

# 2 SOCIOECONOMIC CONDITIONS

## 2.1 INTRODUCTION

The distribution of population and job sites has a significant impact on regional travel patterns, including the routes that individuals use to travel and the means of transportation. A critical step in long-range regional transportation planning is therefore understanding socioeconomic conditions and how changes over time may impact future transportation needs. This section describes the projected levels of population and employment across the region through 2045.

The 2045 MTP, which uses 2018 as a base year for analysis, was developed at the end of a period of population and employment loss. Indications are that period of population loss may have ended and modest growth is expected into the future. However, employment conditions are volatile, especially given the presumptive closure of the San Juan Generating Station.<sup>2</sup> In addition, the projections for the 2045 MTP were completed before the release of the 2020 Census, meaning the most complete base year data on housing and population distributions is from the 2010 Census. Projections were also developed before the COVID-19 pandemic, the long-term effects of which are highly uncertain.

## 2.2 POPULATION PROJECTIONS

### 2.2.1 San Juan County

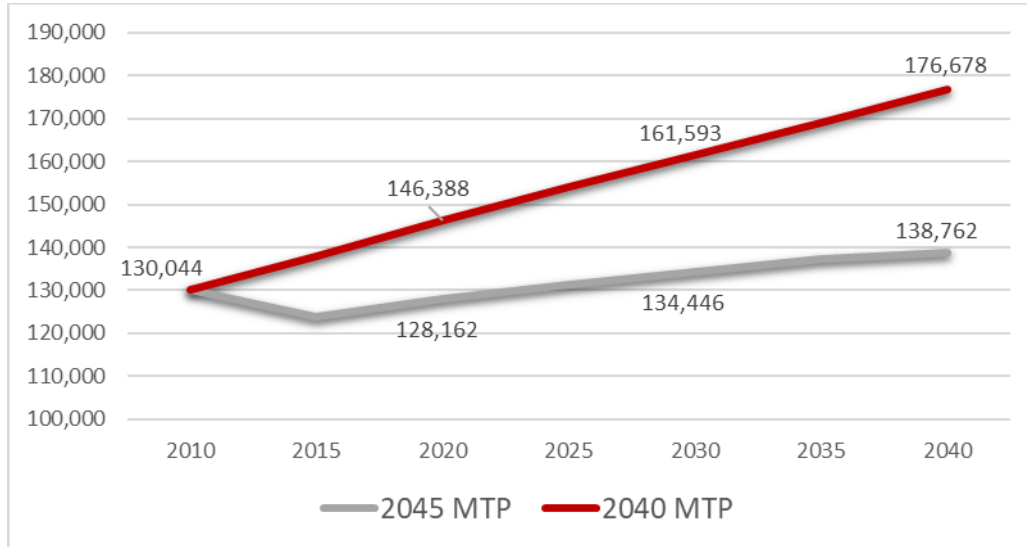
The 2045 MTP uses the population projections for San Juan County developed by the Geospatial and Population Studies (GPS) office at the University of New Mexico as a control total and the basis for estimating population at the municipal and sub-area level in the FMPO region. These population projections are noteworthy for the modest levels of anticipated growth, especially when compared to the projections contained in the previous MTP. Figure 2-1 shows the projections by MTP; previous projections indicated 36% growth between 2010 and 2040, while the projections used for this MTP indicate a total growth across San Juan County of about 8.3%, or 11,600 residents, between 2018 and 2045. The more recent projections are informed by the population loss experienced at the beginning of the 2010s and the declining net migration rate for the region (net migration equals in-migration minus out-migration).

Year	Population
2010	130,044
2015	123,979
2018	128,046
2020	128,162
2025	131,278
2030	134,446
2035	137,173
2040	138,762
2045	139,665

<sup>2</sup> In July 2020, the Public Regulatory Commission approved a plan to close the San Juan Generating Station by 2022 and replace the energy generation with solar (plus battery backup). The plan anticipates a total of 650 MW of solar generated across San Juan, McKinley, and Rio Arriba. Officials are exploring opportunities to continue operations at the San Juan Generating Station through the deployment of carbon capture technology.

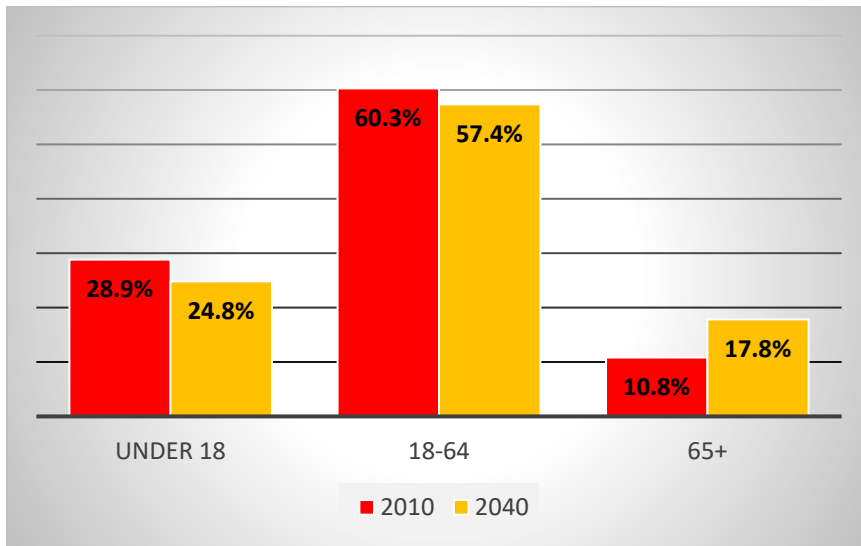
Note: Since the horizon year for the projections from GPS is 2040, the Project Team extended the projections from 2040 to 2045 using the average annual rate of growth between 2015 and 2040.

**Figure 2-1: Comparison of Projections for San Juan County by MTP: 2010-2040**



The age dynamics contained in the population projections have implications for workforce participation rates as well as future transportation needs. The projections indicate modest decreases in the anticipated share of the population under 18 as well as the share of the population of working age; the percentage of adults in the region age 18-64 is projected to decrease from 60.3% in 2010 to 57.4% in 2040. At the same time, the share of the population age 65 or older is projected to increase by seven percentage points. These dynamics have economic considerations, including additional jobs related to healthcare, as well as the need to provide safe transportation options for an aging population. Strategies to support transportation needs of an aging population include on-call public transportation and support for ride-hailing services. Demographics are also considered in traffic engineering when establishing traffic signal timing phases and pedestrian crossing times.

**Figure 2-2: Share of Population by Age**



### 2.2.2 Municipal Projections

Municipal-level population projections were developed using a shift share analysis which calculates the share of the county population over time and projects that ratio into the future. The analysis used San Juan County population in combination with recent annual estimates at the municipal level from the Census Bureau. Once municipal projections are calculated, the remaining population is assumed to be located in unincorporated areas of San Juan County. A similar process was used to calculate the share of the San Juan County population in unincorporated areas both inside and outside of the FMPO region.

Of the jurisdictions in the FMPO region, the City of Farmington has the largest share of the population currently and is expected to experience the most growth. About 50% of the growth in the region is projected to take place in Farmington, while another 43% is projected to take place in unincorporated portions of San Juan County.

**Table 2-2: Population Projections for Jurisdictions in the FMPO Region**

Location	2010	2018	2020	2025	2030	2035	2040	2045
<b>Aztec</b>	6,747	6,442	6,471	6,543	6,613	6,657	6,643	6,595
<b>Bloomfield</b>	8,198	7,842	7,893	8,021	8,149	8,247	8,275	8,260
<b>Farmington</b>	46,051	44,788	45,356	46,468	47,598	48,573	49,146	49,475
<b>Kirtland</b>	643	610	612	617	622	624	621	615
<b>San Juan County (MPO Share)</b>	37,530	37,462	37,207	38,290	39,397	40,383	41,042	41,501
<b>FMPO Total Population</b>	99,169	97,144	97,539	99,938	102,378	104,485	105,727	106,447

### 2.2.3 Small Area Projections

More refined projections were developed for Traffic Analysis Zones (TAZs), small geographic units that are roughly equivalent in size to census block groups and which serve as the inputs to the regional travel demand model. TAZ level estimates were aligned to the municipal, FMPO level, and San Juan County projections.

Population projections are translated into total numbers of housing units and growth was distributed to TAZs based on available land, transportation access, and likelihood of development. Projections for individual TAZs were developed by applying projected shares of growth from the 2040 MTP to the updated control totals developed for the 2045 MTP. The distribution of growth across the region was refined based on input received from member agency staff, including known development between 2015 and 2020, as well as locations where utilities or roadway connections have been extended. Areas of potential growth include:

- West Farmington
- Northeast Farmington north of Animas River around Foothills Dr
- Crouch Mesa – the level of growth depends on the timing and extent of roadway network expansion efforts
- General Kirtland area – little or no change in housing and population is expected within the Town limits, though modest growth is possible to the east and north of Town limits

### 2.2.4 Notes on Housing Units and Occupancy Rate

To allocate housing units to TAZs as accurately as possible requires an understanding of residents per housing unit. However, economic conditions and population loss created distortions in the local housing market. The occupancy rate fell from 2010 to 2018, while the persons per household rate went up, according to the most recent data from the ACS. This dynamic reflects uncertain economic conditions where households merge to save on housing costs. The result of this combination of population loss during the 2010s, lower housing occupancy rates, and increased household size is an overstock of housing across the region.

The projections assume an increase in occupancy rate over time but that future occupancy rates remain but below the historical average (the MTP utilizes a rate based on the average of rates from the 2010 Census and most recent ACS). Similarly, the projections assume that household size will gradually decline since the current values break with a historical trend toward shrinking household sizes

In summary, a key assumption of the projections is that some new growth will be absorbed by existing housing stock. Because consumer preferences change over time, it is likely there will still be new housing developed across the region, though it difficult to know at this point if and how much new housing will be constructed.

**Table 2-3: Housing Characteristics by Location (2018)**

Geography	2018 Population	Household Pop.	Housing Units	Households	Occupancy Rate	Household Size
<b>Aztec</b>	6,442	6,379	2,917	2,521	87.5%	2.53
<b>Bloomfield</b>	7,842	7,755	3,100	2,647	87.5%	2.93
<b>Farmington</b>	44,788	43,323	17,720	15,084	87.5%	2.87
<b>Kirtland</b>	610	610	258	222	87.5%	2.74
<b>SJC MPO Area</b>	37,462	37,323	14,958	12,385	82.8%	3.01
<b>Total MPO Area</b>	97,144	95,390	38,953	32,860	85.7%	2.90
<b>San Juan County</b>	128,046	126,292	50,716	41,908	82.8%	3.01

**Table 2-4: Housing Characteristics by Location (2045)**

Geography	2045 Population	Household Pop.	Housing Units	Households	Occupancy Rate	Household Size
<b>Aztec</b>	6,595	6,532	2,922	2,613	89.4%	2.50
<b>Bloomfield</b>	8,260	8,173	3,163	2,831	89.5%	2.89
<b>Farmington</b>	49,475	48,010	18,660	17,198	92.2%	2.79
<b>Kirtland</b>	615	615	258	222	86.4%	2.71
<b>SJC MPO Area</b>	41,501	41,362	16,862	14,568	86.4%	2.84
<b>Total MPO Area</b>	106,447	104,693	41,865	37,433	89.4%	2.80
<b>San Juan County</b>	139,665	137,911	54,085	46,728	86.4%	2.95

*Note: The difference in total population and household population is the residents living in group quarters, which includes nursing homes, correctional facilities, and other communal living facilities. The group quarters population is assumed to be the same in 2018 and 2045.*

## 2.3 EMPLOYMENT

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### 2.3.1 Projections for FMPO Region

Customized employment projections were developed for the 2045 MTP for San Juan County, the FMPO region, and at the small area (i.e. TAZ level). Projections were based on existing employment levels and short-term projections for San Juan County from the Department of Workforce Solutions (DWS) for the State of New Mexico.

Since not all jobs in San Juan County are in the urbanized area, the Project Team used the OnTheMap tool from the US Census to generate employment data for the FMPO region.<sup>3</sup> Since OnTheMap provides slightly different employment totals, the share of jobs by industry in the FMPO region out of the San Juan County total from OnTheMap were applied to the DWS data. (e.g. For example, if 80% of the jobs San Juan County in the OnTheMap dataset in retail services are located within the FMPO boundaries, then the assumed total employment for the FMPO region is 80% of the San Juan County total from the DWS dataset).

DWS projects 8.2% total employment growth for San Juan County between 2014 and 2024, with varying rates of growth by industry, as part of a short-term employment projection dataset. The annualized growth rates for each industry from DWS were applied to the 2018 employment total for the FMPO region and extended forward to 2045 to develop horizon year projections by industry. It is important to note that, per DWS estimates, employment fell between 2014 and 2018 but is expected to grow between 2018 and 2024. Industries projected to experience major growth include healthcare and accommodation services. Industries that are expected to see a decline in jobs include mining and manufacturing.

### 2.3.2 Small-Area Employment Estimates

Base year employment estimates by TAZ were developed by applying an adjustment factor to the base year employment levels from the previous MTP (base year 2014). Future year employment totals by industry were assigned to TAZs based on previously identified locations for employment growth (from the 2040 MTP) and the total employment by industry developed for the 2045 MTP.

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<sup>3</sup> The boundaries for the FMPO region and other customized geographies can be imported into OnTheMap to generate base year employment totals.

**Table 2-5: Employment by Industry – FMPO Region 2018-2045**

<b>Industry</b>	<b>2014</b>	<b>2018</b>	<b>2030</b>	<b>2045</b>	<b>MPO Share of SJC Total by Industry</b>
Agriculture, Forestry	110	100	101	102	29.2%
Mining	5,951	4,139	4,149	4,161	86.0%
Utilities	213	181	169	155	24.0%
Construction	3,525	2,907	3,178	3,552	86.1%
Manufacturing	1,346	1,280	1,228	1,166	99.6%
Wholesale Trade	1,680	1,435	1,510	1,608	92.0%
Retail Trade	6,167	5,786	6,057	6,415	96.2%
Transp. & Warehousing	1,311	1,111	1,180	1,271	90.7%
Information	247	199	188	176	95.8%
Finance	863	752	752	752	95.8%
Real Estate	494	375	379	383	94.5%
Prof. Tech Services	932	933	985	1,054	92.3%
Management	250	248	250	253	100.0%
Admin & Waste	1,179	1,049	1,063	1,081	98.3%
Education - Public	3,697	3,585	3,967	4,502	72.5%
Health - Public	6,348	6,449	8,283	11,327	97.4%
Arts & Entertainment	245	258	281	312	62.0%
Accommodation	4,088	4,259	5,052	6,255	92.9%
Other	1,164	1,158	1,202	1,261	94.8%
Local Govt	4,550	4,505	4,549	4,603	97.4%
State Govt	431	429	434	439	97.4%
Fed Govt	1,461	1,424	1,438	1,455	97.4%
<b>Total Jobs</b>	<b>46,253</b>	<b>42,564</b>	<b>46,395</b>	<b>52,283</b>	