# Population Estimates and Forecasts for:

# Growth Management Areas, Sustainable Development Areas, and the Water/Wastewater Service Area

# County of Santa Fe

# 1990-2030

**Geospatial and Population Studies**


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Kay Davis-McGill, Administrator for the Town of Edgewood, deserves a special thanks for sharing an afternoon out of her busy schedule to talk with us about some exciting upcoming developments in that community.

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An ongoing methodological research program in demographic modeling and analytics, supported by the State of New Mexico and providing a funding offset for projects such as these, should always be remembered. My colleagues, Dr. Adelamar Alcantara (Director of Geospatial and Population Studies at UNM) and Mr. Xiaomin Ruan (now with Portland State University's Population Forecasting unit) started this project off and have been my partners in developing various demographic methodologies over the last decade. Their partnership continues to be highly-valued and appreciated as well.

## Executive Summary of Population Projections & Forecasts

- Santa Fe County's growth is expected to slow between 2014 and 2030, most markedly between 2014 and 2020.
- Between now and 2030, the population will become more centralized within the City of Santa Fe—by 2030, over half the County's population will be within the City.
- This centralization will be driven primarily by the recent annexations of unincorporated County by the City.
- Proposed shifts in zoning regulations in unincorporated areas are anticipated to have only minor impacts on long-term trends of population distribution within the County.
- The forecast reported here is most sensitive to shifts in the Santa Fe Community College Planned Development District, which will coincide with the County's plan to focus growth into Sustainable Development Area 1.
- Population concentration within the *El Centro* Growth Management Area will be notable. By 2030 it is anticipated that this GMA will comprise approximately 2/3 of the unincorporated County population.
- While growth rates will flatten in Sustainable Development Area 2 (SDA-2) and accelerate in Sustainable Development Area 1 (SDA-1), the majority of the unincorporated County population total will continue to be found within SDA-2 across the entire forecast horizon.
- The results reported here depend on an assumption of continued slowed growth throughout the remainder of the 2010-2020 decade, followed by a return to historical growth patterns between 2020-2030.
- The results reported here depend upon an assumption that the county level population forms an appropriate control total—changes in sub-county population are share-based.
- An expert-opinion-based rate of buildout in the Santa Fe Community College Planned Development District will systematically direct growth, primarily into SDA-1 and 2, at a modest tempo consistent with county growth overall and similar historical developments.
- Trends in housing units correspond with trends in population change 2010-2030.

**Supplemental Summary: A Harmonization of Population Forecasts with Employment Projections Produced by the Bureau of Business and Economic Research (BBER-UNM)**

**Daren Ruiz, Research Scientist, Bureau of Business and Economic Research**

The Geospatial and Population Studies (GPS) and the Bureau of Business and Economic Research (BBER) expect that the population and employment of Santa Fe County will reach 165,290 and 73,464 in 2030, respectively. From 2013, population is expected to increase by 18,443 people (or 13%) while employment is expected to increase by 12,834 jobs (or 21%).

The population growth rate has been slowing and we expect to see this trend continue, with a slight reversal in the last decade of the forecast. From 1990 to 2000, population increased by 27,787 people (or 27.4%). However, from 2000 to 2010, population only increased by 15,386 (or 11.9%). From 2010 to 2020 and subsequently from 2020 to 2030, we expect population to increase by 7,364 (or 5.1%) and 13,380 (or 8.8%), respectively. **Table S1** presents Santa Fe County historical and forecasted population and employment decennially.

The employment growth rate has suffered recently because of the Great Recession. From 1990 to 2000, employment increased by 15,372 jobs (or 36.3%). However from 2000 to 2010, employment increased by only 2,867 (or 5.0%). Specifically, employment started to fall in 2007, where it peaked at 65,908 jobs. We expect that it will be 13 years later for employment to reach that previous peak, with 65,984 in 2020. From 2010 to 2020 and subsequently from 2020 to 2030, we expect employment to increase by 5,446 (or 9.0%) and 7,480 (or 11.3%).

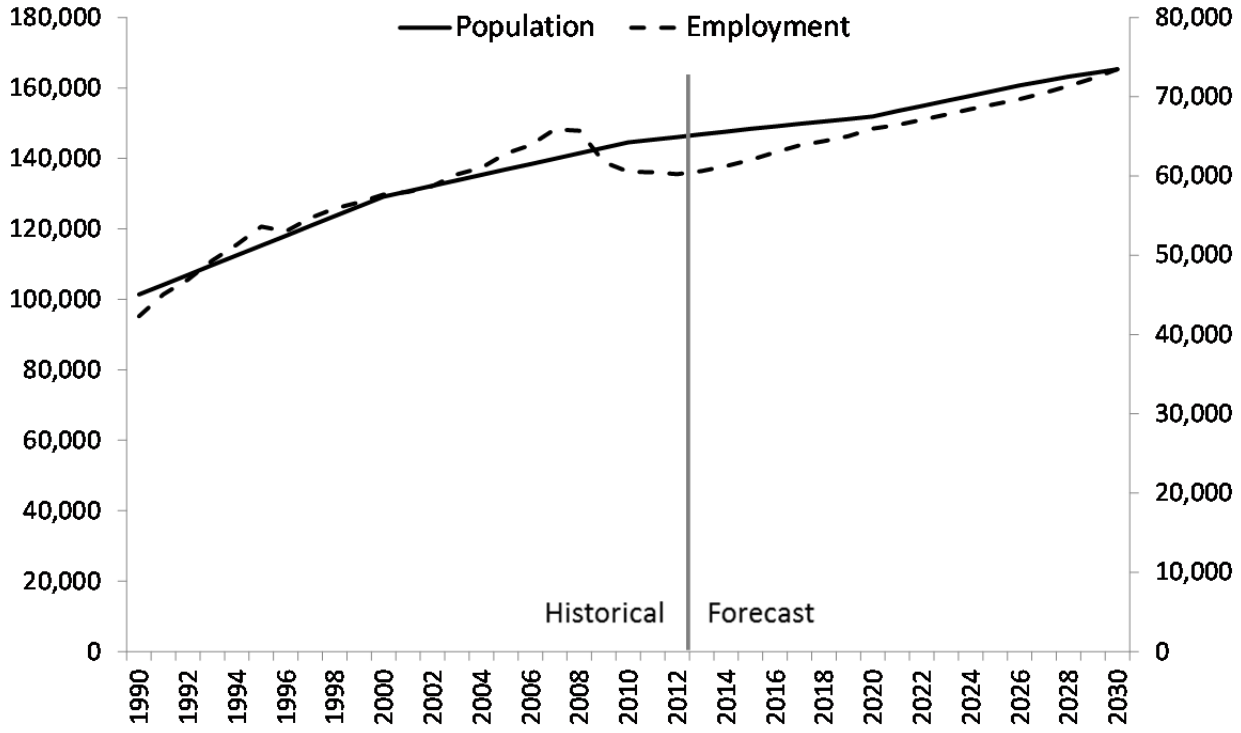
**Table S1: Santa Fe County population and employment estimates and forecasts**

| | Population | | Employment | |
|---|---|---|---|---|
| Year | Count | % Change | Count | % Change |
| 1990 | 101,373 | | 42,298 | |
| 2000 | 129,160 | 27.4 | 57,671 | 36.3 |
| 2010 | 144,546 | 11.9 | 60,538 | 5.0 |
| 2020 | *151,910* | 5.1 | *65,984* | 9.0 |
| 2030 | *165,290* | 8.8 | *73,464* | 11.3 |

Source: University of New Mexico, Geospatial Population Studies (estimate and forecast) and Bureau of Business and Economic Research (forecast), U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages (estimate).

The historic trend of Santa Fe County employment and population share a similar growth path, up to the Great Recession. Immediately preceding the recession, employment grew faster than population, and then commencing with the recession, employment suffered loses. While many people lost their jobs during the recession, many of them remained in the county. We expect that employment will grow faster than population as the economy recovers. **Figure S1** displays estimated (1990-2012) and forecasted (2013-2030) population (on the left axis) and employment (on the right axis).

**Figure S1: Estimated (1990-2012) and forecasted (2013-2030) population (left axis) and employment (right axis) for Santa Fe County**

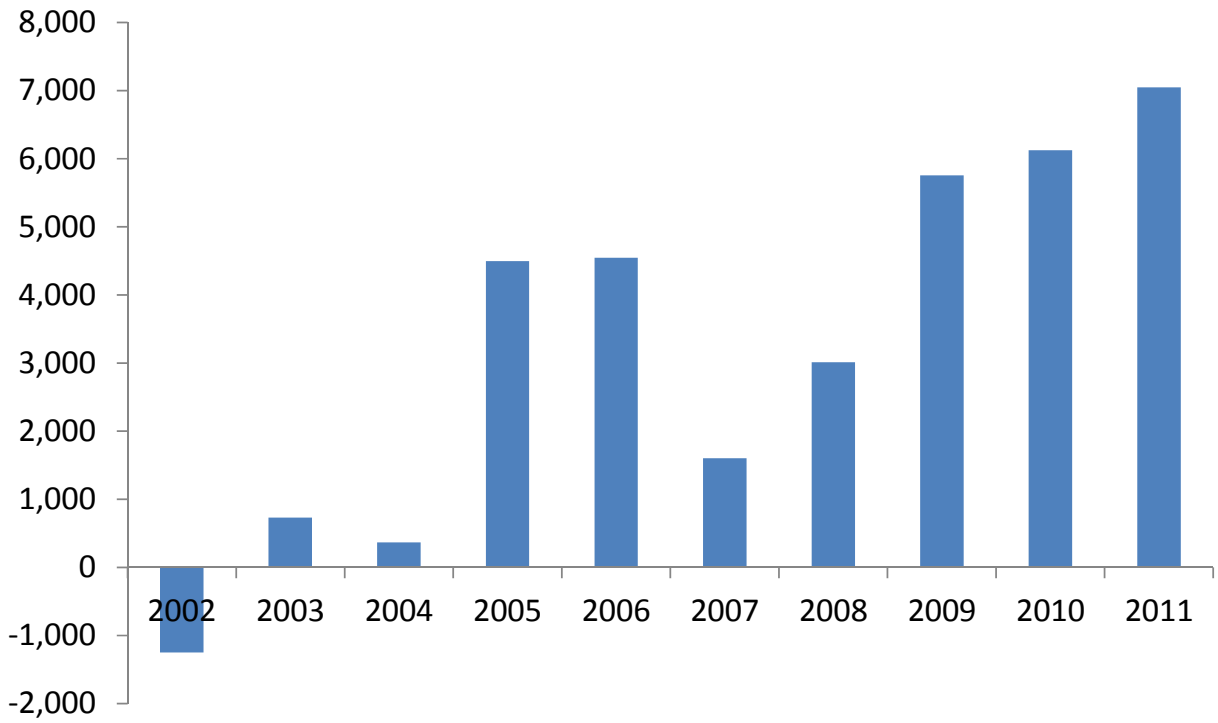



Source: University of New Mexico, Geospatial Population Studies (history and forecast) and Bureau of Business and Economic Research (forecast), U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages (history).

Commuting trends have played a role in population/employment dynamics and we expect them to play a larger role in the future. Although we did not forecast the flow of commuters entering or leaving the county, the Figure S2 suggests that the net inflow will increase in the future. The net flow of workers commuting to Santa Fe County was negative in 2002, but has increased from 2003 through 2011.

Although we expect population to increase by 18,443 people and employment to increase by 12,834 jobs, we do not expect that the increase in employment will be fully filled by the increase in population.

**Figure S2: Net inflow/outflow of Santa Fe County commuters**




Source: U.S. Department of Commerce, Census Bureau, Longitudinal Employer-Household Dynamics (2002-2012); estimates and forecasts performed by UNM BBER.

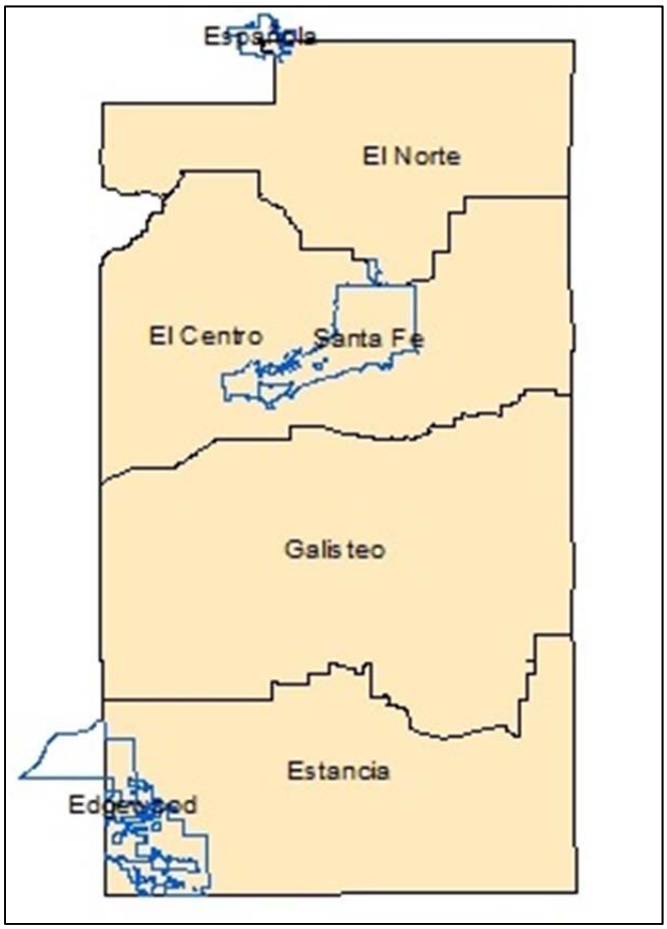
## Introduction

This report was commissioned by the County of Santa Fe's Growth Management Department for planning purposes as part of the County's Land Use Assumptions. The report presents population estimates and projections/forecasts for the period 1990-2030 for the County as a whole, for portions of incorporated municipalities within the County, the unincorporated County, and for eight geographies defined by the County to assist in its Sustainable Growth Management Plan (SGMP) process.

The customized geographies include four growth management areas (GMAs), three sustainable development areas (SDAs), and one Water Wastewater Utility Service Area—an area anticipated to be the primary center of new growth during the next ten years.

The four GMAs are defined as *El Norte*, *El Centro*, *Galisteo*, *and Estancia* comprise the entire area of the county, less the incorporated municipalities as one moves from North to South within the County (Map 1). The *El Norte* GMA describes the area North of

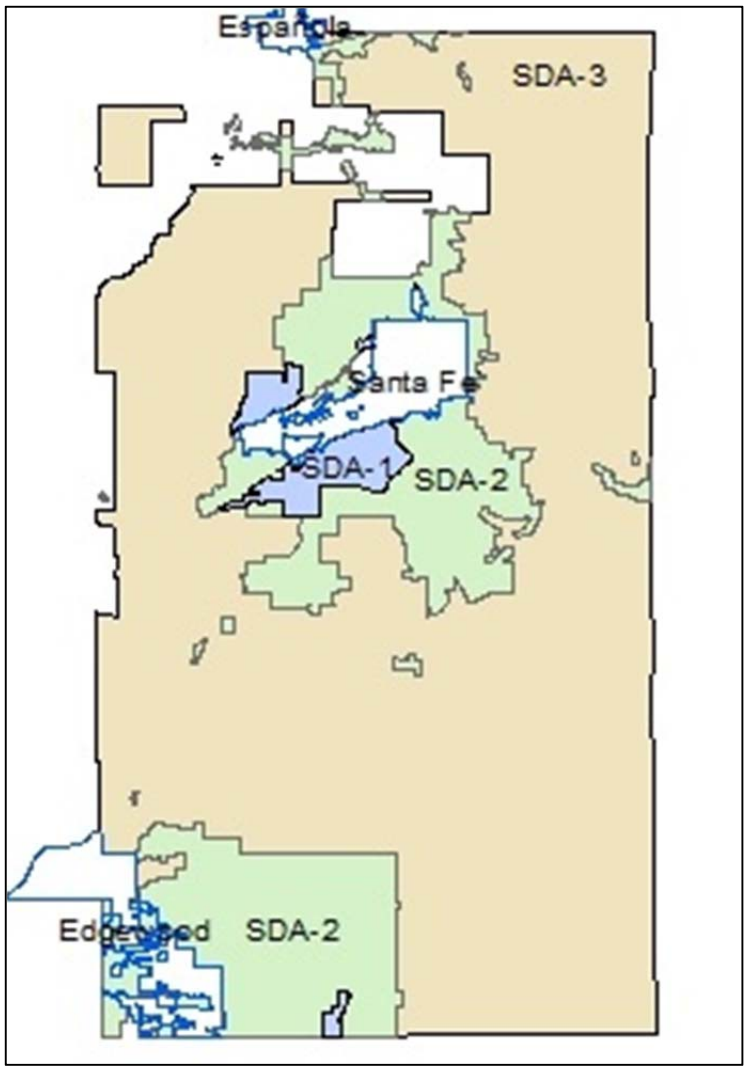
### Map 1. Growth Management Areas, Santa Fe County



the City of *Santa Fe*, less Tribal Lands held in Federal Trust and those lands within the incorporated municipality of Espanola, which is split between *Santa Fe* and *Rio Arriba* counties. The *El Centro* GMA encompasses the areas West and East of the City of *Santa Fe* while the Galisteo GMA is comprised primarily of unincorporated and sparsely-populated areas of the County as one moves toward the South. The *Estancia* GMA is also sparsely populated, but includes the Santa Fe County portions around the Town of Edgewood.

The Sustainable Development Areas are numbered 1-3 (Map 2) and have been specifically identified as Service Areas for the County. They are, consequently, intended to be used to target and leverage both public and private funding and investment and direct and phase future growth into specific areas of the unincorporated County. SDA-1 identifies the primary area in which population growth is anticipated to occur in the next ten years, while SDA-2

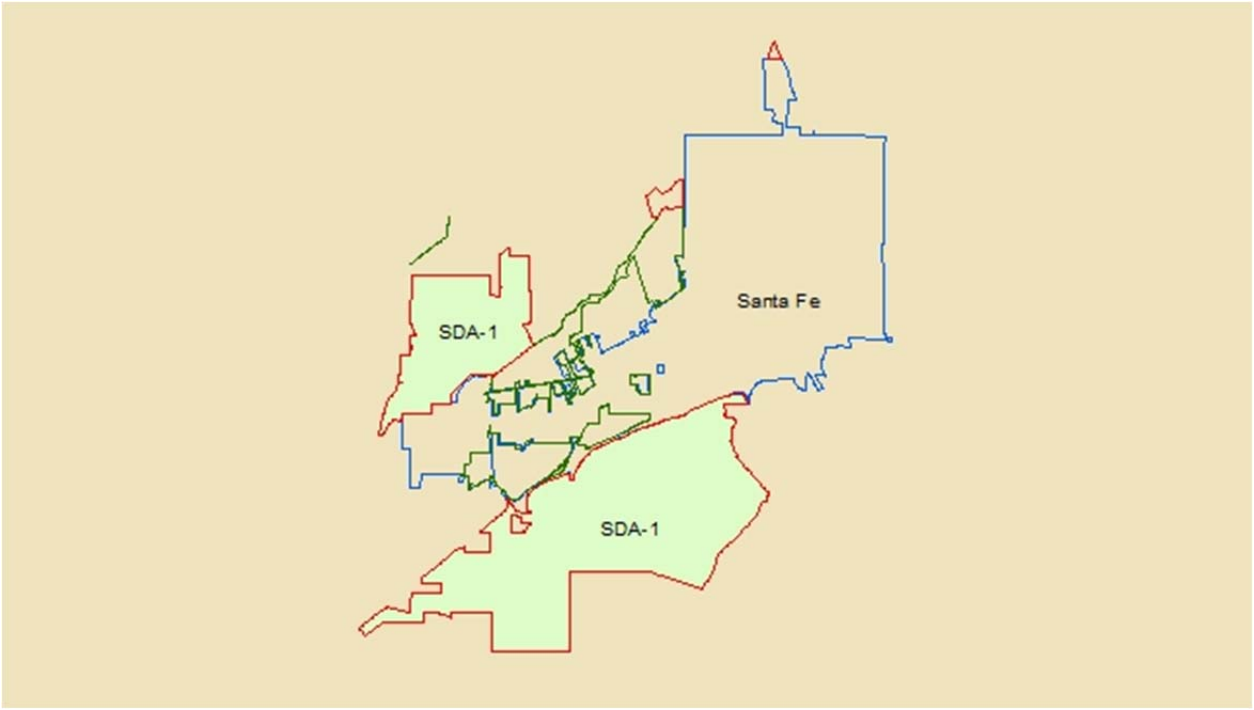
**Map 2. Sustainable Development Areas Within Santa Fe County**



defines areas subject to infill within existing communities over the next ten years and new development over the next twenty years. SDA-2 areas are found around the City of *Santa Fe* and the Town of Edgewood. In SDA-3 areas, no plans to provide urban or suburban facilities or services exist. These last areas are, obviously, largely within sparsely-populated areas of unincorporated *Santa Fe* County.

The Water and Wastewater Utility Service Area (WSA) is comprised of the majority of the SDA-1 Area within the *El Centro* GMA—again largely representing the primary area of anticipated growth over the next ten years. **Map 3** presents the overlap and non-intersection between the two geographies, with City of *Santa Fe* in blue, City of *Santa Fe* Annexations in green (which are mostly accomplished), SDA-1 in red, and the WSA in green shade.

## Map 3. Water and Wastewater Utility Service Area, County of Santa Fe



Within this geographic context, the current report presents population estimates and projections for the 1990-2030 period. All estimates and projections are presented in the most current geographic boundaries. Any annexations occurring between 2009 and 2018 (most of these have occurred) by the City of *Santa Fe* are represented in both estimates and projections, meaning that values reported here are *presented as if the post-annexation boundaries had existed since 1990*. To ensure the accuracy of estimates and projections for the unincorporated County that form the control total for all those presented for sub-areas (GMAs, SDAs, and the WSA), separate estimates and projections were made for the City of *Santa Fe*, the City of *Espanola*, the Town of Edgewood, and Tribal areas within the County.

The estimates and forecasts presented here are described independently, as well as being collated in Appendix 1. The same is true for housing units: while these are presented for each of the geographies independently within the report, Appendix 2 collates forecasted housing unit counts. Appendix 3 presents details of the methodology utilized in this study. All estimates and projections make use of decennial census data from 1990, 2000, and 2010 as well as various forms of microdata utilized by the Geospatial and Population Studies group for making demographic estimates and projections for small-areas (census tracts and Department of Health "Small Areas"). The census tract and "small area" estimates are made available at http://bber.unm.edu and at www.nm.ibis.gov and are freely available for interested readers of this report.

# 1. Santa Fe County, Unincorporated County, Municipalities, and Tribal Areas

## Table 1. Population Estimates and Forecasts, 1990-2030

| Year | County | City of Santa Fe | Town of Edgewood | City of Espanola | Tribal Lands | Unincorporated County |
|---|---|---|---|---|---|---|
| 1990 | 101,373 | 63,819 | 1,655 | 1,987 | 2,975 | 30,937 |
| 1991 | 104,152 | 65,148 | 1,776 | 2,051 | 2,997 | 32,180 |
| 1992 | 106,931 | 66,505 | 1,906 | 2,117 | 3,019 | 33,384 |
| 1993 | 109,710 | 67,890 | 2,045 | 2,185 | 3,041 | 34,549 |
| 1994 | 112,488 | 69,303 | 2,195 | 2,255 | 3,063 | 35,672 |
| 1995 | 115,266 | 70,747 | 2,355 | 2,327 | 3,085 | 36,752 |
| 1996 | 118,045 | 72,220 | 2,528 | 2,402 | 3,107 | 37,788 |
| 1997 | 120,823 | 73,724 | 2,712 | 2,479 | 3,130 | 38,778 |
| 1998 | 123,603 | 75,259 | 2,911 | 2,559 | 3,153 | 39,721 |
| 1999 | 126,382 | 76,826 | 3,124 | 2,641 | 3,176 | 40,615 |
| 2000 | 129,160 | 78,426 | 3,352 | 2,726 | 3,199 | 41,457 |
| 2001 | 130,699 | 78,755 | 3,386 | 2,776 | 3,223 | 42,559 |
| 2002 | 132,237 | 79,085 | 3,421 | 2,827 | 3,247 | 43,657 |
| 2003 | 133,774 | 79,416 | 3,456 | 2,878 | 3,271 | 44,753 |
| 2004 | 135,315 | 79,749 | 3,492 | 2,931 | 3,296 | 45,847 |
| 2005 | 136,853 | 80,083 | 3,527 | 2,985 | 3,321 | 46,937 |
| 2006 | 138,392 | 80,419 | 3,564 | 3,039 | 3,346 | 48,024 |
| 2007 | 139,930 | 80,756 | 3,600 | 3,095 | 3,371 | 49,108 |
| 2008 | 141,470 | 81,095 | 3,637 | 3,152 | 3,396 | 50,190 |
| 2009 | 143,007 | 81,435 | 3,674 | 3,209 | 3,421 | 51,268 |
| 2010 | 144,546 | 81,776 | 3,742 | 3,268 | 3,447 | 52,313 |
| 2011 | *145,309* | *81,776* | *3,750* | *3,307* | *3,452* | *53,024* |
| 2012 | *146,077* | *82,463* | *3,789* | *3,347* | *3,457* | *53,021* |
| 2013 | *146,846* | *82,809* | *3,827* | *3,386* | *3,461* | *53,363* |
| 2014 | *147,622* | *83,156* | *4,348* | *3,426* | *3,466* | *53,226* |
| 2015 | *148,402* | *83,504* | *4,898* | *3,467* | *3,471* | *53,062* |
| 2016 | *149,094* | *83,854* | *5,453* | *3,505* | *3,473* | *52,809* |
| 2017 | *149,790* | *84,206* | *5,509* | *3,544* | *3,476* | *53,055* |
| 2018 | *150,484* | *84,559* | *5,566* | *3,583* | *3,478* | *53,298* |
| 2019 | *151,172* | *84,913* | *5,623* | *3,622* | *3,480* | *53,534* |
| 2020 | *151,910* | *85,269* | *5,680* | *3,663* | *3,483* | *53,815* |
| 2021 | *153,447* | *85,627* | *5,739* | *3,723* | *3,504* | *54,854* |
| 2022 | *154,876* | *85,985* | *5,797* | *3,781* | *3,522* | *55,791* |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2023 | *156,323* | *86,346* | *5,857* | *3,840* | *3,541* | *56,739* |
| 2024 | *157,781* | *86,708* | *5,917* | *3,899* | *3,559* | *57,698* |
| 2025 | *159,257* | *87,071* | *5,978* | *3,960* | *3,578* | *58,670* |
| 2026 | *160,751* | *87,436* | *6,039* | *4,021* | *3,597* | *59,658* |
| 2027 | *161,914* | *87,803* | *6,101* | *4,074* | *3,608* | *60,328* |
| 2028 | *163,226* | *88,171* | *6,163* | *4,132* | *3,622* | *61,138* |
| 2029 | *164,246* | *88,540* | *6,227* | *4,182* | *3,629* | *61,668* |
| 2030 | *165,289* | *88,911* | *6,290* | *4,234* | *3,637* | *62,217* |

Table 1 reports population estimates and forecasts for the County as a whole, for the municipalities of *Santa Fe*, *Espanola*, and Edgewood, for Tribal Lands, and for the sum remainder unincorporated County. These account for existing or proposed annexations by the City of *Santa Fe*, occurring between 2009 and 2018. The striking overall trend is the increasing consolidation of the County's population within the City of *Santa Fe*, with the annexations being the primary driver of this trend.

Growth is anticipated to slow overall within the County and is apparent within all of the sub-county geographies. **Charts 1 and 2** (next page) present these trends graphically. This flattening growth is apparent in all geographies, even in the Town of Edgewood whose forecast is here step-jumped in view of current development of the Google/Titan Aerospace facility in Moriarty. The majority of the residential housing development associated with this employment boost is anticipated to occur in Edgewood. In the forecasts presented here, a supplementary increase of 1,250 persons between 2014 and 2020 is included, with a return to historical growth levels beyond 2020.

Between 1990 and 2010, the County (**Table 1**) as a whole grew by over 42.58 percent (2.13 percent per year); the diminished anticipated growth is reflected in an increase of only 14.35 percent over the forecast period (.0072 percent per year). The unincorporated County areas during the historical period (1990-2010) grew at a slightly faster rate (69.10 percent overall or 3.46 percent per year), but in a numeric sense this growth was swamped by the momentum provided by the larger City area. It should be remembered that much of the City of Santa Fe growth was actually in the unincorporated County during this historical period, only recently being annexed. Over the forecast period, the unincorporated County is also anticipated to slow its growth, to only 17.34 percent between 2010 and 2030 (.009 percent per year). Growth in Tribal areas is slower than the County overall in both periods. These geographies grew by only 15.87 percent between 1990 and 2010 (.008 per year), at a rate similar to the unincorporated County areas. During the projection period, their growth is anticipated to slow even more relative to the unincorporated County as well as the County as a whole. Between 2010 and 2030, it is anticipated that these areas will grow at a rate of only .003 percent per annum, resulting in a numeric increase of only 5.5 percent between 2010 and 2030.

Smaller incorporated areas of Edgewood and Espanola (*Santa Fe* County) have

**Chart 1. Population Growth (1990-2030) for Santa Fe County and the City of Santa Fe**

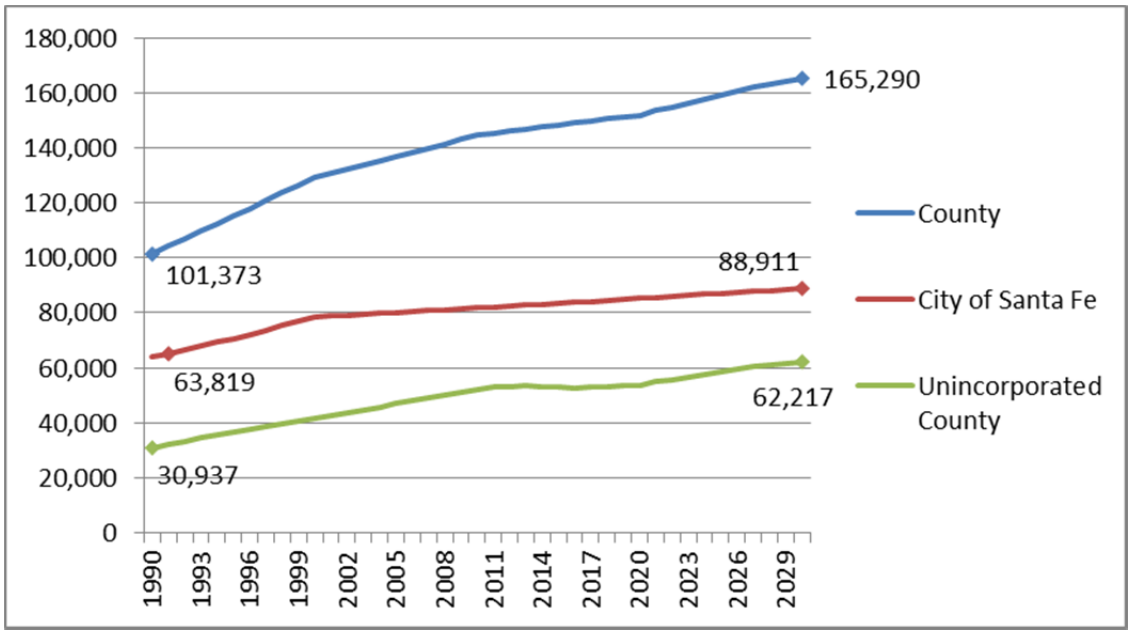
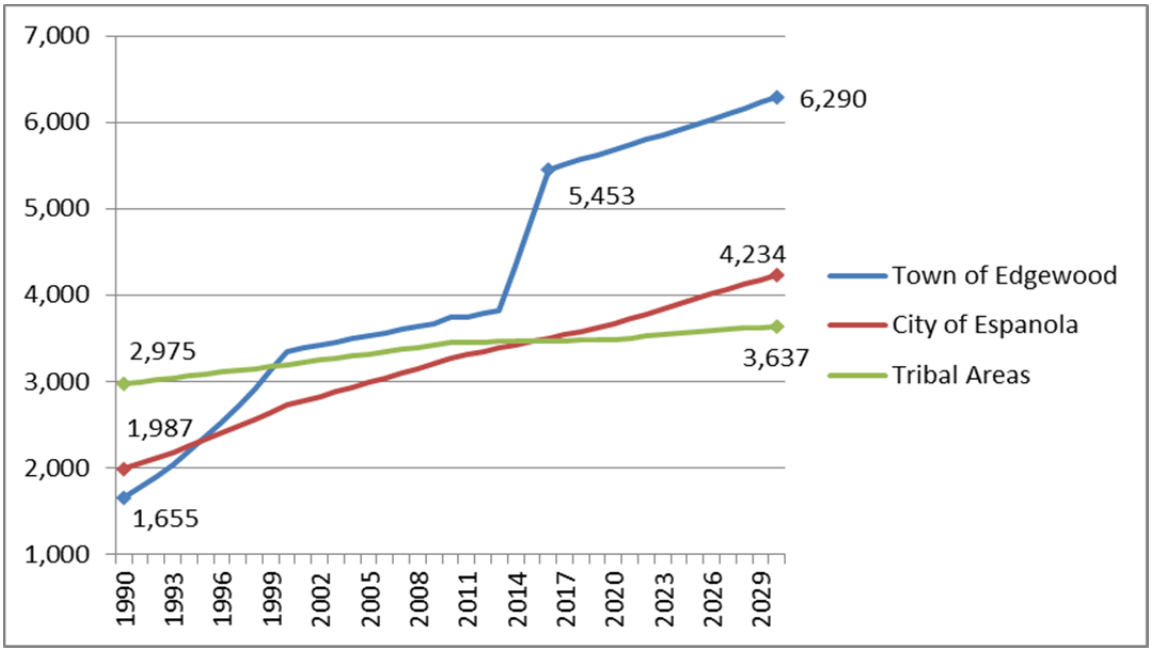



**Chart 2. Population Growth (1990-2030) for Smaller Municipalities and Tribal Areas**



grown rapidly in the 1990-2010 period and although their growth is anticipated to slow in the forecast period as well, they will continue to grow somewhat more rapidly than the whole County, the City of Santa Fe, or unincorporated areas of the County. The Town of Edgewood's 1990-2010 growth has seen an over doubling (126 percent increase) of their population (6.3 percent per year), though this has slowed somewhat between 2000 and 2010 when compared to the 1990-2000 period. Over the forecast period, it is anticipated that they will grow by an additional 68.1 percent or at a rate of 3.41 percent per year. The City of Espanola's segment within Santa Fe County will also grow rapidly, 29.56 percent over the 2010-2030 period (at a rate of 1.5 percent per year).

**Table 2. Annualized Growth Rates by Decade, 1990-2030**

| Year | County | City of Santa Fe | City of Espanola | Town of Edgewood | Tribal Lands | Unincorporated County |
|---|---|---|---|---|---|---|
| 1990 to 2000 | 0.0242 | 0.0206 | 0.0316 | 0.0706 | 0.0073 | 0.0293 |
| 2000 to 2010 | 0.0113 | 0.0042 | 0.0181 | 0.0110 | 0.0075 | 0.0233 |
| 2010 to 2020 | 0.0050 | 0.0042 | 0.0114 | 0.0417 | 0.0010 | 0.0028 |
| 2020 to 2030 | 0.0084 | 0.0042 | 0.0145 | 0.0102 | 0.0043 | 0.0145 |

## Table 3. Forecasted Housing Units, 1990-2030

| Year | County | City of Santa Fe | Town of Edgewood | City of Española | Tribal Areas | Unincorporated County |
|---|---|---|---|---|---|---|
| **2010** | **71,285** | **42,600** | **1,552** | **1,420** | **1,417** | **24,296** |
| 2011 | *71,661* | *42,795* | *1,560* | *1,428* | *1,424* | *24,454* |
| 2012 | *72,040* | *43,108* | *1,576* | *1,445* | *1,426* | *24,484* |
| 2013 | *72,420* | *43,265* | *1,593* | *1,462* | *1,428* | *24,672* |
| 2014 | *72,802* | *43,423* | *1,809* | *1,479* | *1,430* | *24,661* |
| 2015 | *73,186* | *43,582* | *2,038* | *1,497* | *1,432* | *24,638* |
| 2016 | *73,529* | *43,741* | *2,269* | *1,513* | *1,433* | *24,573* |
| 2017 | *73,871* | *43,901* | *2,292* | *1,530* | *1,434* | *24,714* |
| 2018 | *74,213* | *44,061* | *2,316* | *1,547* | *1,435* | *24,854* |
| 2019 | *74,553* | *44,222* | *2,340* | *1,564* | *1,436* | *24,991* |
| 2020 | *74,917* | *44,384* | *2,364* | *1,581* | *1,437* | *25,151* |
| 2021 | *75,674* | *44,547* | *2,388* | *1,607* | *1,445* | *25,687* |
| 2022 | *76,380* | *44,710* | *2,412* | *1,632* | *1,453* | *26,172* |
| 2023 | *77,092* | *44,874* | *2,437* | *1,658* | *1,461* | *26,663* |
| 2024 | *77,812* | *45,039* | *2,462* | *1,684* | *1,468* | *27,160* |
| 2025 | *78,540* | *45,204* | *2,487* | *1,710* | *1,476* | *27,663* |
| 2026 | *79,277* | *45,370* | *2,513* | *1,736* | *1,484* | *28,174* |
| 2027 | *79,850* | *45,537* | *2,538* | *1,759* | *1,488* | *28,527* |
| 2028 | *80,497* | *45,704* | *2,565* | *1,784* | *1,494* | *28,950* |
| 2029 | *81,001* | *45,872* | *2,591* | *1,806* | *1,497* | *29,234* |
| 2030 | *81,515* | *46,041* | *2,617* | *1,828* | *1,501* | *29,528* |

Housing unit accumulation will mirror population within the County between 2010 and 2030 (**Table 3**). During this time, the County's overall housing unit stock is anticipated to grow by 10,230 units, of which 3,441 are to be found within the City of Santa Fe. During the same period, the Town of Edgewood's housing unit stock is anticipated to grow by 1,065 units while units within the *Santa Fe* County portion of the City of Espanola and within Tribal areas will grow much more slowly—by 411 units and 84 units, respectively. The relationship between population and housing is always complex and the dynamics forecasted here suggest that for each housing unit added the county population will increase by 1.95 persons. This relationship varies across sub county geographies, however, from 2.07 in the City of Santa Fe to 2.39, 2.26, and 2.21 in the Town of Edgewood, City of Espanola, and Tribal Areas, respectively.

# 2. Growth Management Areas

## Table 4. Population Estimates and Forecasts, 1990-2030

| Year | Unincorporated County | *El Centro* | *El Norte* | *Estancia* | *Galisteo* |
|---|---|---|---|---|---|
| 1990 | 30,937 | 12,694 | 6,939 | 3,478 | 7,826 |
| 1991 | 32,180 | 13,397 | 7,126 | 3,596 | 8,061 |
| 1992 | 33,384 | 14,100 | 7,298 | 3,707 | 8,279 |
| 1993 | 34,548 | 14,801 | 7,455 | 3,811 | 8,481 |
| 1994 | 35,672 | 15,499 | 7,597 | 3,909 | 8,667 |
| 1995 | 36,752 | 16,193 | 7,723 | 4,000 | 8,836 |
| 1996 | 37,788 | 16,880 | 7,834 | 4,085 | 8,989 |
| 1997 | 38,778 | 17,560 | 7,930 | 4,162 | 9,126 |
| 1998 | 39,721 | 18,231 | 8,011 | 4,233 | 9,246 |
| 1999 | 40,615 | 18,891 | 8,078 | 4,296 | 9,350 |
| 2000 | 41,457 | 19,538 | 8,130 | 4,352 | 9,437 |
| 2001 | 42,559 | 20,320 | 8,227 | 4,434 | 9,578 |
| 2002 | 43,658 | 21,114 | 8,319 | 4,513 | 9,712 |
| 2003 | 44,753 | 21,920 | 8,404 | 4,589 | 9,840 |
| 2004 | 45,846 | 22,739 | 8,483 | 4,663 | 9,961 |
| 2005 | 46,937 | 23,570 | 8,556 | 4,735 | 10,076 |
| 2006 | 48,024 | 24,413 | 8,624 | 4,803 | 10,184 |
| 2007 | 49,109 | 25,267 | 8,685 | 4,870 | 10,287 |
| 2008 | 50,189 | 26,133 | 8,741 | 4,933 | 10,382 |
| 2009 | 51,267 | 27,010 | 8,791 | 4,994 | 10,472 |
| 2010 | 52,313 | 27,882 | 8,831 | 5,050 | 10,550 |
| 2011 | *53,024* | *28,664* | *8,762* | *5,085* | *10,513* |
| 2012 | *53,022* | *29,058* | *8,577* | *5,051* | *10,336* |
| 2013 | *53,364* | *29,548* | *8,482* | *5,069* | *10,265* |
| 2014 | *53,225* | *29,768* | *8,312* | *5,041* | *10,104* |
| 2015 | *53,062* | *29,968* | *8,142* | *5,011* | *9,941* |
| 2016 | *52,809* | *30,114* | *7,961* | *4,972* | *9,762* |
| 2017 | *53,054* | *30,544* | *7,856* | *4,979* | *9,675* |
| 2018 | *53,299* | *30,976* | *7,751* | *4,985* | *9,587* |
| 2019 | *53,534* | *31,407* | *7,643* | *4,989* | *9,495* |
| 2020 | *53,815* | *32,022* | *7,578* | *4,760* | *9,455* |
| 2021 | *54,854* | *32,978* | *7,566* | *4,812* | *9,498* |
| 2022 | *55,792* | *33,894* | *7,538* | *4,839* | *9,521* |
| 2023 | *56,739* | *34,828* | *7,507* | *4,864* | *9,540* |

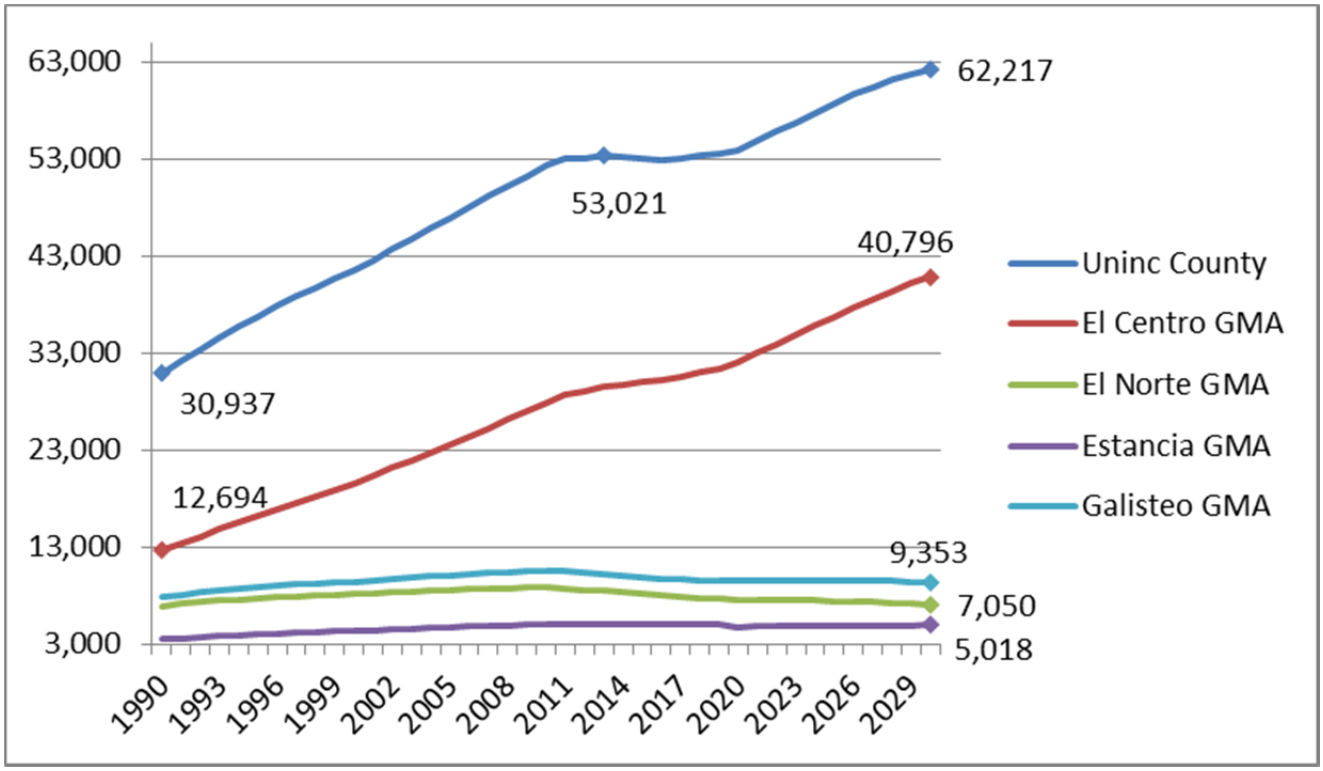
| | | | | | |
|---|---|---|---|---|---|
| 2024 | *57,699* | *35,780* | *7,474* | *4,888* | *9,557* |
| 2025 | *58,669* | *36,751* | *7,438* | *4,910* | *9,570* |
| 2026 | *59,658* | *37,742* | *7,402* | *4,932* | *9,582* |
| 2027 | *60,327* | *38,540* | *7,323* | *4,925* | *9,539* |
| 2028 | *61,138* | *39,435* | *7,260* | *4,929* | *9,514* |
| 2029 | *61,668* | *40,154* | *7,162* | *4,908* | *9,444* |
| 2030 | *62,217* | *40,796* | *7,050* | *5,018* | *9,353* |

Growth within the unincorporated areas of Santa Fe County around the City of *Santa Fe* has largely driven growth toward the El Centro GMA during the 1990-2010 historical period. This increasing concentration should continue in the forecast period (2010-2030). While *El Norte*, *Estancia*, and *Galisteo* GMAs have also grown rapidly, the *El Centro* GMA has over doubled in size between 1990 and 2010. In numeric terms, this meant an increase from 12,694 persons in 1990 to 27,882 persons in 2010 (**Table 4**). Moving forward, this momentum will continue, with an additional 13,000 persons being added to this GMA—at the expense of other GMAs. Beyond 2010, the *El Norte*, *Galisteo*, and *Estancia* GMAs are anticipated to either stabilize (*Estancia*) or slightly decline over the remainder of the forecast horizon to 2030.

This concentration of population within the *El Centro* GMA is reflected in the fact that between 1990 and 2010, the GMA grew by over 100 percent (119.66 percent)—at an annual rate of 5.98 percent. In comparison, *El Norte*, *Estancia*, and *Galisteo* GMAs grew by 27.26, 45.21, and 34.80 percent respectively, at corresponding annual rates of 1.36, 2.26, and 1.74 percent. The most rapidly growing of the remaining GMAs, *Estancia*, grew by not half of the growth rate observed in the *El Centro* GMA. Though slowing, these patterns carry forward into the population forecasts (**Table 2**), with the *El Centro* GMA forecasted to grow by an additional 46.32 percent (2.32 percent per year) by 2030. The *El Norte*, *Estancia*, and *Galisteo* GMAs, in contrast will decrease by 21.17 percent (*El Norte*), 11.4 percent (*Galisteo*), and less than 1.0 percent (*Estancia*). This overall trend largely reflects an intensity of population movement into the area around the City of Santa Fe. The forecasts assume that this will reflect a movement of people within the County into the *El Centro* GMA over the 2010-2030 period, rather than an influx of persons from outside the County into this area.

Housing unit loss is predicted for three of the four GMAs: El Norte, Estancia, and Galisteo (Table 6, p. 19). Between 2010 and 2030, 6,200 units are predicted to be added to the stock of the *El Norte* GMA, with an associated population gain of 1.96 persons per housing unit.

**Chart 3. Population Growth (1990-2030), by Growth Management Area**




## Table 5. Annualized Growth Rate by Decade, 1990-2030

| Year | Unincorporated County | El Norte | El Centro | Galisteo | Estancia |
|---|---|---|---|---|---|
| 1990 to 2000 | 0.0293 | 0.0158 | 0.0431 | 0.0187 | 0.0224 |
| 2000 to 2010 | 0.0233 | 0.0083 | 0.0356 | 0.0111 | 0.0149 |
| 2010 to 2020 | 0.0028 | -0.0153 | 0.0138 | -0.0110 | -0.0059 |
| 2020 to 2030 | 0.0145 | -0.0072 | 0.0242 | -0.0011 | 0.0053 |

**Table 6. Forecasted Housing Unit Changes, 1990-2030**

| Year | *El Centro* | *El Norte* | *Galisteo* | *Estancia* | Unincorporated County |
|---|---|---|---|---|---|
| 2010 | **12,103** | **4,671** | **2,127** | **5,395** | **24,296** |
| 2011 | *12,181* | *4,702* | *2,141* | *5,430* | *24,454* |
| 2012 | *12,260* | *4,699* | *2,144* | *5,381* | *24,484* |
| 2013 | *12,568* | *4,661* | *2,136* | *5,307* | *24,672* |
| 2014 | *12,660* | *4,654* | *2,124* | *5,223* | *24,661* |
| 2015 | *12,751* | *4,634* | *2,113* | *5,141* | *24,638* |
| 2016 | *12,812* | *4,617* | *2,096* | *5,048* | *24,573* |
| 2017 | *12,997* | *4,614* | *2,099* | *5,004* | *24,714* |
| 2018 | *13,185* | *4,608* | *2,102* | *4,959* | *24,854* |
| 2019 | *13,370* | *4,604* | *2,104* | *4,913* | *24,991* |
| 2020 | *13,642* | *4,604* | *2,009* | *4,896* | *25,151* |
| 2021 | *14,094* | *4,622* | *2,037* | *4,934* | *25,687* |
| 2022 | *14,524* | *4,635* | *2,054* | *4,958* | *26,172* |
| 2023 | *14,962* | *4,649* | *2,070* | *4,981* | *26,663* |
| 2024 | *15,410* | *4,662* | *2,086* | *5,002* | *27,160* |
| 2025 | *15,866* | *4,675* | *2,100* | *5,022* | *27,663* |
| 2026 | *16,333* | *4,687* | *2,115* | *5,040* | *28,174* |
| 2027 | *16,699* | *4,691* | *2,114* | *5,023* | *28,527* |
| 2028 | *17,114* | *4,698* | *2,119* | *5,019* | *28,950* |
| 2029 | *17,439* | *4,698* | *2,112* | *4,985* | *29,234* |
| 2030 | *17,730* | *4,697* | *2,161* | *4,940* | *29,528* |

# 3. Sustainable Development Areas

## Table 7. Population Estimates and Forecasts, 1990-2030

| Year | Unincorporated County | SDA-1 | SDA-2 | SDA-3 |
|---|---|---|---|---|
| 1990 | 30,937 | 3,326 | 22,280 | 5,331 |
| 1991 | 32,180 | 3,310 | 23,496 | 5,374 |
| 1992 | 33,384 | 3,289 | 24,688 | 5,408 |
| 1993 | 34,548 | 3,263 | 25,851 | 5,435 |
| 1994 | 35,672 | 3,232 | 26,986 | 5,454 |
| 1995 | 36,752 | 3,197 | 28,088 | 5,467 |
| 1996 | 37,788 | 3,159 | 29,157 | 5,473 |
| 1997 | 38,778 | 3,117 | 30,189 | 5,473 |
| 1998 | 39,721 | 3,071 | 31,183 | 5,467 |
| 1999 | 40,615 | 3,023 | 32,136 | 5,455 |
| 2000 | 41,457 | 2,972 | 33,047 | 5,438 |
| 2001 | 42,559 | 3,278 | 33,761 | 5,520 |
| 2002 | 43,658 | 3,584 | 34,473 | 5,601 |
| 2003 | 44,753 | 3,889 | 35,182 | 5,682 |
| 2004 | 45,846 | 4,195 | 35,888 | 5,763 |
| 2005 | 46,937 | 4,500 | 36,593 | 5,844 |
| 2006 | 48,024 | 4,805 | 37,295 | 5,924 |
| 2007 | 49,109 | 5,110 | 37,995 | 6,003 |
| 2008 | 50,189 | 5,414 | 38,693 | 6,083 |
| 2009 | 51,267 | 5,718 | 39,388 | 6,162 |
| 2010 | 52,313 | 6,018 | 40,058 | 6,237 |
| 2011 | *53,024* | *6,330* | *40,436* | *6,258* |
| 2012 | *53,022* | *6,560* | *40,267* | *6,194* |
| 2013 | *53,364* | *6,833* | *40,359* | *6,171* |
| 2014 | *53,225* | *7,046* | *40,088* | *6,091* |
| 2015 | *53,062* | *7,255* | *39,798* | *6,009* |
| 2016 | *52,809* | *7,449* | *39,443* | *5,917* |
| 2017 | *53,054* | *7,714* | *39,460* | *5,882* |
| 2018 | *53,299* | *7,980* | *39,473* | *5,845* |
| 2019 | *53,534* | *8,248* | *39,480* | *5,807* |
| 2020 | *53,815* | *8,524* | *39,518* | *5,773* |
| 2021 | *54,854* | *8,927* | *40,108* | *5,819* |
| 2022 | *55,792* | *9,321* | *40,618* | *5,852* |
| 2023 | *56,739* | *9,725* | *41,130* | *5,883* |
| 2024 | *57,699* | *10,140* | *41,644* | *5,914* |

| | | | | |
|---|---|---|---|---|
| 2025 | *58,669* | *10,565* | *42,162* | *5,943* |
| 2026 | *59,658* | *11,002* | *42,684* | *5,972* |
| 2027 | *60,327* | *11,387* | *42,974* | *5,967* |
| 2028 | *61,138* | *11,805* | *43,359* | *5,974* |
| 2029 | *61,668* | *12,174* | *43,541* | *5,952* |
| 2030 | *62,217* | *12,553* | *43,733* | *5,931* |

Sustainable Development Area 2 (SDA-2) has historically contained the greatest proportion of the unincorporated County population. Consequently, it has largely mirrored overall Santa Fe County trends and will continue to do so throughout the forecast period. It also has been—and will be—the largest SDA throughout the period in terms of population. This trend is part of the larger trend already noted toward the increasing concentration within the *El Centro* GMA over both the historical and forecast periods. Between 1990 and 2010, SDA-2 grew from 22,280 persons to 40,058 persons—an increase of 79.80 percent (4.0 percent per year). Between 2010 and 2030, it is anticipated that this SDA will grow by only an additional 3,297 persons—posting less than one half the growth observed in the previous 20 years (0.005 percent per annum or a total of 9.2 percent).

SDA-1 and SDA-3 have displayed more complicated historical dynamics. SDA-1 grew by 81.00 percent (4.00 percent per annum) between 1990 and 2010 while SDA-3 grew by only 16.90 percent (.008 percent per annum). In spite of the rapid growth of SDA-1, this only constituted a numeric increase of 2,693 persons (3,326 to 6,018). SDA-3 increased by 906 persons from 5,331 to 6,237 persons). Between 2010 and 2020, both SDAs are tapering off in growth, reflecting the overall county-level trend. Likewise, as County growth picks back up between 2020 and 2030, SDA-1 and SDA-3 are both assumed to do so in correspondence.

**Table 8. Annualized Growth Rate by Decade, 1990-2030**

| Year | Unincorporated County | SDA-1 | SDA-2 | SDA-3 |
|---|---|---|---|---|
| 1990 to 2000 | 0.0293 | -0.0112 | 0.0394 | 0.0020 |
| 2000 to 2010 | 0.0233 | 0.0706 | 0.0192 | 0.0137 |
| 2010 to 2020 | 0.0028 | 0.0348 | -0.0014 | -0.0077 |
| 2020 to 2030 | 0.0145 | 0.0387 | 0.0101 | 0.0027 |

**Chart 4. Growth in Unincorporated Santa Fe County and within SDA-2**

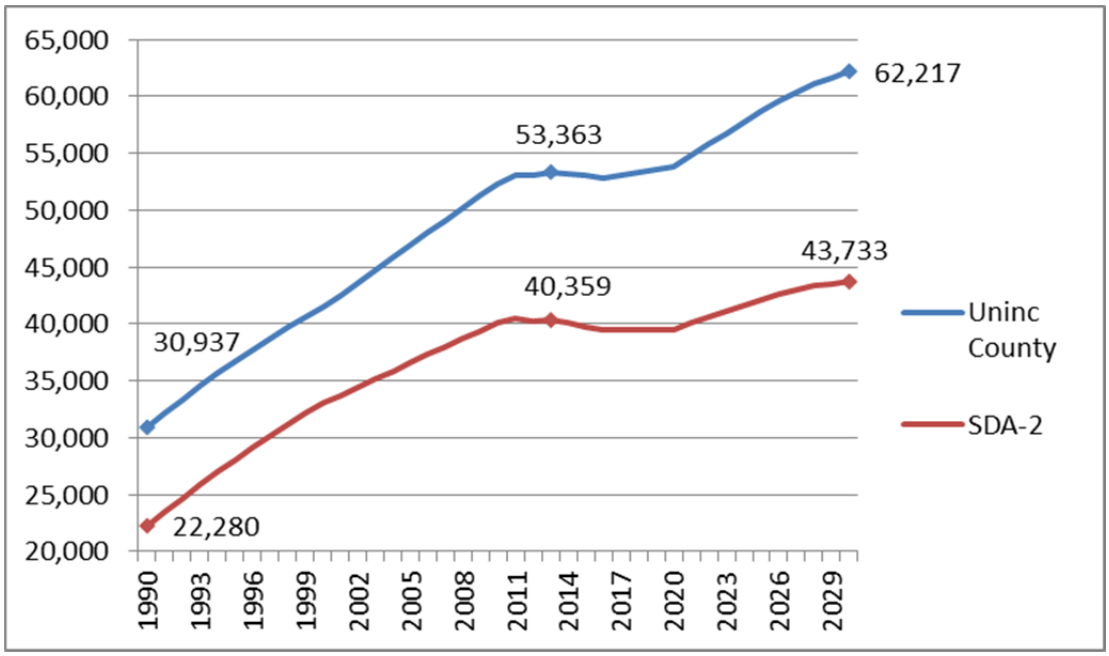
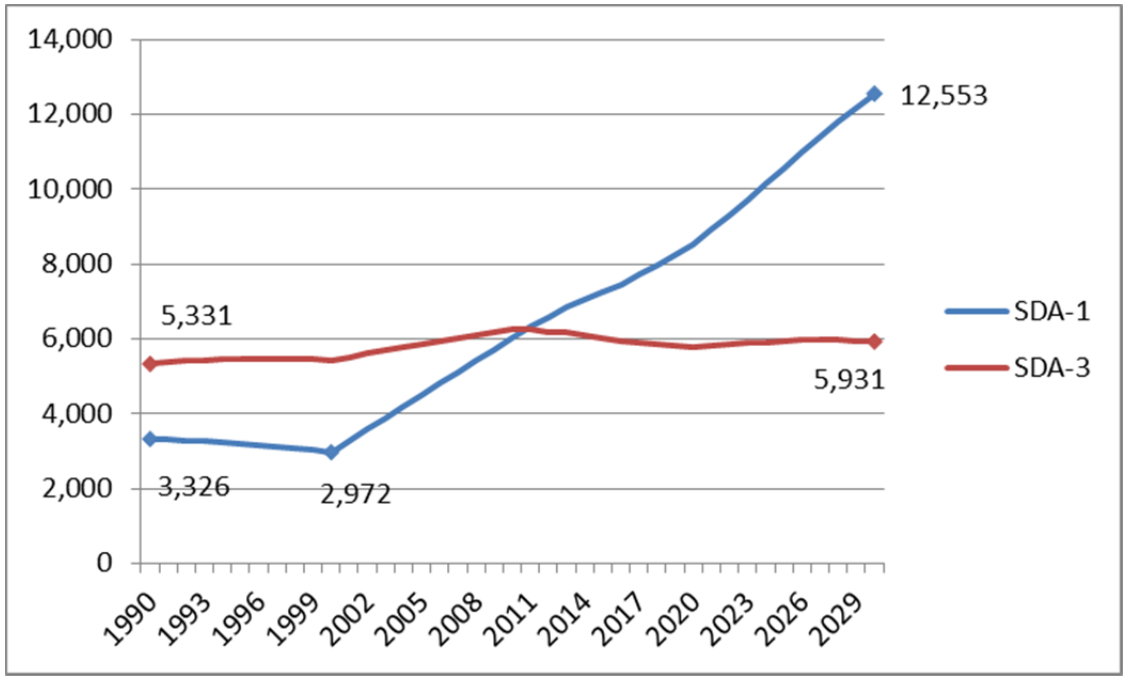



**Chart 5. Growth in SDA-2 and SDA-3 (1990-2030)**



## Table 9. Forecasted Housing Units, 1990-2030

| Year | SDA-1 | SDA-2 | SDA-3 | Unincorporated County |
|---|---|---|---|---|
| 2010 | **1,984** | **19,242** | **3,070** | **24,296** |
| 2011 | *1,997* | *19,367* | *3,090* | *24,454* |
| 2012 | *2,065* | *19,335* | *3,085* | *24,484* |
| 2013 | *2,148* | *19,425* | *3,099* | *24,672* |
| 2014 | *2,210* | *19,361* | *3,090* | *24,661* |
| 2015 | *2,269* | *19,290* | *3,079* | *24,638* |
| 2016 | *2,324* | *19,187* | *3,062* | *24,573* |
| 2017 | *2,403* | *19,240* | *3,071* | *24,714* |
| 2018 | *2,482* | *19,293* | *3,080* | *24,854* |
| 2019 | *2,561* | *19,342* | *3,088* | *24,991* |
| 2020 | *2,644* | *19,408* | *3,099* | *25,151* |
| 2021 | *2,771* | *19,760* | *3,155* | *25,687* |
| 2022 | *2,896* | *20,071* | *3,205* | *26,172* |
| 2023 | *3,023* | *20,384* | *3,256* | *26,663* |
| 2024 | *3,153* | *20,700* | *3,306* | *27,160* |
| 2025 | *3,287* | *21,018* | *3,358* | *27,663* |
| 2026 | *3,424* | *21,340* | *3,410* | *28,174* |
| 2027 | *3,542* | *21,543* | *3,442* | *28,527* |
| 2028 | *3,671* | *21,796* | *3,483* | *28,950* |
| 2029 | *3,783* | *21,945* | *3,507* | *29,234* |
| 2030 | *3,892* | *22,103* | *3,533* | *29,528* |

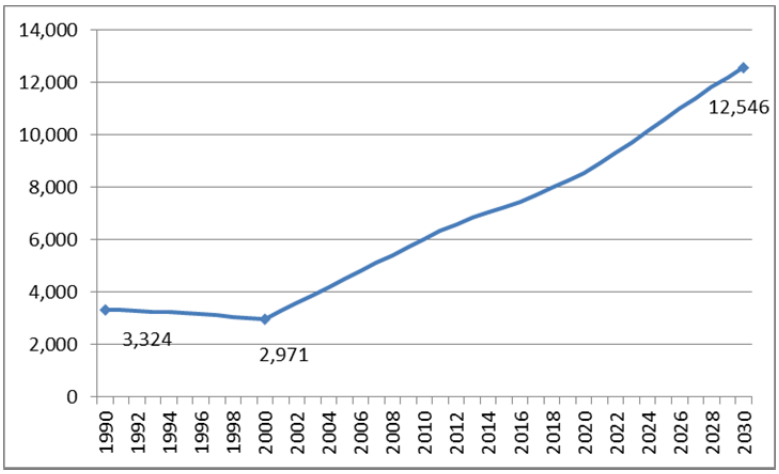
The forecast of housing units by Sustainable Development Area accords with the population forecast, with the greatest percentage growth between 2010 and 2030 occurring within SDA-1. It is anticipated to grow by 2,189 units, which constitutes an 89.66 percent increase over that 20 year time period. SDA-2 will grow similarly in numeric terms, adding 2,618 housing units by 2030; however, due to the large numerical dominance of SDA-2, this actually results in a deceleration of growth in the housing unit stock (only 11.06 percent). SDA-3, comprised of rural sections of *Santa Fe* County will grow by only 426 units—an 11.27 percent increase. Within SDA-1, this results in a 2.99 person per housing unit increase (an almost ½ person increase in density within each housing unit from 2010, which was 2.57 persons). It suggests a 1.40 person per housing unit increase in SDA-2. Again, this reinforces the notion that SDA-1 will be the primary growth attractor within unincorporated *Santa Fe* County.

# 4. Water and Wastewater Service Utility Area (WSA)

**Table 10. Population, WSA, 1990-2030**

| | | Forecasted | |
|---|---|---|---|
| 1990 | 3,324 | | |
| 1991 | 3,308 | 2011 | *6,327* |
| 1992 | 3,287 | 2012 | *6,556* |
| 1993 | 3,261 | 2013 | *6,830* |
| 1994 | 3,230 | 2014 | *7,043* |
| 1995 | 3,196 | 2015 | *7,251* |
| 1996 | 3,157 | 2016 | *7,445* |
| 1997 | 3,115 | 2017 | *7,710* |
| 1998 | 3,070 | 2018 | *7,976* |
| 1999 | 3,021 | 2019 | *8,244* |
| 2000 | 2,971 | 2020 | *8,520* |
| 2001 | 3,276 | 2021 | *8,922* |
| 2002 | 3,582 | 2022 | *9,316* |
| 2003 | 3,887 | 2023 | *9,720* |
| 2004 | 4,193 | 2024 | *10,135* |
| 2005 | 4,498 | 2025 | *10,560* |
| 2006 | 4,803 | 2026 | *10,996* |
| 2007 | 5,107 | 2027 | *11,381* |
| 2008 | 5,411 | 2028 | *11,799* |
| 2009 | 5,715 | 2029 | *12,168* |
| 2010 | 6,015 | 2030 | *12,546* |

**Chart 6. Population Growth, Water Service Area *1990-2030***




The difference between the SDA-1 forecast and that of the Water Service Area is trivial owing to the fact that only small portions of the County's population reside in the areas that do not form an intersection between the Water Service Area and SDA-1. The same trajectories described for SDA-1 hold for the Water Service Area. The population increased by some 2,694 persons between 1990 and 2010—a near doubling of population. Forecasted increases suggest that the population will again nearly double over the next twenty years (2010-2030), from 6,015 persons in 2010 to 12,546 by 2030. Housing units within the WSA are nearly identical to the analysis presented for SDA-1.

# Appendix 1. All Estimates and Forecasts in a Single Table

**County of Santa Fe: Population Estimates and Projections (1990-2030) by Geography**

| Year | County | City of Santa Fe | Town of Edgewood | City of Espanola | Tribal Areas | Unincorporated County | El Centro GMA | El Norte GMA | Estancia GMA | Galisteo GMA | SDA-1 | SDA-2 | SDA-3 | WSA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1990 | 101,373 | 63,819 | 1,655 | 1,987 | 2,975 | 30,937 | 12,694 | 6,939 | 3,478 | 7,826 | 3,326 | 22,280 | 5,331 | 3,324 |
| 1991 | 104,152 | 65,148 | 1,776 | 2,051 | 2,997 | 32,180 | 13,397 | 7,126 | 3,596 | 8,061 | 3,310 | 23,496 | 5,374 | 3,308 |
| 1992 | 106,930 | 66,505 | 1,906 | 2,117 | 3,019 | 33,384 | 14,100 | 7,298 | 3,707 | 8,279 | 3,289 | 24,688 | 5,408 | 3,287 |
| 1993 | 109,709 | 67,890 | 2,045 | 2,185 | 3,041 | 34,549 | 14,801 | 7,455 | 3,811 | 8,481 | 3,263 | 25,851 | 5,435 | 3,261 |
| 1994 | 112,488 | 69,303 | 2,195 | 2,255 | 3,063 | 35,672 | 15,499 | 7,597 | 3,909 | 8,667 | 3,232 | 26,986 | 5,454 | 3,230 |
| 1995 | 115,267 | 70,747 | 2,355 | 2,327 | 3,085 | 36,752 | 16,193 | 7,723 | 4,000 | 8,836 | 3,197 | 28,088 | 5,467 | 3,196 |
| 1996 | 118,045 | 72,220 | 2,528 | 2,402 | 3,107 | 37,788 | 16,880 | 7,834 | 4,085 | 8,989 | 3,159 | 29,157 | 5,473 | 3,157 |
| 1997 | 120,824 | 73,724 | 2,712 | 2,479 | 3,130 | 38,778 | 17,560 | 7,930 | 4,162 | 9,126 | 3,117 | 30,189 | 5,473 | 3,115 |
| 1998 | 123,603 | 75,259 | 2,911 | 2,559 | 3,153 | 39,721 | 18,231 | 8,011 | 4,233 | 9,246 | 3,071 | 31,183 | 5,467 | 3,070 |
| 1999 | 126,381 | 76,826 | 3,124 | 2,641 | 3,176 | 40,615 | 18,891 | 8,078 | 4,296 | 9,350 | 3,023 | 32,136 | 5,455 | 3,021 |
| 2000 | 129,160 | 78,426 | 3,352 | 2,726 | 3,199 | 41,457 | 19,538 | 8,130 | 4,352 | 9,437 | 2,972 | 33,047 | 5,438 | 2,971 |
| 2001 | 130,699 | 78,755 | 3,386 | 2,776 | 3,223 | 42,559 | 20,320 | 8,227 | 4,434 | 9,578 | 3,278 | 33,761 | 5,520 | 3,276 |
| 2002 | 132,237 | 79,085 | 3,421 | 2,827 | 3,247 | 43,657 | 21,114 | 8,319 | 4,513 | 9,712 | 3,584 | 34,473 | 5,601 | 3,582 |
| 2003 | 133,776 | 79,416 | 3,456 | 2,878 | 3,271 | 44,753 | 21,920 | 8,404 | 4,589 | 9,840 | 3,889 | 35,182 | 5,682 | 3,887 |
| 2004 | 135,314 | 79,749 | 3,492 | 2,931 | 3,296 | 45,847 | 22,739 | 8,483 | 4,663 | 9,961 | 4,195 | 35,888 | 5,763 | 4,193 |
| 2005 | 136,853 | 80,083 | 3,527 | 2,985 | 3,321 | 46,937 | 23,570 | 8,556 | 4,735 | 10,076 | 4,500 | 36,593 | 5,844 | 4,498 |
| 2006 | 138,392 | 80,419 | 3,564 | 3,039 | 3,346 | 48,024 | 24,413 | 8,624 | 4,803 | 10,184 | 4,805 | 37,295 | 5,924 | 4,803 |
| 2007 | 139,930 | 80,756 | 3,600 | 3,095 | 3,371 | 49,108 | 25,267 | 8,685 | 4,870 | 10,287 | 5,110 | 37,995 | 6,003 | 5,107 |
| 2008 | 141,469 | 81,095 | 3,637 | 3,152 | 3,396 | 50,190 | 26,133 | 8,741 | 4,933 | 10,382 | 5,414 | 38,693 | 6,083 | 5,411 |
| 2009 | 143,007 | 81,435 | 3,674 | 3,209 | 3,421 | 51,268 | 27,010 | 8,791 | 4,994 | 10,472 | 5,718 | 39,388 | 6,162 | 5,715 |
| 2010 | 144,546 | 81,776 | 3,742 | 3,268 | 3,447 | 52,313 | 27,882 | 8,831 | 5,050 | 10,550 | 6,018 | 40,058 | 6,237 | 6,015 |
| 2011 | *145,309* | *81,776* | *3,750* | *3,307* | *3,452* | *53,024* | *28,664* | *8,762* | *5,085* | *10,513* | *6,330* | *40,436* | *6,258* | *6,327* |
| 2012 | *146,076* | *82,463* | *3,789* | *3,347* | *3,457* | *53,021* | *29,058* | *8,577* | *5,051* | *10,336* | *6,560* | *40,267* | *6,194* | *6,556* |
| 2013 | *146,847* | *82,809* | *3,827* | *3,386* | *3,461* | *53,363* | *29,548* | *8,482* | *5,069* | *10,265* | *6,833* | *40,359* | *6,171* | *6,830* |
| 2014 | *147,622* | *83,156* | *4,348* | *3,426* | *3,466* | *53,226* | *29,768* | *8,312* | *5,041* | *10,104* | *7,046* | *40,088* | *6,091* | *7,043* |
| 2015 | *148,401* | *83,504* | *4,898* | *3,467* | *3,471* | *53,062* | *29,968* | *8,142* | *5,011* | *9,941* | *7,255* | *39,798* | *6,009* | *7,251* |
| 2016 | *149,095* | *83,854* | *5,453* | *3,505* | *3,473* | *52,809* | *30,114* | *7,961* | *4,972* | *9,762* | *7,449* | *39,443* | *5,917* | *7,445* |
| 2017 | *149,790* | *84,206* | *5,509* | *3,544* | *3,476* | *53,055* | *30,544* | *7,856* | *4,979* | *9,675* | *7,714* | *39,460* | *5,882* | *7,710* |
| 2018 | *150,484* | *84,559* | *5,566* | *3,583* | *3,478* | *53,298* | *30,976* | *7,751* | *4,985* | *9,587* | *7,980* | *39,473* | *5,845* | *7,976* |
| 2019 | *151,172* | *84,913* | *5,623* | *3,622* | *3,480* | *53,534* | *31,407* | *7,643* | *4,989* | *9,495* | *8,248* | *39,480* | *5,807* | *8,244* |
| 2020 | *151,910* | *85,269* | *5,680* | *3,663* | *3,483* | *53,815* | *32,022* | *7,578* | *4,760* | *9,455* | *8,524* | *39,518* | *5,773* | *8,520* |
| 2021 | *153,446* | *85,627* | *5,739* | *3,723* | *3,504* | *54,854* | *32,978* | *7,566* | *4,812* | *9,498* | *8,927* | *40,108* | *5,819* | *8,922* |
| 2022 | *154,877* | *85,985* | *5,797* | *3,781* | *3,522* | *55,791* | *33,894* | *7,538* | *4,839* | *9,521* | *9,321* | *40,618* | *5,852* | *9,316* |
| 2023 | *156,322* | *86,346* | *5,857* | *3,840* | *3,541* | *56,739* | *34,828* | *7,507* | *4,864* | *9,540* | *9,725* | *41,130* | *5,883* | *9,720* |
| 2024 | *157,781* | *86,708* | *5,917* | *3,899* | *3,559* | *57,698* | *35,780* | *7,474* | *4,888* | *9,557* | *10,140* | *41,644* | *5,914* | *10,135* |
| 2025 | *159,257* | *87,071* | *5,978* | *3,960* | *3,578* | *58,670* | *36,751* | *7,438* | *4,910* | *9,570* | *10,565* | *42,162* | *5,943* | *10,560* |
| 2026 | *160,751* | *87,436* | *6,039* | *4,021* | *3,597* | *59,658* | *37,742* | *7,402* | *4,932* | *9,582* | *11,002* | *42,684* | *5,972* | *10,996* |
| 2027 | *161,914* | *87,803* | *6,101* | *4,074* | *3,608* | *60,328* | *38,540* | *7,323* | *4,925* | *9,539* | *11,387* | *42,974* | *5,967* | *11,381* |
| 2028 | *163,226* | *88,171* | *6,163* | *4,132* | *3,622* | *61,138* | *39,435* | *7,260* | *4,929* | *9,514* | *11,805* | *43,359* | *5,974* | *11,799* |
| 2029 | *164,247* | *88,540* | *6,227* | *4,182* | *3,629* | *61,668* | *40,154* | *7,162* | *4,908* | *9,444* | *12,174* | *43,541* | *5,952* | *12,168* |
| 2030 | *165,290* | *88,911* | *6,290* | *4,234* | *3,637* | *62,217* | *40,796* | *7,050* | *5,018* | *9,353* | *12,553* | *43,733* | *5,931* | *12,546* |

# Appendix 2. Housing Units by Forecast Geography *2010-2030*.

| County of Santa Fe: Housing Units by Forecast Geography *2010-2030* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | County | City of Santa Fe | Town of Edgewood | City of Espanola | Tribal Areas | Unincorporated County | El Centro GMA | El Norte GMA | Estancia GMA | Galisteo GMA | SDA-1 | SDA-2 | SDA-3 | WSA |
| **2010** | **71,285** | **42,600** | **1,552** | **1,420** | **1,417** | **24,296** | **12,103** | **4,671** | **2,127** | **5,395** | **1,984** | **19,242** | **3,070** | **1,969** |
| 2011 | *71,661* | *42,795* | *1,560* | *1,428* | *1,424* | *24,454* | *12,181* | *4,702* | *2,141* | *5,430* | *1,997* | *19,367* | *3,090* | *1,982* |
| 2012 | *72,040* | *43,108* | *1,576* | *1,445* | *1,426* | *24,484* | *12,260* | *4,699* | *2,144* | *5,381* | *2,065* | *19,335* | *3,085* | *2,050* |
| 2013 | *72,420* | *43,265* | *1,593* | *1,462* | *1,428* | *24,672* | *12,568* | *4,661* | *2,136* | *5,307* | *2,148* | *19,425* | *3,099* | *2,133* |
| 2014 | *72,802* | *43,423* | *1,809* | *1,479* | *1,430* | *24,661* | *12,660* | *4,654* | *2,124* | *5,223* | *2,210* | *19,361* | *3,090* | *2,195* |
| 2015 | *73,186* | *43,582* | *2,038* | *1,497* | *1,432* | *24,638* | *12,751* | *4,634* | *2,113* | *5,141* | *2,269* | *19,290* | *3,079* | *2,254* |
| 2016 | *73,529* | *43,741* | *2,269* | *1,513* | *1,433* | *24,573* | *12,812* | *4,617* | *2,096* | *5,048* | *2,324* | *19,187* | *3,062* | *2,309* |
| 2017 | *73,871* | *43,901* | *2,292* | *1,530* | *1,434* | *24,714* | *12,997* | *4,614* | *2,099* | *5,004* | *2,403* | *19,240* | *3,071* | *2,388* |
| 2018 | *74,213* | *44,061* | *2,316* | *1,547* | *1,435* | *24,854* | *13,185* | *4,608* | *2,102* | *4,959* | *2,482* | *19,293* | *3,080* | *2,467* |
| 2019 | *74,553* | *44,222* | *2,340* | *1,564* | *1,436* | *24,991* | *13,370* | *4,604* | *2,104* | *4,913* | *2,561* | *19,342* | *3,088* | *2,546* |
| 2020 | *74,917* | *44,384* | *2,364* | *1,581* | *1,437* | *25,151* | *13,642* | *4,604* | *2,009* | *4,896* | *2,644* | *19,408* | *3,099* | *2,629* |
| 2021 | *75,674* | *44,547* | *2,388* | *1,607* | *1,445* | *25,687* | *14,094* | *4,622* | *2,037* | *4,934* | *2,771* | *19,760* | *3,155* | *2,756* |
| 2022 | *76,380* | *44,710* | *2,412* | *1,632* | *1,453* | *26,172* | *14,524* | *4,635* | *2,054* | *4,958* | *2,896* | *20,071* | *3,205* | *2,881* |
| 2023 | *77,092* | *44,874* | *2,437* | *1,658* | *1,461* | *26,663* | *14,962* | *4,649* | *2,070* | *4,981* | *3,023* | *20,384* | *3,256* | *3,008* |
| 2024 | *77,812* | *45,039* | *2,462* | *1,684* | *1,468* | *27,160* | *15,410* | *4,662* | *2,086* | *5,002* | *3,153* | *20,700* | *3,306* | *3,138* |
| 2025 | *78,540* | *45,204* | *2,487* | *1,710* | *1,476* | *27,663* | *15,866* | *4,675* | *2,100* | *5,022* | *3,287* | *21,018* | *3,358* | *3,272* |
| 2026 | *79,277* | *45,370* | *2,513* | *1,736* | *1,484* | *28,174* | *16,333* | *4,687* | *2,115* | *5,040* | *3,424* | *21,340* | *3,410* | *3,409* |
| 2027 | *79,850* | *45,537* | *2,538* | *1,759* | *1,488* | *28,527* | *16,699* | *4,691* | *2,114* | *5,023* | *3,542* | *21,543* | *3,442* | *3,527* |
| 2028 | *80,497* | *45,704* | *2,565* | *1,784* | *1,494* | *28,950* | *17,114* | *4,698* | *2,119* | *5,019* | *3,671* | *21,796* | *3,483* | *3,656* |
| 2029 | *81,001* | *45,872* | *2,591* | *1,806* | *1,497* | *29,234* | *17,439* | *4,698* | *2,112* | *4,985* | *3,783* | *21,945* | *3,507* | *3,768* |
| 2030 | *81,515* | *46,041* | *2,617* | *1,828* | *1,501* | *29,528* | *17,730* | *4,697* | *2,161* | *4,940* | *3,892* | *22,103* | *3,533* | *3,877* |

## Appendix 3. Methods

### *Population Projections vs. Population Forecasts*

Population projections extrapolate future population growth strictly from historical trends. Population forecasts, on the other hand, predict future growth while considering various external factors including economic circumstances, zoning-constrained land use, etc. Commonly, the two terms are used interchangeably—but the distinction is clear. Here, we utilize projections for municipal-level (except for Edgewood) predictions of future population totals as well as for the overall county totals. **All estimates of future counts within the geographies specifically developed for this contract are forecasts in that they explicitly consider zoning and development plans within the mathematical model used to capture growth.**

### *Revised Total County Population Projection from Geospatial and Population Studies*

A revised county total population projection was made that weighs current economic trends and prospects—supported by demographic analysis—more heavily than the projections produced in 2012 by Geospatial and Population Studies. This revision was made using the standard component method of demographic modeling which relies upon the population balancing equation:

$$\boldsymbol{N_{t+1} = N_t + [B_{t,t+1} - D_{t,t+1} + I_{t,t+1} - E_{t,t+1}]}$$

[**N** for a population count, **B** for births, **D** for deaths, **I** for Immigration, **E** for Emigration, and **t** for "time" in the subscript].

Revisions of these totals were made by adjusting for anticipated migration over the 2010-2030 period in light of historical and current demographic and economic trends observed in the past two years within the County.

### *Defining the Control Total (Unincorporated County of Santa Fe)*

Small-area demographic projections are improved considerably by the use of a larger-scale control total. In this case, the scope of the project is the *unincorporated* county of Santa Fe. The first objective, therefore, was to isolate the portion of the county within incorporated municipalities as well as Tribal lands, which are held in Federal Trust. This land was isolated within ESRI's Arc-GIS and bases for 1990, 2000, and 2010 were formulated using *current boundaries of the City of Santa Fe which include annexations have occurred or will occur within three phases between 2009 and 2018.* The vast majority of these annexations have already occurred. The use of these bases requires estimating a population as of July 1 1990, 2000, and 2010. The added base for the City of Santa Fe is over 5,000 persons in 1990, nearly 13,000 persons in 2000, and 13,623 persons in 2010. This makes the total estimate for the City of Santa

Fe significantly different from the April 1 decennial census counts for each of these times. Since the US Census Bureau does not appear to have the current boundaries of the City (as of their 2013 municipal-level estimates), these will also result in large differences from the City of Santa Fe's estimated population count from the Bureau's Population Division. These differences hinge upon the city's annexations. In this report, they have been considered as executed and all demographic estimates and forecasts reported here include the annexation areas.

Projections are reported for not only for the City of Santa Fe, but also for the portions of the Town of Edgewood and City of Espanola that are within the County of Santa Fe, and for Tribal Lands within the County. The difference between the county total projection and the sum of these areas defines the total of the unincorporated County of Santa Fe population. These estimates and projections for this total form the control total for the projection of Growth Management Areas (GMAs) and, indirectly, for the Sustainable Development Areas (SDAs) and Water Service Area (WSA).

***Estimation of Historical Growth in Unincorporated Areas***

Estimates were made for: (1) County of Santa Fe, (2) City of Santa Fe, (3) Town of Edgewood (*Santa Fe* portion), (4) City of Espanola (*Santa Fe* portion), (5) Tribal Lands, (6) the unincorporated areas of the County of Santa Fe, (7) four Growth Management Areas, (8) 3 Sustainable Development Areas, (9) one Water Service Area, and (10) the Santa Fe Community College Planned Development District. These estimates were formulated by aggregating block level population counts from 1990, 2000, and 2010. Block-level aggregates for 2000 and 2010 were made from actual decennial census counts using simple overlays in ESRI's Arc-GIS (v. 11.1). Block counts from 1990 involve *normalization* of 1990 block counts to 2000 census boundaries. When boundaries for the target year are larger than those of the year to be normalized, minimal to no distortion of data should be anticipated. However, when it involves proportional allocation of population in the case of when target boundaries split those to be normalized, it is known to distort population counts. This is an inherent limitation because the Census Bureau releases block-level summary counts, not the xy-point-level data required to make a precise conversion of 1990 data in 2000 or 2010 boundaries. When these block counts are re-aggregated to a larger geography, distortions are known to be minimal—in the area of 5-7 percent for census tracts. In the current study, we expect this distortion to be trivial since the re-aggregation geographies are larger than census tracts. Distortions in the 1990 bases should be less than 5 percent.

***Forecasting of Future Growth in Unincorporated Areas***

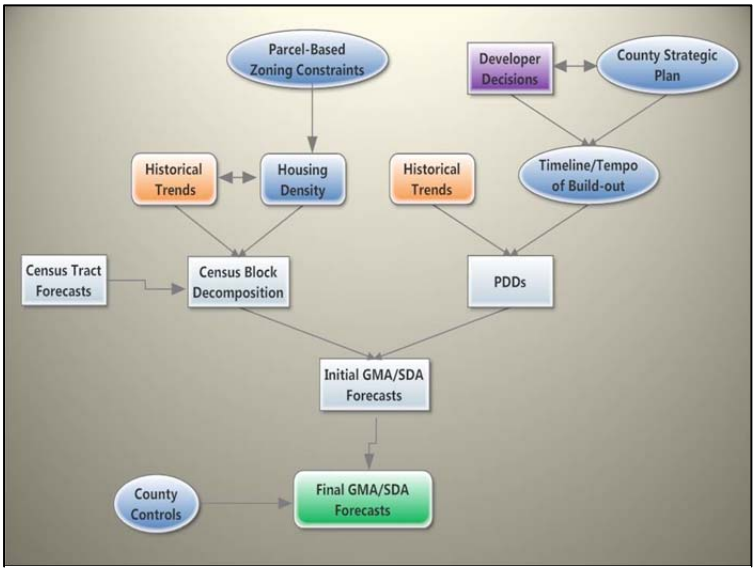



**Figure A3.1. Projections Methodology**

A logical/computational model of the forecast methodology is presented in **Figure A3.1**. Forecasts are based on historical trends with hierarchical controls at the County and Census tract level. Block-level decompositions of tract-level projections are used to re-aggregate data to the projection geographies (GMAs, SDAs, and the WSA). These decompositions are also constrained to totals that conform to both historical trends and limits to growth imposed by zoning strategies that cap housing unit accumulation. Planned Development Districts (PDDs) are treated separately, subjected to historical trends and modeled according to specific timeline/tempo build-out scenarios that reflect both the official development plans as well as the expert opinion of the staff of County and City. The resulting projections for the PDDs are then built into the overall projections for GMAs, SDAs, and the WSA. Finally, these draft forecasts are controlled to the unincorporated county total projections.

*Municipal-Level and Tribal Area Forecasts and the Unincorporated County*

Municipal-level projections were made for the City of Santa Fe, the City of Espanola (*Santa Fe* County portion), city of Edgewood (*Santa Fe* County portion), and the Federal/Tribal Areas using a shift-share based extrapolation of 2000 to 2010 trends. These shifts reflect decelerating growth in the City of *Santa Fe*, which is the largest contributor to overall county-level population dynamics. The City of Espanola's *Santa Fe* county portion and the Tribally-held lands comprise small portions of the county's total growth. The City of *Santa Fe's* growth corresponds well with the recent observation of diminishing growth as well as the tendency of the city to add population at a lower rate than housing (nearly one-person per housing unit) in the 1990-2010 period.

The Town of Edgewood's growth was deemed to require separate treatment, based on developments there that were estimated to be "highly-likely" by Geospatial and Population Studies as well as County staff after meeting with planners from the Town in July, 2014. Specifically, it is anticipated that acquisition of Titan Aerospace by Google for the purposes of developing aerial drone-based delivery of Internet services will bring as many as 500 jobs to the area. The Town is annexing specific portions of checkerboard areas that are now under the jurisdiction of the county with the express purpose of developing appropriate technology parks to

support this effort and is planning housing development to provide residences for this influx. ***On this basis, the Town's forecast was augmented by 1,250 persons over the 2014-2020 period, then allowed to grow multiplicatively at its historical rate (2000-2010).*** This provides an estimate of the population level impact of this development (this step-based increase corresponds to 2.5 persons per household added) that is considered realistic.

*Census Tract Forecasts and Block-Level Decompositions*

Census tract level projections were used as a basis for the small-area decompositions required to make forecasts for the study geographies. These projections were based on the 1990-2013 age/sex-structured estimates for census tracts produced by the Geospatial and Population Studies unit at UNM and available at both http://bber.unm.edu/ and www.nmibis.gov. Block-level decompositions were made using the shift-share from 2000 to 2010 of blocks relative to each Santa Fe County tract. These decomposition factors were then used moving forward with shifts; however, the shifts were constrained according to a density-dependent model (the Pearl-Reed logistic model) that provided an upper-limit to the number of housing units that could accumulate in a given block. This upper limit on density was defined *specifically based on the zoning-based build-out estimates provided by the County of Santa Fe* at the parcel level. They utilized the lower bound of these build-out estimates.

The parcel-level file was used to attribute the limit to each census block, then the historical trend extrapolated under density-dependence as:

$$N_{t+1} = N_t * e^{r*[(K-N)/K]}$$

$N_{t+1}$ = Population at one time step forward
$N_t$ = Population at the year prior
e = the exponential (2.17….)
r = the historical annual exponential growth rate (determined by the 2000 to 2010 trend)
K = the zoning-based "carrying capacity" of the census block
N = the population at $N_t$

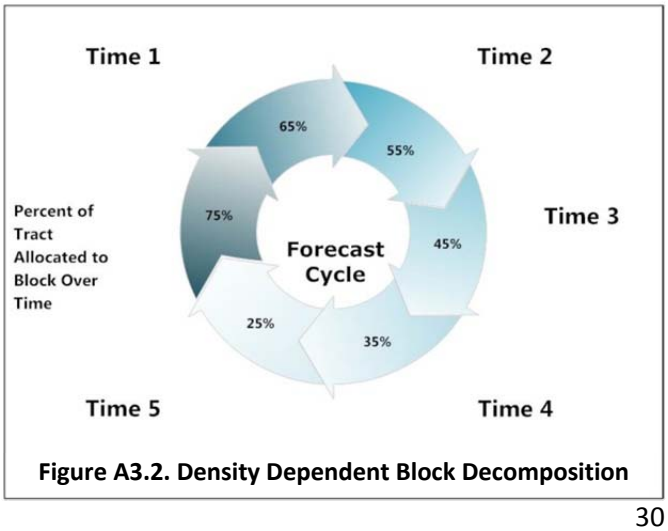



**Figure A3.2. Density Dependent Block Decomposition**

This model defined a share for each census block (proportional to the tract) at each time-step forward. In cases where a given block reaches K, the population remains constant and the share computed at each step forward will diminish as other blocks where the carrying capacity has not been reached will be eligible to receive a greater share of the t to t+1 growth. Figure A3.2 captures this graphically. The

proportion of the census tract forecast allocated to each block depends, at each time step, on the density of housing within that block relative to its capacity limit. Over each step in the projection, the proportion of new growth allocated to a growing block declines. Eventually, it reaches zero when the block is built out relative to zoning requirements. These blocks are then re-aggregated to the forecast geographies specified in this project.

*Santa Fe Community College Planned Development District*

Draft projections suggested that the overall forecast was sensitive to only one of the Planned Development Districts: the Santa Fe Community College (SFCC) District. On this basis, the remaining PDDs were allowed to grow using the methodology described above and the SFCC District was modeled separately. The upper limit capacity for this area was treated not at the block level, but at the level of the PDD, in conformance with the logic of the Development District plans. After consultation with County Staff, the upper limit used was the lower-bound build-out scenario provided by the County of Santa Fe's Planning Division. The overall projection was made sensitive to this upper limit in a projection out to 2050, which reflected the tempo/timeline of build out for this PDD suggested by County staff as realistic. This resulted in a substantial, but realistic increase in the population of this PDD. This projection was incorporated into the GMA, SDA, and WSA projections as appropriate, with blocks within it extracted from the original methodological process, then reintegrated as a final step. The methodology used to project this area was identical to the methodology for defining an upper limit to growth described for the blocks—except that this upper limit was defined for the PDD as a whole, rather than for any single census block within it.