



**GEOSPATIAL &  
POPULATION STUDIES**

---

# **Population Growth, Housing and Workforce Needs in New Mexico's Permian Basin**

**Robert Rhatigan  
Associate Director  
Geospatial and Population Studies  
University of New Mexico**

**Legislative Finance Committee  
Cloudcroft, NM  
July 10, 2019**



# Context

---

## □ UNM-GPS' expertise

- New Mexico's demographic liaison to United States Census Bureau
- Publishes biennial state and county population projections for New Mexico
- Appointed as state liaison for the Local Update of Census Addresses program and to the New Mexico 2020 State Complete Count Commission
- Analyzed population dynamics for the Lea County Community Improvement Corporation in December 2015

## □ Challenges to measuring population/housing dynamics in the Permian Basin

- Transient nature of workforce
- Usual residents population (de jure census) vs. physically present population (de facto census)
- Nine years have passed since last decennial census = high uncertainty for population estimates
- Eddy and Lea County's population dynamics do not parallel

# Population Change in New Mexico's Permian Basin

---

- ❑ Eddy and Lea Counties are growing in population while most of NM's population remains flat or in decline
- ❑ The number and share of residents ages 0-17 and 65+ are increasing in both counties.
- ❑ Eddy and Lea Counties are becoming more Hispanic, more male and more urbanized compared with the rest of New Mexico
- ❑ Much of the growth is transient or semi-permanent though **school enrollment is up 19.7% in both counties since 2010**
- ❑ Population change remains relatively volatile though not as volatile as in previous boom/bust cycles
- ❑ *Resident vs. transient* population changes are difficult to estimate

# Population Estimates

---

|                    | <b>2010</b> | <b>2018</b> | <b>8 Year Growth Rate</b> |
|--------------------|-------------|-------------|---------------------------|
| <b>Eddy County</b> | 53,829      | 57,900      | 7.6%                      |
| <b>Lea County</b>  | 64,727      | 69,611      | 7.5%                      |
| <b>New Mexico</b>  | 2,059,179   | 2,095,427   | 1.8%                      |



# Population Characteristics

## Age Distribution

|                    | 2010  | 2018  | 8 Year Growth Rate |
|--------------------|-------|-------|--------------------|
| <b>Eddy County</b> |       |       |                    |
| Median Age         | 37.3  | 35.3  | -2.0*              |
| 0-17               | 26.1% | 26.5% | 1.5%               |
| 18-64              | 59.9% | 59.0% | -1.5%              |
| 65+                | 14.0% | 14.5% | 3.6%               |
| <b>Lea County</b>  |       |       |                    |
| Median Age         | 31.9  | 32.3  | 0.4                |
| 0-17               | 29.4% | 29.8% | 1.4%               |
| 18-64              | 59.8% | 58.8% | -1.7%              |
| 65+                | 10.8% | 11.4% | 5.6%               |
| <b>New Mexico</b>  |       |       |                    |
| Median Age         | 36.7  | 38.1  | 1.4                |
| 0-17               | 25.2% | 23.0% | -8.7%              |
| 18-64              | 61.6% | 59.5% | -3.4%              |
| 65+                | 13.2% | 17.5% | 32.4%              |

## Percent Hispanic

|                    | 2010  | 2018  | 8 Year Growth Rate |
|--------------------|-------|-------|--------------------|
| <b>Eddy County</b> | 44.1% | 47.4% | 7.4%               |
| <b>Lea County</b>  | 51.1% | 57.0% | 11.5%              |
| <b>New Mexico</b>  | 46.3% | 49.1% | 6.1%               |

## Percent Male

|                    | 2010  | 2018  | 8 Year Growth Rate |
|--------------------|-------|-------|--------------------|
| <b>Eddy County</b> | 49.9% | 50.3% | 0.8%               |
| <b>Lea County</b>  | 51.1% | 51.4% | 0.6%               |
| <b>New Mexico</b>  | 49.4% | 49.5% | 0.2%               |



\* - changes in median age reflect additions rather than rates

Source: U.S. Census Bureau, Population Estimates Program, Vintage 2018; <https://factfinder.census.gov/>

# Population Indicator Growth Rates 2010-2017

---

|                    | School Enrollment | Medicaid Recipients | Registered Voters | Licensed Drivers | Traffic Crashes |
|--------------------|-------------------|---------------------|-------------------|------------------|-----------------|
| <b>Eddy County</b> | 19.7%             | 4.3%                | 9.6%              | 9.6%             | 56.9%           |
| <b>Lea County</b>  | 19.7%             | 7.1%                | 22.6%             | 15.3%            | -19.0%          |
| <b>New Mexico</b>  | 0.1%              | 26.1%               | 7.5%              | -1.4%            | 7.3%            |



Sources: New Mexico Public Education Department, <https://webnew.ped.state.nm.us/bureaus/information-technology/stars/>; Centers for Medicare & Medicaid Services, <https://dnav.cms.gov/>; NM Secretary of State, <https://www.sos.state.nm.us/voting-and-elections/data-and-maps/voter-registration-statistics/>; UNM-GPS Annual Crash Report, <https://gps.unm.edu/tru/crash-reports/annual-reports>

# Components of Population Change

## Natural Increase

|                    | 2010 Population | Births 2010-17 | Deaths 2010-2017 | 7 Year Natural Increase | Natural Increase as Percent of 2010 Population |
|--------------------|-----------------|----------------|------------------|-------------------------|--|
| <b>Eddy County</b> | 53,829          | 6,595          | 4,385            | 2,210                   | 4.1%   |
| <b>Lea County</b>  | 64,727          | 8,869          | 4,333            | 4,536                   | 7.0%   |
| <b>New Mexico</b>  | 2,059,179       | 208,205        | 137,680          | 70,525                  | 3.4%   |

## Migration

|                    | 2010 Population | Net Migration 2010-2017 | Domestic | International | Net Migration as Percent of 2010 Population |
|--------------------|-----------------|-------------------------|----------|---------------|---|
| <b>Eddy County</b> | 53,829          | 2,886                   | 1,133    | 642           | 5.4%  |
| <b>Lea County</b>  | 64,727          | 43                      | (1,111)  | 1,154         | 0.1%  |
| <b>New Mexico</b>  | 2,059,179       | (34,628)                | (62,051) | 27,423        | -1.7%                                       |

# Share of Population in Incorporated Places

---

|                    | <b>2010</b> | <b>2018</b> | <b>8 Year Growth Rate</b> |
|--------------------|-------------|-------------|---------------------------|
| <b>Eddy County</b> | 72.9%       | 74.4%       | 1.6%                      |
| <b>Lea County</b>  | 77.6%       | 78.5%       | 0.9%                      |
| <b>New Mexico</b>  | 66.1%       | 66.8%       | 0.7%                      |



# UNM-GPS Population Projections

---

- ❑ Based largely on the cohort-component method i.e. a demographic accounting model
- ❑ Projection of current trends in fertility, mortality, migration across all age/sex cohorts
- ❑ The Cohort-Component method does not directly incorporate the local economy or jobs as inputs to the model
- ❑ Demographic-Economic models such as REMI have not performed well in New Mexico
- ❑ Updated state and county projections are in production

# UNM-GPS Population Projections

## UNM-GPS *Preliminary* 2019 Population Projections

|                    | 2010 Population | 2020 Projection | 2025 Projection | 2030 Projection | 2035 Projection | 2040 Projection |
|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Eddy County</b> | 53,829          | 58,511          | 59,447          | 59,915          | 60,383          | 60,617          |
| <b>Lea County</b>  | 64,727          | 70,832          | 72,358          | 73,274          | 73,885          | 74,190          |
| <b>New Mexico</b>  | 2,059,179       | 2,102,677       | 2,111,376       | 2,117,901       | 2,122,251       | 2,124,425       |

## *Preliminary* Growth Rates from 2010

|                    | 2010 Population | 10 Year Growth | 15 Year Growth | 20 Year Growth | 25 Year Growth | 30 Year Growth |
|--------------------|-----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Eddy County</b> | 53,829          | 8.7%           | 10.4%          | 11.3%          | 12.2%          | 12.6%          |
| <b>Lea County</b>  | 64,727          | 9.4%           | 11.8%          | 13.2%          | 14.1%          | 14.6%          |
| <b>New Mexico</b>  | 2,059,179       | 2.1%           | 2.5%           | 2.9%           | 3.1%           | 3.2%           |



# Housing as a Potential Constraint to Population Growth

---

- ❑ There is strong demand for housing at all income levels evidenced by:
  - Price/availability of housing/hotels
  - Growth of single family units, multi-family units, and man camps
  - *Update of the Census for Lea County: Population Dynamics* and *City of Hobbs Housing Needs Assessment*
  - Anecdotal accounts
- ❑ Limited housing goes to the highest bidders who are often temporary workers
- ❑ A variety of housing is needed: apartments, single family homes, senior living, mobile homes and temporary housing
- ❑ Housing is being built, but:
  - Current building trends which are currently above recent norms must continue since the housing market appears to remain saturated
  - Vacancy rates may be misleading due to age/condition of the housing stock
  - Housing construction is more difficult during an oil boom
  - Subsidized housing rehabilitation is another option
- ❑ Other constraints to permanent population growth exist e.g. transportation, education, healthcare

# Housing Estimates

---

|                    | <b>2010 Housing Units</b> | <b>2018 Housing Units</b> | <b>8 Year Growth Rate</b> |
|--------------------|---------------------------|---------------------------|---------------------------|
| <b>Eddy County</b> | 22,585                    | 24,782                    | 9.7%                      |
| <b>Lea County</b>  | 24,919                    | 26,648                    | 6.9%                      |
| <b>New Mexico</b>  | 901,388                   | 943,208                   | 4.6%                      |



# Housing Characteristics

## Persons per Household

|             | 2010 | 2017 | 7 Year Change |
|-------------|------|------|---------------|
| Eddy County | 2.68 | 2.64 | -0.04         |
| Lea County  | 2.82 | 3.07 | 0.25          |
| New Mexico  | 2.61 | 2.65 | 0.04          |

## Vacancy Rates

|             | 2010  | 2017  | 7 Year Change |
|-------------|-------|-------|---------------|
| Eddy County | 14.0% | 11.4% | -2.6%         |
| Lea County  | 13.9% | 15.1% | 1.2%          |
| New Mexico  | 14.8% | 17.0% | 2.2%          |

## Age of Housing Stock

|             | Median Year Structure Built | Percent Built Pre-1950 |
|-------------|-----------------------------|------------------------|
| Eddy County | 1970                        | 35.9%                  |
| Lea County  | 1973                        | 29.8%                  |
| New Mexico  | 1982                        | 18.5%                  |

# Summary

---

- ❑ Eddy and Lea County are growing in population while most of New Mexico's population remains flat or in decline
- ❑ Housing availability/affordability could constrain population growth at all income levels
- ❑ New residential units are being constructed, but growth must remain at or above current levels for several years to absorb new permanent residents

# Areas for Primary Research

---

- ❑ Assessment of current housing demands
  - ❑ Assessment of housing stock condition
  - ❑ More timely and accurate vacancy rates
  - ❑ Potential constraints of other factors such as transportation, education and healthcare
- 
- ❖ Note that the 2020 Census is nine months away with detailed results available in April, 2021
    - Lea and Eddy Counties will be difficult to accurately enumerate due to transient populations
    - Nonetheless, the decennial census will provide more accurate data than is currently available