

MONTANA'S SCHOOLS AND POPULATION TRENDS THEN, NOW & INTO THE FUTURE



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MONTANA SCHOOL FUNDING COMMISSION - JANUARY 2016



WHAT ARE WE TALKING ABOUT TODAY...

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- **A FEW QUICK FACTS TO CELEBRATE**
 - EDUCATIONAL ATTAINMENT
- **SCHOOL AGE POPULATION PROJECTIONS**
 - SOURCE, AVAILABILITY AND LIMITATIONS OF THE DATA
 - A FEW K-12 TRENDS
 - RESIDENT POPULATION VERSUS ENROLLMENT – A COUNTY EXAMPLE
- **POPULATION MIGRATION TRENDS**
 - SOURCE, AVAILABILITY AND LIMITATIONS OF THE DATA
- **NEXT STEPS**

A FEW MONTANA EDUCATION STATS

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Enrollment

- Total MT public school enrollment 2014-2015: 144,532
- After declining for seven years, kindergarten enrollment began increasing in 2003-04 and has increased by 1,535 students from 2003-04 to 2014-15.
- Montana (PK-8) showed an increase in enrollment in 2014 - 15 of 0.7%.

Educational Attainment

- For people 25 years and older, 92.5% of Montanans have a high school degree or higher– **the highest percentage in the nation**. The national average is 86.3%. ¹
- For bachelor's degrees (which is the minimum education needed for many high-tech industry jobs), Montana is about equal to the national average with 29.3% of people 25 and older holding bachelor's degrees, **ranking 20th** among the 50 states. ¹

1. Source: 2014 American Community Survey 5-Year Data, U.S. Census Bureau

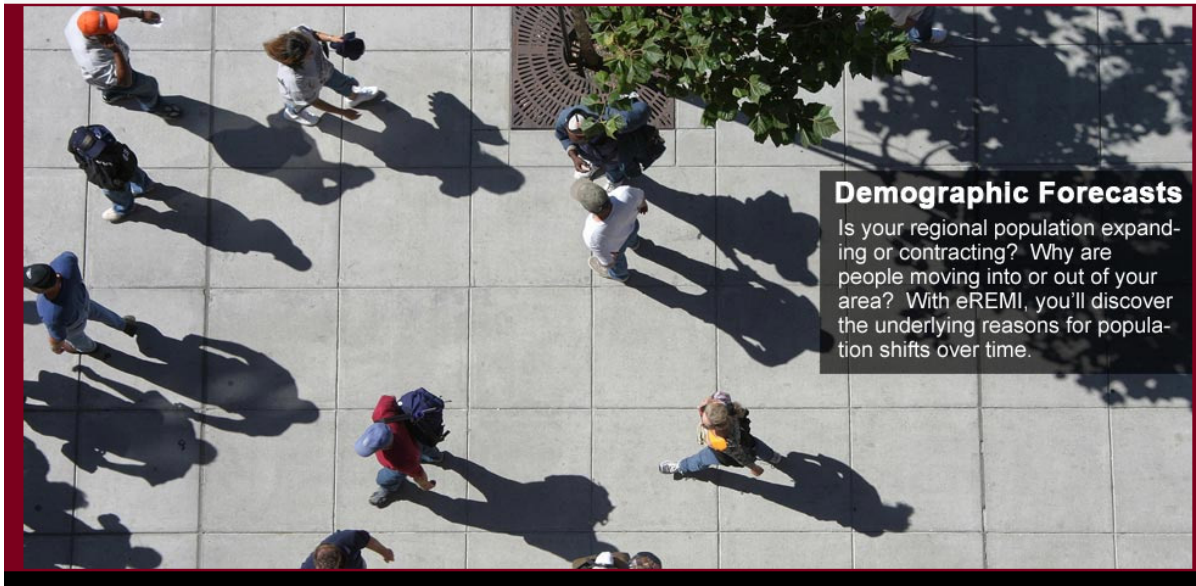
MONTANA COUNTY LEVEL POPULATION PROJECTIONS

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WE (RIS) PURCHASE POPULATION PROJECTIONS FROM REMI – KNOWN AS **eREMI** – FOR EACH OF MONTANA’S 56 COUNTIES FOR THE TIME PERIOD 2015 – 2060 (VERSION 6)



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E-REMI DATA STRENGTHS

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- RIS makes the data available to the public in pdf and excel formats.
- The projections are based on the trusted REMI methodology that has been used by clients throughout the nation and the world for over thirty years.
- Data is at the county level for single year of age by gender.
- Latest series includes historic estimates from 1990-2014 which are tied to the Decennial Census counts and projections from 2015-2060.

E-REMI DATA LIMITATIONS

6

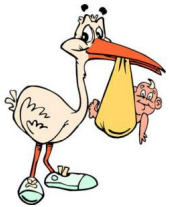


- The farther out and the more granulated the projection figures, the less reliable.
- The nature of the modeling and projection calculations result in more influence of larger population areas.
- Projections are for MT residents and don't include temporary populations.
- Standard population projection methods project forward past trends into the future. Therefore, population projections must be used with caution as they are simply a guide to what might happen **if past trends** continue into the future.

HOW ARE FUTURE POPULATIONS PREDICTED?

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$$\text{Total Population} = \text{Births} - \text{Deaths} + \text{Net Migration}$$



FROM A MODELING STAND-POINT...

BIRTH & DEATH RATES ARE *RELATIVELY* STRAIGHTFORWARD TO ESTIMATE AND PROJECT FORWARD...



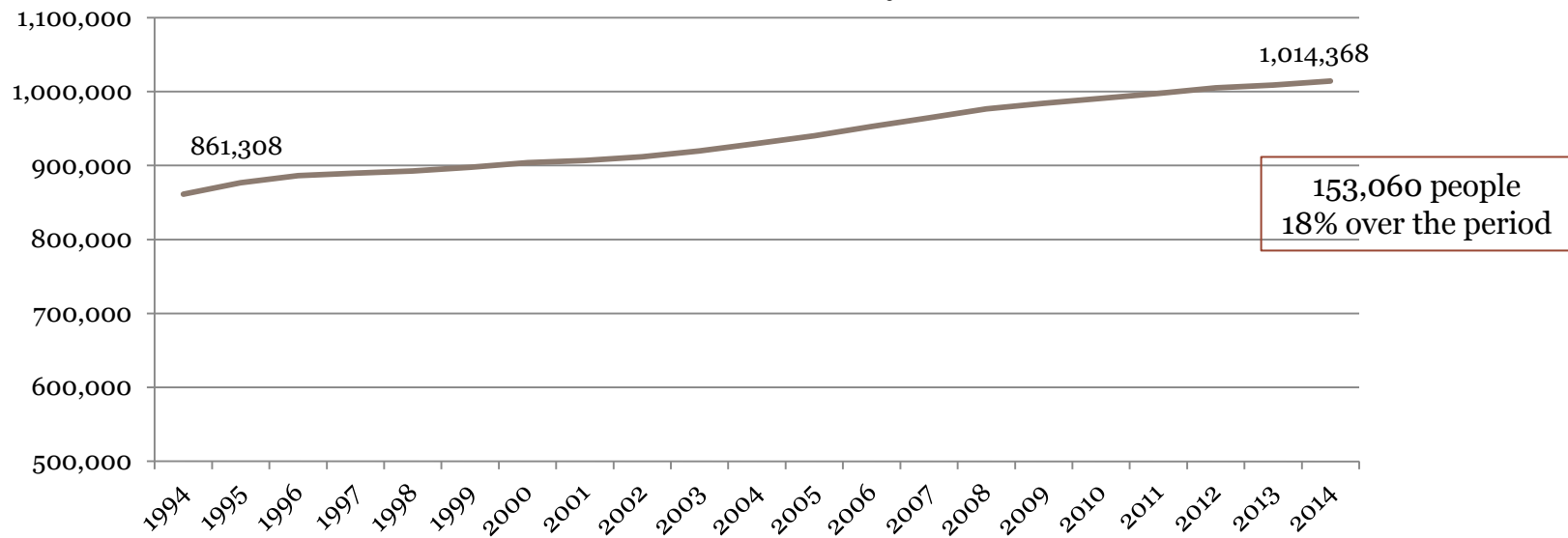
IN COMPARISON TO ESTIMATING NET MIGRATION WHICH TENDS TO BE THE STICKING POINT IN MODEL-BASED POPULATION PROJECTIONS...

“WALL STREET INDICES PREDICTED NINE OUT OF THE LAST FIVE RECESSIONS!” – PAUL A. SAMUELSON (NEWSWEEK 1966)

MONTANA POPULATION - PAST

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Total Montana State Resident Population - Past 1994 – 2014 (20 years)

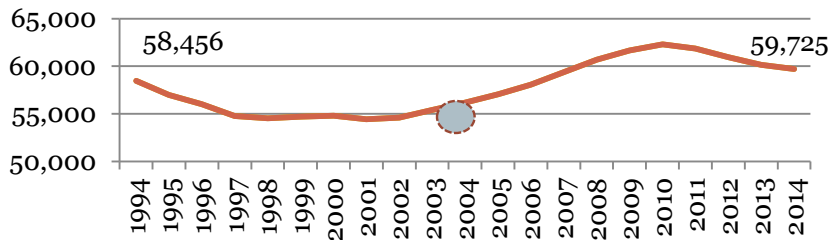


Source E-REMI Estimates

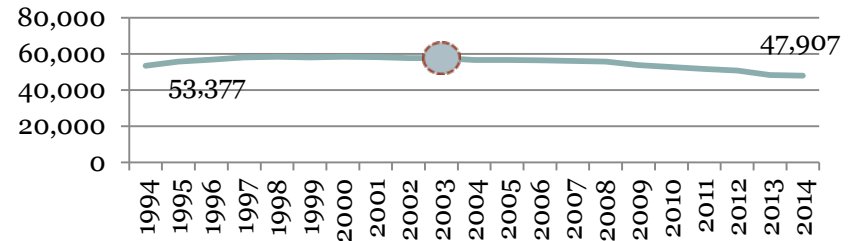
K-12 AGE MT POPULATION COHORTS - PAST

9

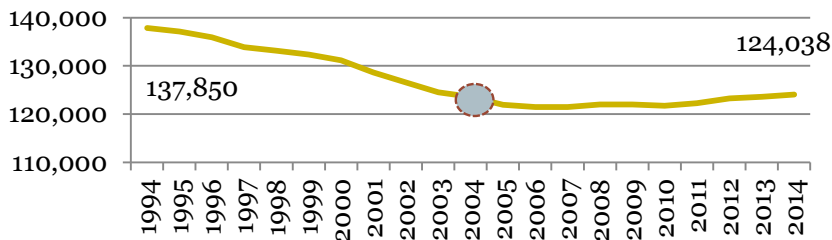
**Total State Resident Population
Age 0-4
1994 – 2014 (20 years)**



**Total State Resident Population
Age 15-18
1994 – 2014 (20 years)**



**Total State Resident Population
Age 5-14
1994 – 2014 (20 years)**



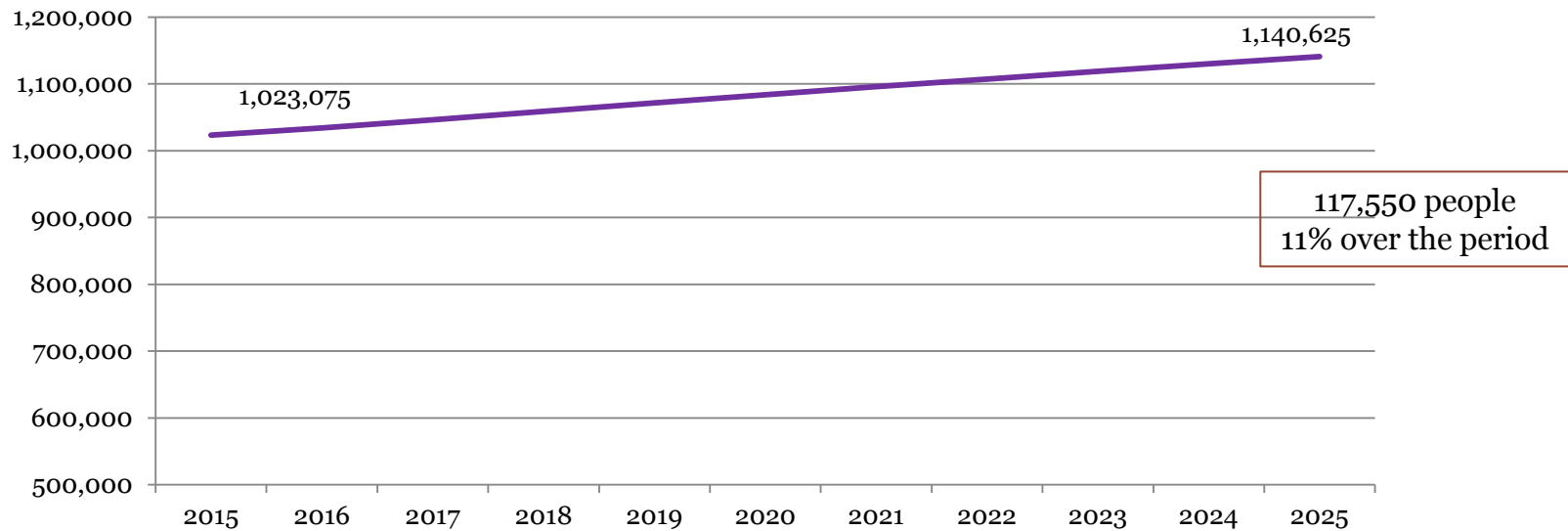
Related Workforce

- Note different y axis values
- Source E-REMI Estimates
- Trend reversal

MONTANA POPULATION PROJECTIONS

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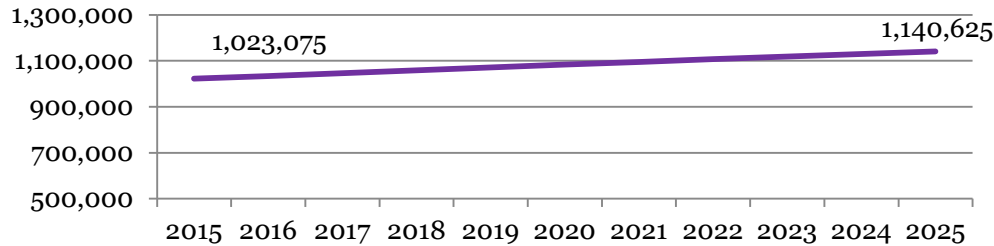
Total Montana State Resident Projections 2015 - 2025



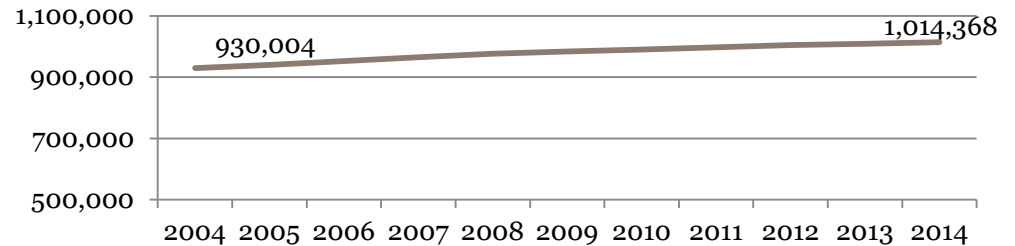
Source E-REMI Estimates

MONTANA POPULATION – FUTURE & PAST TREND LINES

Total Montana State Population Future 2015 - 2025



Total Montana State Population Past 2004 – 2014 (10 years)



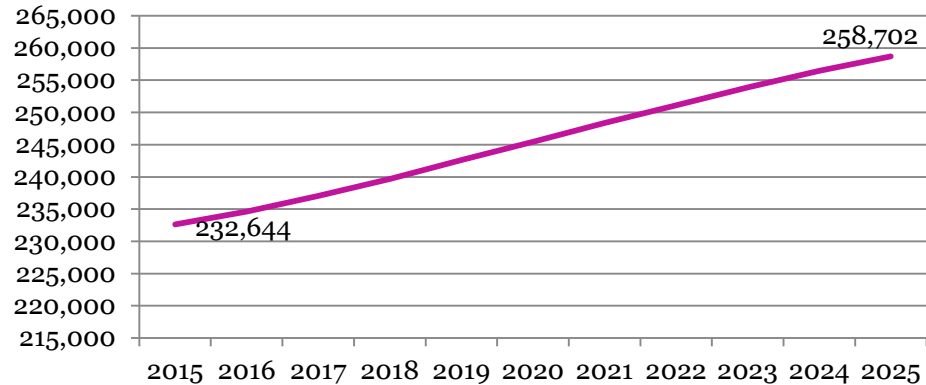
- Note different y axis values
Source E-REMI Estimates

K-12 AGE MT POPULATION COHORT PROJECTION

AGE 0 - 18

12

Total State Resident Population Age 0-18 2015 - 2025



26,058 people
11% over the period

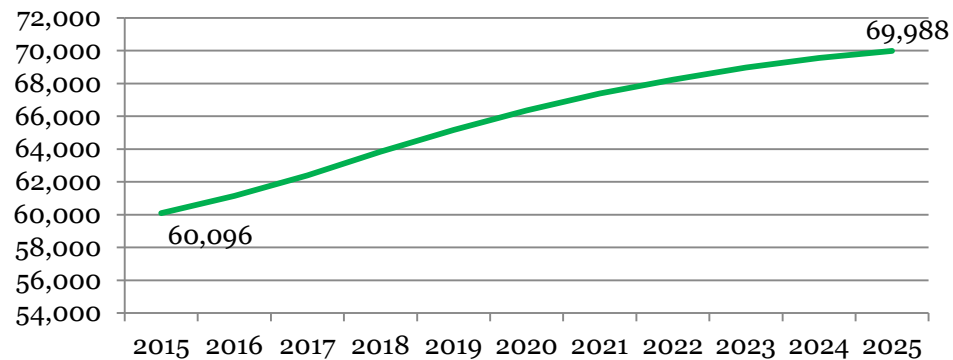
Source E-REMI Estimates

K-12 AGE MT POPULATION COHORT PROJECTION

AGE 0-4

13

Total State Population Projection Age 0-4 2015 - 2025



9,892 people
16% over the period

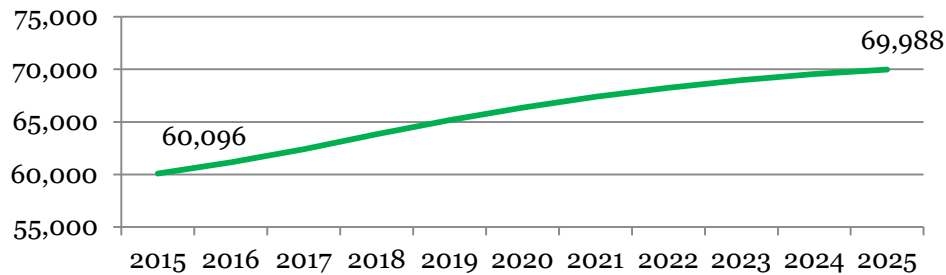
Source E-REMI Estimates

K-12 AGE MT POPULATION COHORT – FUTURE

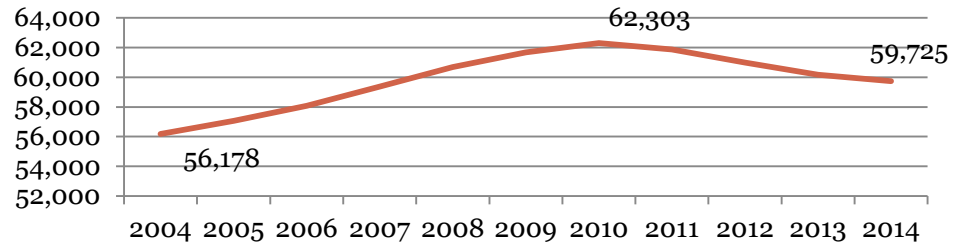
AGE 0-4

14

Total State Resident Population Age 0-4 - Future 2015 - 2025



Total State Resident Population Age 0-4 - Past 2004 – 2014 (10 years)



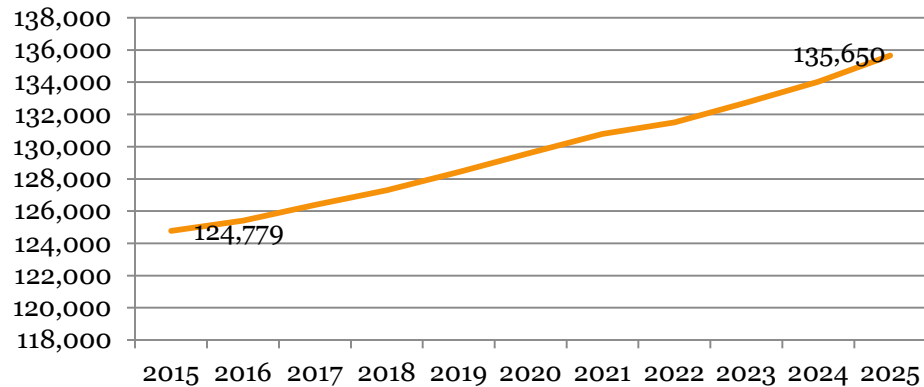
- Note different y axis values
Source E-REMI Estimates

K-12 AGE MT POPULATION COHORT PROJECTION

AGE 5 - 14

15

Total State Resident Population Projection Age 5-14 2015-2025



10,871 people
9% over the period

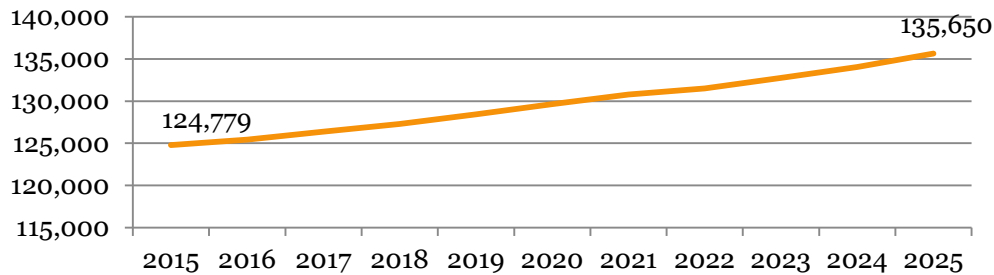
Source E-REMI Estimates

K-12 AGE MT POPULATION COHORT – FUTURE

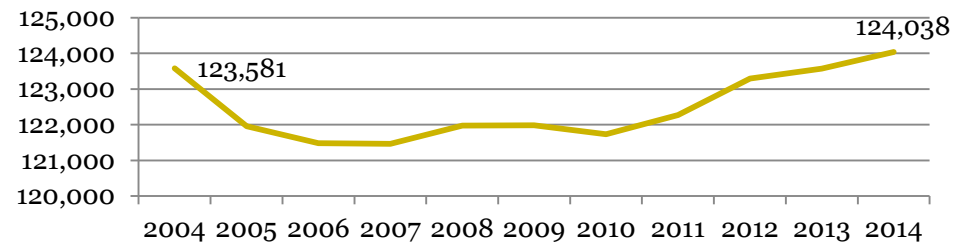
AGE 5-14

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Total State Resident Population Age 5-14 -Future 2015-2025



Total State Resident Population Age 5-14 - Past 2004-2014 (10 years)



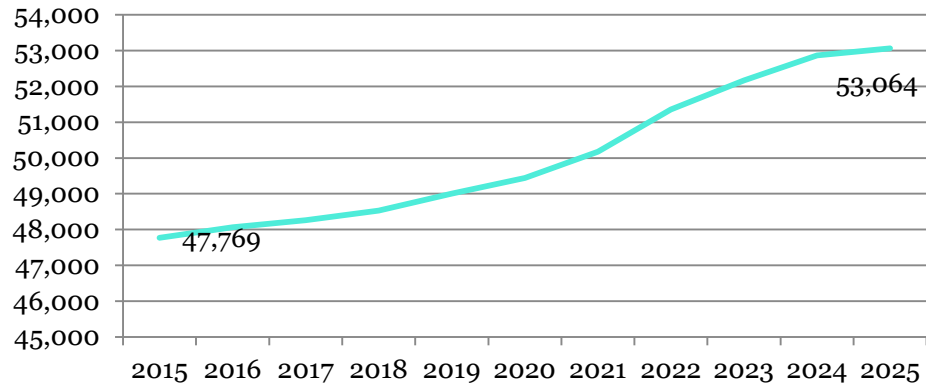
- Note different y axis values
Source E-REMI Estimates

K-12 AGE MT POPULATION COHORT PROJECTION

AGE 5 - 14

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Total State Resident Population Age Projection 15-18 2015 - 2025



5,295 people
11% over the period

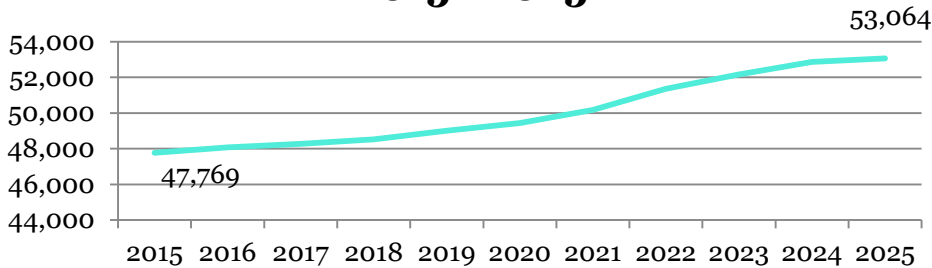
Source E-REMI Estimates

K-12 AGE MT POPULATION COHORT – FUTURE

AGE 15-18

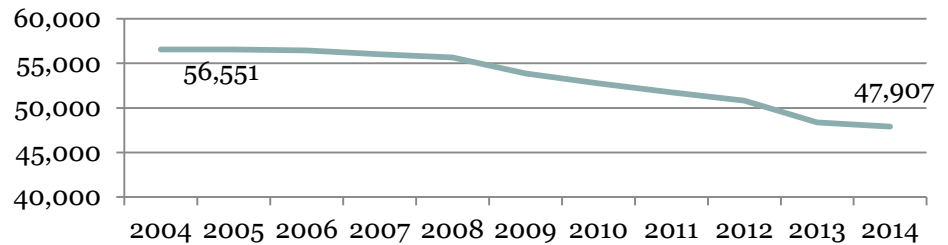
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**Total State Resident Population Age
15-18 - Future
2015 - 2025**



2003 Kindergarten turn-around

**Total State Resident Population Age
15-18 – Past
2004 – 2014 (10 years)**



- Note different y axis values
Source E-REMI Estimates

MT OPI ENROLLMENT FIGURES COMPARED TO E-REMI POPULATION ESTIMATES
RICHLAND AND YELLOWSTONE COUNTY EXAMPLES

2011-2012 Richland County
Public School Elementary Enrollment
Grades K-8
Source OPI - ANB
1,199 Students

2011 Richland County
Resident Population
Age 5-14
Source E-Remi
1,247 Children

2011-2012 Yellowstone County
Public School Elementary Enrollment
Grades K-8
Source OPI
15,825 Students

2011 Yellowstone County
Resident Population
Age 5-14
Source E-Remi
19,420 Children

Private School Enrollment not included

MIGRATION TRENDS

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Resident Migration Terms

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- **Emigration:** The process of leaving one area to take up residence in another.
- **Immigration:** The process of entering one area from another to take residence
- **International Migration:** Population flows to and from outside of the US and Montana
- **Inter-state Migration:** Population flows to and from other US States and Montana
- **Intra-state Migration:** Population flows to and from one geographic area within Montana to another area within the state
- **Net Migration:** The net effect of immigration and emigration on an area's population in a given time period, expressed as an increase or decrease

CENSUS POPULATION ESTIMATES (CPS) STRENGTHS & WEAKNESSES

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Census Population Estimates Program

<http://www.census.gov/popest/>



- Annual estimate through a joint partnership with the states (FSCPE program).
- Estimates produced for many geographies including nation, state, counties, incorporated places, metro and micropolitan areas.
- Data are estimates but are benchmarked to the Decennial Census figures which are a complete count of everyone.

Sources of Montana Population Change

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Cumulative Estimates of Population Change in MT 2010-2014
Total Population Change: **34,162** additional residents

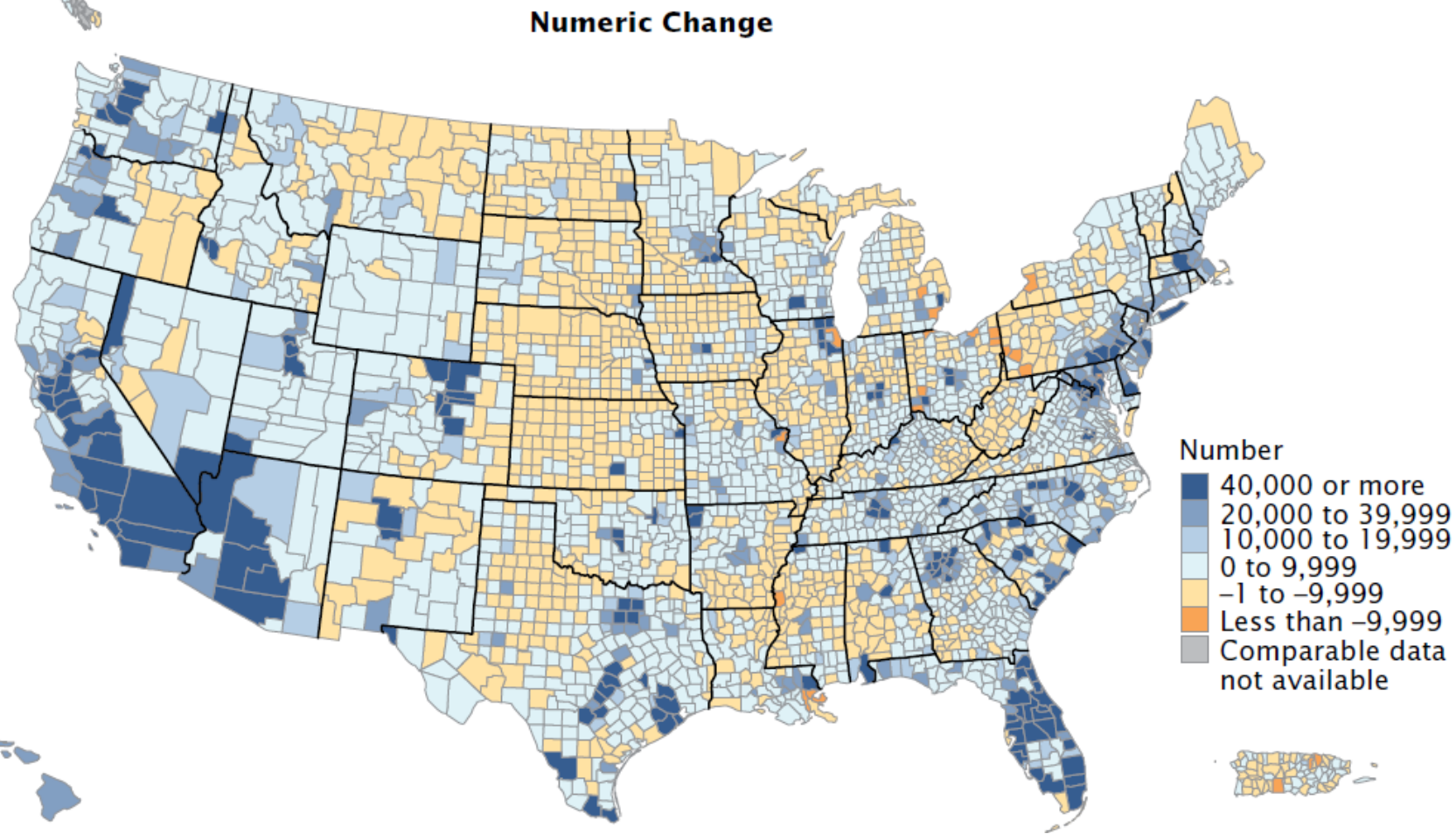
Estimated Components of MT Population Change For the period 2010-2014		
Type of Change	Change	% of Overall Est. Change
Natural Increase	13,082 (51,465 Births – 38,383 Deaths)	38.3%
Domestic Net Migration	17,262	50.5%
International Net Migration	3,240	9.5%

Source: U.S. Census Bureau, Population Division Estimates of the Components of Resident Population Change: April 1, 2010 to July 1, 2014

Figure 5.

Change in Population by County: 2000 to 2010

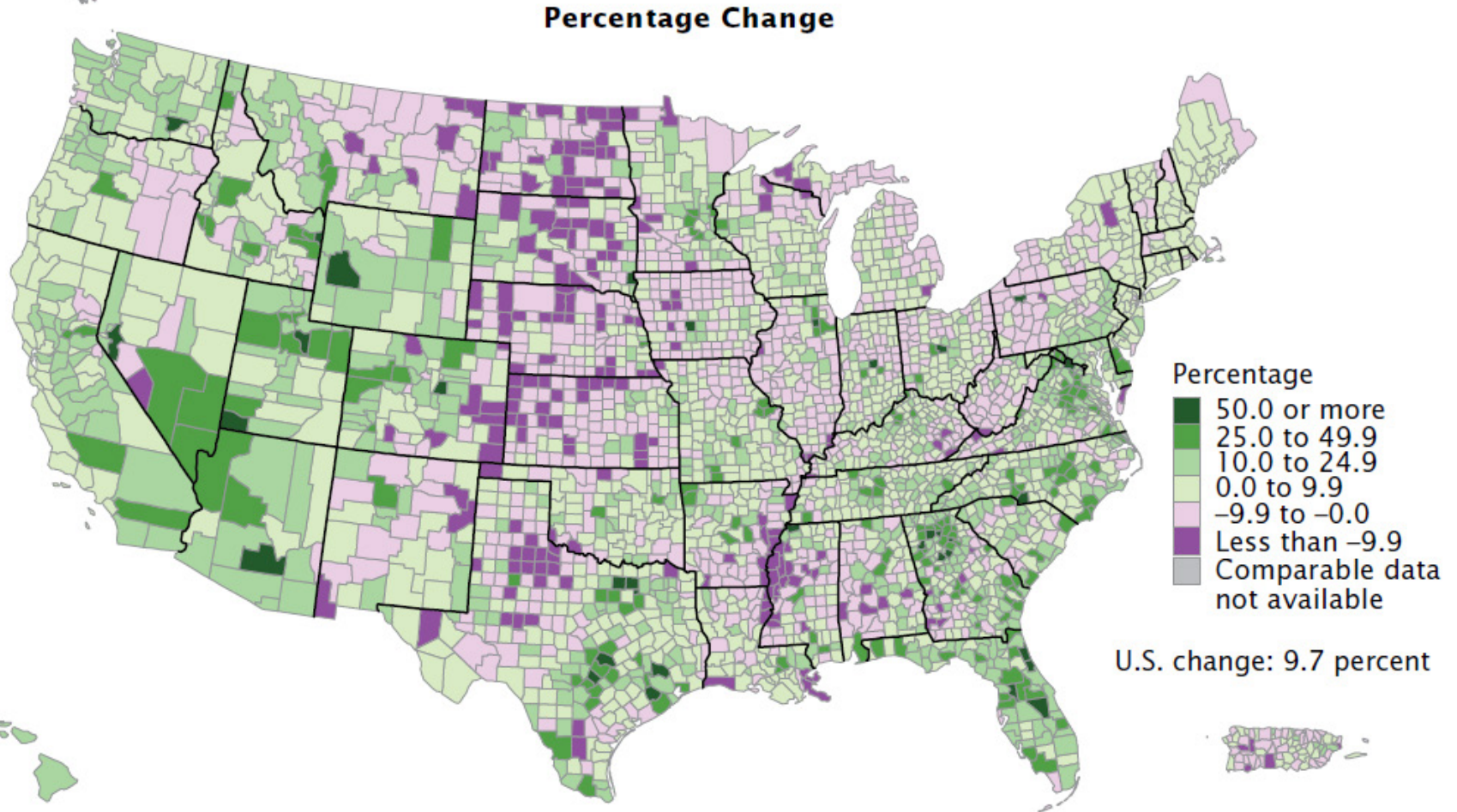
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/pl94-171.pdf)



Source: U.S. Census Bureau, Decennial Census

Figure 5.
Change in Population by County: 2000 to 2010

(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/pl94-171.pdf)



Source: U.S. Census Bureau, Decennial Census

MONTANA'S POPULATION DENSITY

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State or Region	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
Montana											
Population	376,053	548,889	537,606	559,456	591,024	674,767	694,409	786,690	799,065	902,195	989,415
People per sq. mile	2.6	3.8	3.7	3.8	4.1	4.6	4.8	5.4	5.5	6.2	6.8
Density Rank	48	47	48	49	49	49	49	50	50	50	50

Wyoming ranks 51 and Alaska ranks 52 (list includes D.C. and Puerto Rico)

Source: U.S. Census Bureau, Decennial Census

QUESTIONS???

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