cent GRT increase could raise an additional \$60+ million per year for transit service and capital expenditures. As part of the Preferred Scenario, a

conceptual future transit network was developed to identify how new transit revenues equal to that generated by the increase in GRT could be utilized (see conceptual transit network in Chapter 3.4).

### *Policy Incentives*

Simulating policy incentives and their effects is possible within the UrbanSim framework through adjustable levers that have been built to increase the development potential of an area that is targeted for additional investment. These incentives may be related to the development process with expedited approvals or waived or reduced permitting fees, for example. They may be regulatory through measures such as density bonuses, parking reductions, or relaxed design criteria. They also might represent financial incentives such as the creation of tax increment financing districts, impact fee reductions, or shared infrastructure costs.

It is important to note that areas that are incentivized remain subject to all other modeling constraints. For example, if a parcel has no remaining capacity or if it is not zoned for certain types of development, the policy incentive will have no effect. The lever increases likelihood but does not ensure future development. It is also important to note that locations for which no incentive has been applied may still experience considerable development. This is especially true where areas exhibit multiple favorable criteria that have historically factored into development decisions or if there are known development plans in the future growth assumptions. This approach preserves the integrity of the underlying regulatory framework and market influences and therefore produces a plausible scenario that could occur under different conditions.

The Trend Scenario is guided by current conditions and therefore it does not assume any additional policy incentives beyond what is in place today. The Preferred Scenario assumes that public entities will utilize incentives within their jurisdiction that will increase the likelihood of development in key locations. Table 2-11 summarizes the main differences between the two scenarios.

**Table 2-11: Main Differences between the Trend and Preferred Scenarios**

COMPONENT	SCENARIO	
	Trend	Preferred
Zoning	Existing	Alternative Zoning in Key Areas
Incentives	Existing	Key Activity Centers, Transit Nodes & Commercial Corridors
Roadways	2040 MTP Network	2040 MTP Network
Transit	2012 + Albuquerque Rapid Transit (Central Ave)	2040 Expanded Network

While the UrbanSim model is a powerful simulation platform for understanding urban systems, its strength lies in its ability to simulate growth patterns, respond to policy changes, and inform decision-making *at a regional scale*. It does not address issues of urban design nor should it be used to predict land use and intensity at detailed geographic levels such as individual parcels. Like most simulation models, its performance is strongest in areas that contain multiple data sources and information points. In rural areas in particular, data availability and accuracy is sometimes a challenge. As such, when forecasting small areas MRCOG will often perform customized forecasts in order to supplement the DASZ level forecast and draw upon additional research and personal interviews. Users of this forecast should keep this in mind when working with the 2040 socioeconomic forecast.

*Select Model Features*

The introduction of UrbanSim into the MRMPO land use forecasting framework allowed for additional enhancements to the previous forecasting process. These enhancements help describe some of the elements that influence growth and explain some of the differences when compared with previous forecasts. In particular, the following features have been introduced into the modeling methodology:

- Household Mobility: the UrbanSim model simulates the movement of households within the region through a household transition model. Household relocation results in a more dynamic forecast and growth in areas that may otherwise remain static or see decline due to shrinking household size. This allows for new families to repopulate existing areas as they change in character and become more attractive over time.
- Vacancy Absorption: UrbanSim contains a vacancy model that allows for vacancy rates throughout the region to respond to changes in attractiveness of areas over time as well as changes in consumer demand. Vacancies were previously handled only in changing neighborhoods and remained relatively consistent in areas that did not experience significant growth.
- Demographic Characteristics: The demographic model in UrbanSim does not explicitly simulate changing housing preferences of various age groups. However, household characteristics

including age of householder, presence of children, and income are factored into where households choose to locate and relocate.

- **Redevelopment:** In the past, redevelopment of existing built areas was primarily driven by known projects and specifically targeted areas. The UrbanSim model has the capacity to detect areas that may be attractive for redevelopment even if they are not currently identified for reinvestment. New growth in established areas may occur as long as it is permissible by zoning. This capability supports a more organic forecasting process for infill and redevelopment activity that is triggered by factors that have been historically known to influence new growth.
- **Accessibility:** The concept of access is introduced into the land use forecasting methodology in two important ways. One, travel time, rather than distance, is used to develop several of the equations that determine the allocation of future growth. The introduction of travel time over proximity allows for a more realistic measure of access as it influences growth. Two, the land use model and the travel demand model are integrated via an automatic feedback loop. That is, the UrbanSim model operates until 2025 at which time it feeds the socioeconomic forecast to the travel demand model to create a travel forecast for year 2025. Travel time data is fed back to the land use model, which is then run until 2040. As such, future congestion on the transportation network is allowed to shape future growth in a manner that is a better reflection of reality.

## 2.8 Scenario Comparison

By using an alternative set of assumptions regarding regional policy and priorities, the Preferred Scenario provides insight into how different the region might look given changes in plans and policies. The true value of this exercise, in addition to the collaborative visioning process, is in the performance evaluation of the scenarios. By analyzing how the scenarios compare based on a variety of measures one can better understand and anticipate the costs and benefits associated with growth and growth-related regulations. The impact of the Preferred Scenario on transportation performance is highlighted in Chapter 3.2. A review of all performance measures can be found in Chapter 4. The measures in Table 2-12 reveal the extent to which the simulation responded to the alternative set of zoning and policy incentives on which the Preferred Scenario is based.

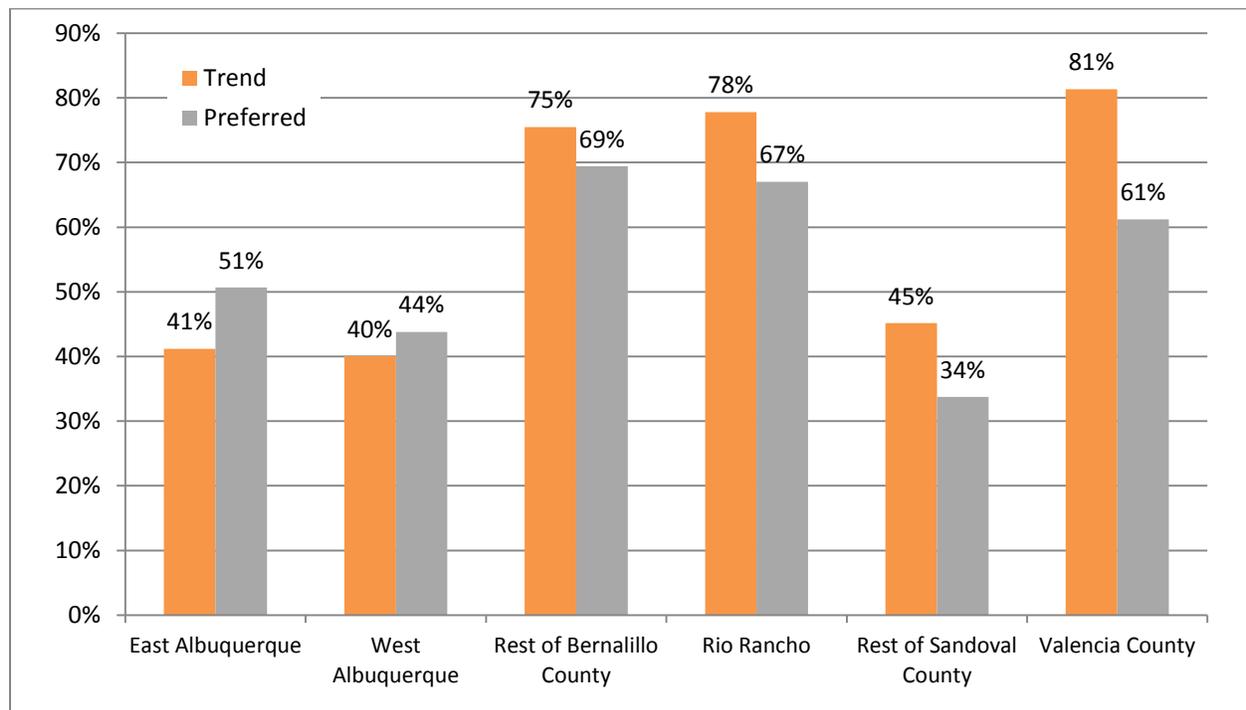
**Table 2-12: Select Performance Measures, 2012, 2040 Trend and Preferred Scenarios**

Performance Measure	2012	Trend	Preferred	Preferred vs. Trend
Access				
Households within Activity Centers	51,840	91,578	116,695	27.4%
Households within 1/4-mile of Transit Nodes	19,646	32,658	43,151	32.1%
Jobs within Activity Centers	152,684	222,951	250,372	12.3%
Jobs within 1/4-mile of Transit Nodes	97,153	119,911	127,421	6.3%
Jobs within 1/10-mile of a Commercial Corridor	72,202	102,426	126,902	23.9%

In particular, the Preferred Scenario is effective at improving accessibility to major centers, employment sites, transit nodes and corridors. In comparison with the Trend, 27 percent more households are located within a mile from activity centers and 32 percent more households are located within ¼-mile to transit in the Preferred. Employment responded positively to the Preferred Scenario as well, exhibiting a 12 percent greater likelihood of locating near centers, a six percent increase in proximity to transit, and a 24 percent increase along key commercial corridors.

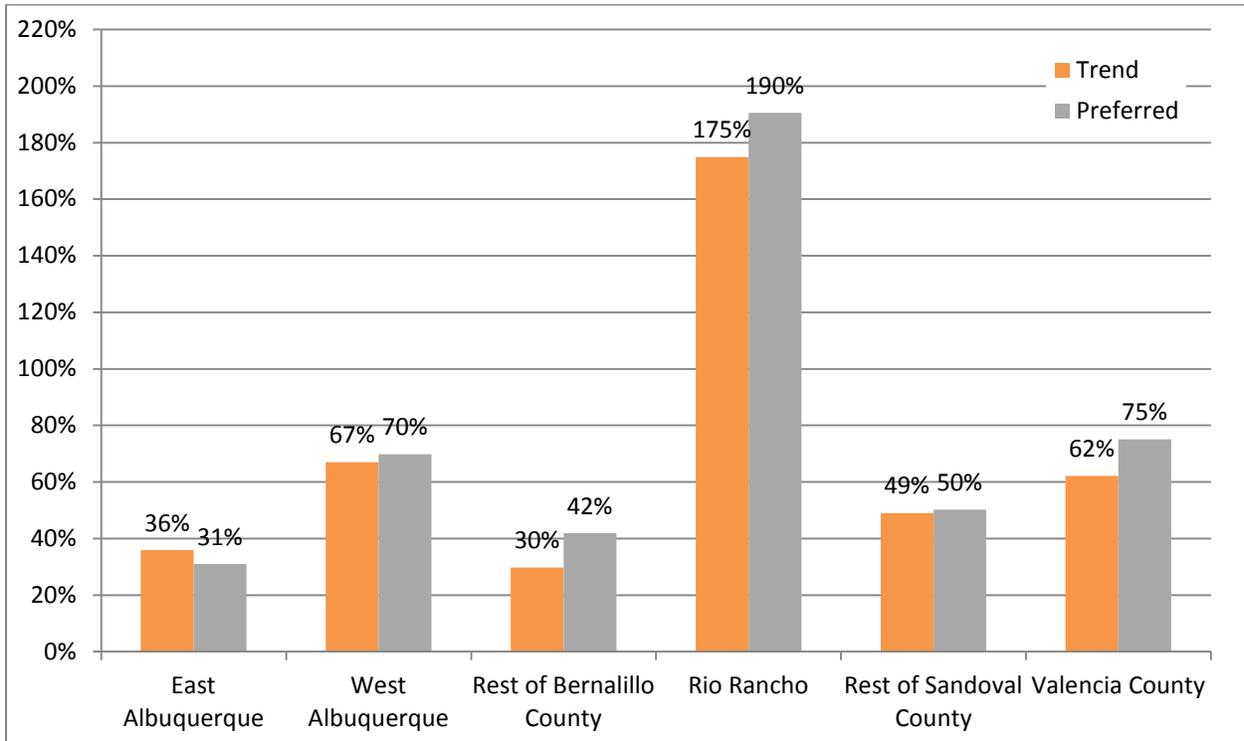
Results of the Preferred Scenario were compared to the Trend by sub-regions within the AMPA. Figures 2-8 and 2-9 illustrate how the scenarios differ in terms of the percent growth of new housing and jobs. Maps 2-8 through 2-9 show the spatial differences in the distribution of population and employment growth between the Trend and Preferred Scenarios.

**Figure 2-8: Growth in Housing by Sub-Region, 2040 Trend and Preferred Scenarios**



The Preferred Scenario exhibits slightly faster housing growth in the City of Albuquerque, both east and west of the Rio Grande, than the Trend, demonstrating the effectiveness of the Preferred Scenario in attracting housing closer to activity centers, particularly east of the Rio Grande. All other sub-regions see a slight decline in pace of housing growth. This is the result of a higher attraction of housing near activity centers and transit nodes, which are highly concentrated in the City of Albuquerque.

**Figure 2-9: Growth in Employment by Sub-Region, 2040 Trend and Preferred Scenarios**



The Preferred Scenario shows faster job growth west of the Rio Grande than the Trend due to a heavier emphasis on Westside employment centers, another guiding principal of the Preferred Scenario. Areas outside of the City of Albuquerque experience an increase in the pace of employment growth relative to the Trend. This will have the effect of positively influencing the balance between jobs and housing in the AMPA. Table 2-13 illustrates how the jobs-housing ratio compares between the base year and the Trend and Preferred Scenarios.

**Table 2-13: Jobs-to-Housing Balance, 2012, Trend and Preferred Scenarios**

<b>Jobs-Housing Ratio</b>	<b>2012</b>	<b>Trend</b>	<b>Preferred</b>
<i>East of the Rio Grande</i>	1.39	1.37	1.31
Housing	219,694	305,419	317,667
Jobs	306,296	417,755	414,799
<i>West of the Rio Grande</i>	0.56	0.64	0.68
Housing	146,537	241,392	232,639
Jobs	82,685	153,414	158,252
<b>AMPA Average</b>	<b>1.06</b>	<b>1.04</b>	<b>1.04</b>

The jobs-housing ratio west of the Rio Grande improves over 2012 under both the Trend and Preferred Scenarios. The greatest improvement is in the Preferred Scenario due to more Westside job growth coupled with more Eastside housing growth in the Preferred when compared with the Trend. These tables demonstrate that relatively small differences in policy, in particular emphasizing development in certain locations, can have a positive impact on access to jobs, and can create the conditions where shorter trips lengths and travel by non-motorized modes is possible.

**Table 2-14: Developed Acres, Trend and Preferred Scenarios**

<b>Performance Measure</b>	<b>2012</b>	<b>Trend</b>	<b>Preferred</b>	<b>Preferred vs. Trend</b>
New Land Developed	233,398	261,054	247,695	-5.1%
Residential Acres	134,431	194,914	182,275	-6.5%
Commercial Acres	12,746	24,847	24,411	-1.8%

Land consumption by residential and commercial uses was also compared between the Trend and Preferred Scenarios. Table 2-14 illustrates these measures. The Preferred Scenario results in a smaller development footprint, consuming approximately 13,000 fewer acres, or five percent less land, than the Trend Scenario. This is an important difference given that the total number of households and jobs are the same in both scenarios, and as such, the Preferred Scenario absorbs the same amount of growth in less space.



Map 2-9: Employment Differences between Trend and Preferred Scenarios

