

## Housing <br> Needs Assessment Update 2016

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# Eagle County Housing Needs Assessment Update 2016 

## Table of Contents

Introduction ..... 5
2007 Housing Needs Assessment: An Overview. ..... 7
Housing Needs Assessment: 2016 Update ..... 8
Housing Needs Summary ..... 10
Explanation of Housing Needs Estimates: Catch-Up Needs ..... 12
Explanation of Housing Needs Estimates: Keep-Up Needs ..... 14
Nexus and Proportionality: 2016 Update ..... 19
Area Median Income ..... 19
Income Distribution of Eagle County Households ..... 20
Rental Limits and Affordable Housing Prices . ..... 21
Affordability Gap ..... 22
Level of Service Estimate: the Mitigation Rate ..... 23
Conclusions and Recommendations . ..... 24
Appendices ..... 27


The mission of the Eagle County Housing Department is to provide innovative housing solutions that promote a higher quality of life for Eagle County residents.

## Eagle County Housing Needs Assessment Update 2016

## Index of Tables

Table I. Housing Needs, 2007
Table 2. Population, Jobs and Employment, 2007-2015
Table 3. Cost Burdened Households in Eagle County, 2010-2014
Table 4. Housing Needs, 201I-2025
Table 5. Catch-Up Needs Generated by In-Commuting Employees
Table 6. Jobs Forecast in Eagle County, 2010-2025
Table 7. Estimate of Housing Needed to Fill New Jobs, 20II - 2025
Table 8. Estimate of Housing Needed to Fill Jobs Vacated by Retirees, 201I-2025
Table 9. Area Median Income by Household Size, 2016
Table 10. Income Distribution by Housing Tenure
Table II. HUD Median Income/Rental Rate Guidelines
Table I2. Affordability Gap

# Eagle County Housing Needs Assessment Update 2016 

## Appendices

Housing Data:
Appendix H-I Overview ..... 27
Appendix H-I: Estimate of Housing Needed to Fill Jobs Vacated by Retirees, 201I-2025 ..... 28
Economic Data:
Appendices E-I and E-2 Overview ..... 31
Appendix E-I: Total Jobs in Eagle County ..... 32
Appendix E-2: Personal Income by Component ..... 33
Population Data:
Appendix P-I: Population by Municipality ..... 35
Appendix P-2: Population by Age ..... 36
Appendix P-3: Population, Households and Housing Units ..... 37
Appendix P-4: Households by Type ..... 38

# Eagle County Housing Needs Assessment Update 2016 

## Introduction

Eagle County completed a Housing Needs Assessment in 2007, and a Nexus/Proportionality study for Commercial Development in 2008. The results of those two analyses were used as a basis for its 2009 Housing Guidelines. The 2012 Housing Needs Assessment was used to update the Housing Guidelines in 2014.

Economic conditions in the United States, Colorado, and Eagle County have changed drastically since 2007-2008. Eagle County has gone from full employment (unemployment under 3\%) to a rate of almost $9 \%$ unemployment in 2010 , back to $3 \%$ in 2015. This see-saw of economic conditions has affected the housing market in Eagle County. Because 2007 was the height of the pre-recession growth period, the 2007 Housing Needs Assessment defined a need for affordable housing at its peak. Calculations in the 2008 Nexus study targeted ownership housing for workforce families earning 140\% of Area Median Income (AMI). The 2012 Housing Needs Assessment provided an overview of post-recession needs for affordable housing which included lowering the target market for affordable housing to 100\% AMI.

The 2014 Eagle County Housing Guidelines state the following:

> "Eagle County faces a gap in the availability of ownership and rental housing that is affordable for the local residents. Residents are burdened by high housing payments. Employees are forced to commute long distances. Overcrowding and substandard living conditions are common. According to the annual workforce survey, employers believe that the availability of workforce housing is a critical or major problem in Eagle County."

The purpose of this update is to examine the assumptions made in 2007 and 2012 and update the data for current conditions.

While traditional needs assessments rely extensively on survey data, which is expensive and time-consuming to collect, this update provides recommendations based on data that is generated or updated annually. Data from public sources including the US Census, State Demographer, Comprehensive Housing Affordability Strategy, Bureau of Economic Analysis, Labor Market Information, and the American Community Survey are used to populate tables. This update was developed to allow timely modifications to the assessment of housing needs, triggered by changes in metrics based on these publicallyaccessible data sources.

The current housing condition in Eagle County is described through demographics, workforce data, and housing units. Current and projected housing gaps by AMI level are identified. A major focus of this analysis is "cost-burdened" households (those paying more than $30 \%$ of their income for housing costs). Rental and ownership housing are both included in the analysis. The analysis is completed at the county level, inclusive of municipalities and unincorporated county areas.

The report is organized into four sections: an overview of the 2007 Housing Needs Assessment; the 2016 update to the Housing Needs Assessment; an explanation of and update to the 2008 Nexus/Proportionality Study; and a final section that includes recommendations for consideration when updating housing policy.

Data sources are footnoted throughout the report. Additional data tables are provided in the Appendices, including general population and economic data reference tables. The update is intended to be an objective analysis of data that can be used for policy recommendations.

This report was researched by Venturoni Surveys \& Research. It is presented to the Housing Department of Eagle County for use in development and potential revisions of housing policies.

## 2007 Housing Needs Assessment: An Overview

The 2007 Housing Needs Assessment, by estimating a housing need of over 12,500 units, established a strong urgency for a wide range of affordable housing initiatives, including the 2009 Housing Guidelines for new development. In addition the Nexus/Proportionality Analysis for Commercial Development was used to create a mitigation formula of units to be built, or fees to be paid in lieu of construction.'

The 2007 report estimated a total number of housing units needed by employees in Eagle County, both to fill existing gaps in the market at the time ("catch-up" needs) and to accommodate future needs ("keep-up" needs). These future needs were based on economic and population growth projections through 2015. "Catch-up" needs included demand from unfilled jobs in 2007, workers commuting to Eagle County from other counties, and units needed to address overcrowding. "Keep-up" needs included housing demand from job growth and from replacement of retirees. The estimates of each of these components of the total needed units are shown in Table I below.

Table 1. Housing Needs, $2007^{2}$

| Type of Need |  |
| :---: | ---: |
| Catch - Up Needs: 2007 | 1,420 |
| Demand from Unfilled Jobs in 2007 | 2,469 |
| In - Commuters | 557 |
| Units Needed to Address Overcrowding | $\mathbf{4 , 4 4 6}$ |
| Total Catch - Up Needs |  |
| Keep - Up Needs: 2015 | $\mathbf{4 , 7 7 6}$ |
| Housing Demand from Job Growth | 3,284 |
| Demand from Replacement of Retirees | $\mathbf{8 , 0 6 0}$ |
| Total Keep - Up Needs | $\mathbf{1 2 , 5 0 6}$ |
| Total Housing Needs |  |

[^0]
## Housing Needs Assessment: 2016 Update

Since the peak housing demand generated by the workforce in 2008, the number of jobs dropped dramatically from 2008 through 2010, from a high of 40,609 in 2008 to a low of 35,635 in 2010 (a decline of $12 \%$ from 2008-20I0). In 2011 the number of jobs started building again and had almost recovered to previous levels by the end of 2015 .

Table 2. Population, Jobs and Employment 2007-2015 ${ }^{3}$

| Year | County Population | Jobs | Civilian Labor Force | Employment | Unemployment | Unemployment Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007 | 49,284 | 40,276 | 30,929 | 30,053 | 876 | 2.8\% |
| 2008 | 50,301 | 40,609 | 31,666 | 30,535 | 1,131 | 3.6\% |
| 2009 | 51,520 | 37,390 | 30,521 | 28,382 | 2,139 | 7.0\% |
| 2010 | 52,057 | 35,635 | 32,447 | 29,697 | 2,750 | 8.5\% |
| 2011 | 51,643 | 35,816 | 32,147 | 29,624 | 2,523 | 7.8\% |
| 2012 | 51,845 | 36,616 | 32,376 | 30,060 | 2,316 | 7.2\% |
| 2013 | 52,360 | 37,260 | 32,030 | 30,097 | 1,933 | 6.0\% |
| 2014 | 52,831 | 38,423 | 32,550 | 31,193 | 1,357 | 4.2\% |
| 2015 | 53,303 | 39,613 | 32,910 | 31,883 | 1,027 | 3.1\% |

Population and Jobs


[^1]As the chart on the previous page indicates, while the jobs number exhibited a pretty dramatic decline in the 2008-2010 time period, the population numbers remained fairly stable and actually grew from 49,284 in 2007 to 53,303 in 2015.


The chart above illustrates the changes in the unemployment rate over this same time period (2007-2015). The unemployment rate peaked in 2010 at $8.5 \%$ and has been steadily declining in the ensuing years. The $3.1 \%$ in 2015 is close to the low point from pre-recession 2007 (2.8\%).

The 2012 Eagle County Housing Needs Assessment Update documented some lessening of the need for employee housing due to the drop in the number of jobs. The updated data in this 2016 Eagle County Housing Needs Assessment Update has revised the forecast for employee housing needs reflecting the improved economy, current recovery of the jobs numbers, and forecast of continued growth for the jobs and housing markets through 2025.

Table 3. Cost Burdened Households in Eagle County 2010-2014 ${ }^{4}$ (Average)


The estimate of the need for workforce housing (see Table 4, next page) does not include an estimate of the number of units needed to overcome the problems of households that are "cost-burdened". However, this is probably the largest and most evident part of the workforce housing problem in Eagle County. The number of costburdened households is high, and affects people who are already living in the county. Table 3 above shows that $50.7 \%$ of homeowners with a mortgage and $46.5 \%$ of renters fall into the designation of "cost-burdened".

This objective measure of cost-burdened households is updated annually through the American Community Survey, and is a good marker of success or distress in the workforce housing market.

## Housing Needs Summary

To provide a current estimate of "catch-up" and "keep-up" housing needed in Eagle County, a number of factors were considered. Table 4 shows the updated estimate of the components included in the 2007 Needs Assessment. The methodologies for preparing these new estimates are contained in the paragraphs following Tables $5-8$. The cumulative housing needs in 2015 were estimated at 4,466 . For the ten-year period 20I5-2025, an estimated II,960 units are needed to meet housing demand generated by forecasted job growth and the demand from replacement of retirees.

[^2]Table 4. Eagle County Housing Needs, 2011 - 2025

| Type of Need | 2007 Est. | $2011$ <br> Est. | 2015 Est. | 2020 Est. | 2025 Est. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Catch - Up Needs |  |  |  |  |  |
| Demand from Unfilled Jobs | 1,420 | 200 |  |  |  |
| In - Commuters | 2,469 | 1,507 |  |  |  |
| Units Needed to Address | 557 | 600 |  |  |  |
| Overcrowding Total Catch - Up Needs | 4,446 | 2,307 |  |  |  |
| Keep - Up Needs |  |  |  |  |  |
| Housing Demand from Job Growth | 4,776 |  | 1,089 | 2,471 | 1,956 |
| Demand from Replacement of | 3,284 |  | 1,070 | 1,412 | 1,655 |
| Retirees Total Keep - Up Needs | 8,060 |  | 2,159 | 3,883 | 3,611 |
| Total Housing Needs | 12,506 |  | $\begin{array}{r} 4,466 \\ (2011+2015) \\ \hline \end{array}$ | $\begin{array}{r} 8,349 \\ (2015+2020) \end{array}$ | $\begin{array}{r} 11,960 \\ (2020+2025) \\ \hline \end{array}$ |

## 2016 Overall Approach to Estimating "Keep-Up" Housing Needs for Eagle County

Researchers for this 2016 update have provided the past explanations and data for catch-up needs in the following sections on demand from unfilled jobs, in-commuters and overcrowding. We are not including a 2015 estimate of catch-up needs in this report. The 2011 estimates included in the 2012 Eagle County Housing Needs Assessment Update were based on the continuation of assumptions from 2007 survey data. This survey data is now nine years old. The economic conditions in Eagle County have changed dramatically during this nine-year time period. We are not comfortable using those same assumptions in 2016. We recommend additional survey data to capture housing needs/wants for unfilled jobs, in-commuters and overcrowding.

We feel very comfortable with the data for the keep-up needs. The forecast data for housing demand from job growth and housing demand from replacement of retirees is very solid. Table 4 (above) indicates a need from these two factors of II,960 housing units from 201I-2025.

# Review of Housing Needs Estimates: Catch-Up Needs used in 2007 \& 2012 Needs Assessments 

## Demand from Unfilled Jobs

In 2007, researchers estimated that Eagle County needed I, 420 housing units to attract employees to fill vacant positions. This was based on an employer survey regarding unfilled jobs, estimated at 4,089, and a combination of assumptions (including a tight labor market) "concerning the number of unfilled jobs and the number of employees living in Eagle County and available for work" ${ }^{5}$. The 2011 estimate came from a Workforce Survey that was conducted by the Economic Council'. There is no updated source of this information.

## In-Commuters

The 2007 Housing Needs Assessment also estimated a catch-up need of housing for incommuters ${ }^{7}$. This was based on an estimate by the State Demography Office/Department of Local Affairs (SDO/DOLA) of the percentage of workers who were in-commuters ( $18.3 \%$ ). An in-commuter survey indicated that $70 \%$ of these workers would prefer to live in Eagle County.

In 2011, SDO/DOLA updated its estimate of the percent of the workforce that are incommuters to $9 \%$. The most recent estimate (2014) is $6.9 \%$ of the Eagle County workforce are in-commuters. However, there is no new estimate of the percent of these who would move into the county if affordable housing were available to them.

Table 5 illustrates how the decrease in the percent of in-commuters has affected the bottom line calculation of housing units needed. This trend should be taken into consideration for future housing needs assessments.

[^3]
## Table 5. Catch-Up Needs Generated by In-Commuting Employees

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 1}$ (revised) | $\mathbf{2 0 1 4}$ |
| :--- | :---: | :---: | :---: |
| Total Jobs | 41,727 | 35,816 | 38,423 |
| Average Jobs per Employee | 1.2 | 1.2 | 1.2 |
| Total Employees | 34,773 | 29,847 | 32,019 |
| In-Commuters | 6,351 | 2,677 | 2,215 |
| \% of Total Employees | $18.3 \%$ | $9 \%$ | $6.9 \%$ |
| \# who would move to Eagle County | 4,446 | 1,874 | 1,550 |
| (70\%) |  |  |  |
| Employees per household | $1.8^{8}$ | 1.8 | 1.8 |
| TOTAL HOUSING UNITS NEEDED | $\mathbf{2 , 4 6 9}$ | $\mathbf{1 , 0 4 1}$ | $\mathbf{8 6 1}$ |

## Units Needed to Address Overcrowding

The 2007 Household Survey found that 9.8\% of Eagle County households lived in overcrowded conditions (defined as having more than I. 5 residents per bedroom). This equated to $\mathrm{I}, 855$ households. Assuming that "an increase in the supply of workforce housing equal to about $30 \%$ of the number of overcrowded units will largely address overcrowding to the extent practical", the 2007 report estimated that 557 units were needed at that time for this purpose.

Applying the same percentage (9.8\%) to the total number of occupied housing units (households) in 2011 yielded an estimate of 1,889 overcrowded units. Multiplying this number by $30 \%$ produced an estimate of 567 units, which was rounded to 600, needed to address the problem of overcrowding.

[^4]
## Explanation of Housing Needs Estimates: Keep-Up Needs

## Housing Demand from Job Growth

A critical part of this assessment is understanding the housing needs that might result from future growth. We must take into account the prospects for growth or change at both the national (and international) and regional (state) levels. After the Great Recession, starting in the Fall of 2008, there is little doubt, that we must at least be aware of aspects of these larger area economies - even though we have little information and no control over their prospects.

The national economy is always susceptible to large or small changes dependent on many economic and non-economic factors. Currently, the economy is in a recovery or recovered mode, but one which has disappointed many, particularly the "middle class" and "working class" elements of the economy. Its overall output has improved but is propped up somewhat by low interest rates which are limiting certain aspects of growth in investment and capital, e.g. infrastructure.

For this report, we have assumed that the national economy will keep moving along in a positive direction, with an awareness that things could move more strongly or could slow because of unexpected developments.

In the meantime, the State of Colorado's economy is relatively strong, and this factor contributes significantly to a steady upward expectation for the Eagle County economy. Eagle County's economy - jobs - is made up of a number of sectors all of which can be expected to increase if the above assumptions of slow national growth but strong state growth prove to be mostly correct. These sectors include day or weekly tourism related to skiing and summer activities, second home presence and use, retirees, and regional (includes surrounding counties) center services, along with other miscellaneous businesses and services.

The aging of the baby-boomers and their increase in the county both as residents and occupants of seasonal housing will cause an increase in the need for medical and numerous other services - jobs. In addition, their restless presence will add to the labor force, either as part-timers or hobby entrepreneurs and will add to activities made possible by volunteers.

The county is especially well-situated with some remaining land and coming development, to believe that it will be willing and able to take advantage of these opportunities, i.e., that it will grow quite steadily over the period of this housing needs assessment. Thus, the forecast presented here shows an annual average growth in jobs of $2 \%$ or a total increase of $24 \%$ over the period from 2015 to 2025 (see Table 6.)

Table 6. Jobs Forecast in Eagle County, 2010-2025

| Table 6. Jobs and Population for Eagle County and Colorado |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EAGLE COUNTY |  |  |  |  |  |  |  |  |
| Jobs |  |  |  |  |  |  |  |  |
|  | 2010 | 2011 | 2012 | 2014 | 2015 | 2017 | 2020 | 2025 |
| Amount | 35,635 | 35,816 | 36,616 | 38,423 | 39,613 | 42,103 | 44,951 | 49,176 |
| Annl \% Chng |  | 0.5\% | 2.2\% | 2.4\% | 3.1\% | 3.1\% | 2.2\% | 1.8\% |
| Population |  |  |  |  |  |  |  |  |
|  | 2010 | 2011 | 2012 | 2014 | 2015 | 2017 | 2020 | 2025 |
| Amount | 52,057 | 51,643 | 51,845 | 52,831 | 53,301 | 54,529 | 57,226 | 65,046 |
| Annl \% Chng |  | -0.8\% | 0.4\% | 0.9\% | 0.9\% | 1.1\% | 1.6\% | 2.6\% |
| COLORADO |  |  |  |  |  |  |  |  |
| Jobs (x1000) |  |  |  |  |  |  |  |  |
|  | 2010 | 2011 | 2012 | 2014 | 2015 | 2017 | 2020 | $\underline{2025}$ |
| Amount | 2,783.6 | 2,830.1 | 2,893.9 | 3,068.5 | 3,144.5 | 3,285.5 | 3,471.6 | 3.738 .0 |
| Annl \% Chng |  | 1.7\% | 2.3\% | 3.0\% | 2.5\% | 2.2\% | 1.9\% | 1.5\% |
| Population (x1000) |  |  |  |  |  |  |  |  |
|  | 2010 | 2011 | 2012 | 2014 | 2015 | 2017 | 2020 | 2025 |
| Amount | 5,050.3 | 5,120.2 | 5,192.0 | 5,353.5 | 5,443.6 | 5,635.9 | 5,935.9 | 6,454.9 |
| Annl \% Chng |  | 1.4\% | 1.4\% | 1.5\% | 1.7\% | 1.8\% | 1.7\% | 1.7\% |

Applying this revised jobs forecast to the 2007 Housing Needs Assessment template for estimating housing units needed to fill new jobs generates a housing demand of 669 in 20I3, I,089 in 20I5, and 2,47I in 2020 and I,956 in 2025 (see Table 7). ${ }^{10}$

[^5]Table 7. Estimate of Housing Needed to Fill New Jobs, 2011-2025

|  | 2011 | 2013 | 2015 | 2020 | 2025 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total Forecasted Jobs | 35,816 | 37,260 | 39,613 | 44,951 | 49,176 |
| Increase in Jobs over Prior Period |  | 1,444 | 2,353 | 5,338 | 4,225 |
| Jobs per Employed Person |  | 1.2 | 1.2 | 1.2 | 1.2 |
| New Employed Persons Needed |  | 1,203 | 1,961 | 4,448 | 3,521 |
| Employed Persons/Housing Unit |  | 1.8 | 1.8 | 1.8 | 1.8 |
| Housing Demand Generated (Units) |  | 669 | 1,089 | 2,471 | 1,956 |

## Housing Demand from Replacement of Retirees

In this and the previous update (20I2), the demand for affordable housing from the workers required to replace retiring members of the workforce is calculated in a different way than in the 2007 Housing Needs Assessment. In the 2007 report, it was estimated that $40 \%$, or 5,911 of the workers between 57 and 64 would retire by 2015 . Assuming the number of employees (employed persons) per household was I.8, this resulted in a housing demand of 3,284 units.

Here, in this update, the number of retirees is estimated by five-year age groups over 50 on the basis of "retirement rates" derived from the declines in their labor force participation by five-year age groups during the periods 2016-2020 and 2021-2025. These new estimates of housing demand from the replacement of retirees - I,4I2 and 1,655 - are much lower than in the 2007 Needs Assessment report. (For a fuller explanation of this chart, see Appendix H.)

Table 8. Estimate of Housing Needed to Fill Jobs Vacated by Retirees, 2011-2025 ${ }^{11}$

| AGE | Pop. | LFPR | In |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GROUP |  |  |  |

2016-2020

| AGE |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GROUP |

[^6]2021-2025

| AGE <br> GROUP | Pop. | LFPR | In <br> Wrkforce | Retire. <br> Rate | New <br> Ret'd | $5-Y r$ <br> Surv. <br> Rate | Surv. <br> Retired | Ret'd <br> /Hhld | Needed <br> Housing |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5 0 - 5 4}$ | 3,554 | 0.84 | 2,987 | 0.08 | 253 | 0.989 | 250 | 1.6 | 156 |
| $\mathbf{5 5 - 5 9}$ | 3,623 | 0.77 | 2,778 | 0.18 | 503 | 0.979 | 493 | 1.5 | 328 |
| $\mathbf{6 0 - 6 4}$ | 3,561 | 0.63 | 2,231 | 0.41 | 907 | 0.965 | 875 | 1.4 | 625 |
| $\mathbf{6 5 - 6 9}$ | 3,018 | 0.37 | 1,128 | 0.27 | 306 | 0.942 | 289 | 1.3 | 222 |
| $\mathbf{7 0 - 7 4}$ | 2,276 | 0.27 | 616 | 0.43 | 262 | 0.910 | 238 | 1.2 | 199 |
| $\mathbf{7 5 - 7 9}$ | 1,396 | 0.16 | 217 | 0.52 | 112 | 0.847 | 95 | 1.1 | 86 |
| $\mathbf{8 0 - 8 4}$ | 616 | 0.08 | 46 | 1.00 | 46 | 0.754 | 35 | 1.0 | 35 |
| TOTAL | 18,044 | 0.55 | 10,003 |  | 2,390 |  | 2,275 |  | $\mathbf{1 , 6 5 5}$ |

(Note: LFPR = Labor Force Participation Rate)

## Nexus and Proportionality: 2016 Update

In addition to the Housing Needs Assessment completed in 2007, the county utilized a "Nexus and Proportionality" study from 2008 to inform the 2009 Housing Guidelines. Although not technically part of this Housing Needs Assessment update, several tables in the Nexus report are key to the county's housing policy. The following tables are explained and revised here using current data:

- Area Median Income by Household Size
- Income Distribution of Eagle County Households
- Rental Limits and Affordable Housing Prices
- The Affordability Gap
- Level of Service Estimates/Mitigation Rate


## Area Median Income

Federal, state and local housing programs are typically based on an anchor to Area Median Income, or AMI. AMI is calculated annually by the US Department of Housing and Urban Development. Eagle County figures for 2016 are shown below, along with a comparison to 2007 for 100\% AMI levels.

Table 9. Area Median Income by Household Size, $2016{ }^{12}$

|  | Household Size |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| AMI Level | 1-person | 2 persons | 3 persons | 4 persons | 5 persons |
| $50 \%$ AMI | $\$ 30,950$ | $\$ 35,400$ | $\$ 39,800$ | $\$ 44,200$ | $\$ 47,750$ |
| $60 \%$ AMI | $\$ 37,140$ | $\$ 42,480$ | $\$ 47,760$ | $\$ 53,040$ | $\$ 57,300$ |
| $\mathbf{8 0 \%}$ AMI | $\$ 49,520$ | $\$ 56,640$ | $\$ 63,680$ | $\$ 70,720$ | $\$ 76,400$ |
| $100 \%$ AMI | $\$ 61,900$ | $\$ 70,800$ | $\$ 79,600$ | $\$ 88,400$ | $\$ 95,500$ |
| $120 \%$ AMI | $\$ 74,280$ | $\$ 84,960$ | $\$ 95,520$ | $\$ 106,080$ | $\$ 114,600$ |
| 140\% AMI | $\$ 86,660$ | $\$ 99,120$ | $\$ 111,440$ | $\$ 123,760$ | $\$ 133,700$ |
|  |  |  |  |  |  |

[^7]100\% AMI Comparison, 2007 and 2016

| AMI Level | 1-person | 2 persons | 3 persons | 4 persons | 5 persons |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $100 \%-2007$ | $\$ 56,800$ | $\$ 64,900$ | $\$ 73,000$ | $\$ 81,100$ | $\$ 87,600$ |
| $100 \%-2016$ | $\$ 61,900$ | $\$ 70,800$ | $\$ 79,600$ | $\$ 88,400$ | $\$ 95,500$ |
| Change | $8.98 \%$ | $9.09 \%$ | $9.04 \%$ | $9.00 \%$ | $9.02 \%$ |

## Income Distribution of Eagle County Households

Household income distribution by tenure (renter or owner) was calculated using 2008 2012 data from the Comprehensive Housing Affordability Strategy data below. This data is available annually and can be used to update housing strategies. Table 10 shows that $65 \%$ of renters and $34 \%$ of owners (a total of $45 \%$ of all household types) earn less than $100 \%$ AMI.

|  | Renters |  | Owners |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | \# | \% | \# | \% | \# | \% |
| MI | 1,255 | 18.99\% | 555 | 4.70\% | 1,810 | 9.83\% |
| 30\% and 50\% | 860 | 13.01\% | 955 | 8.09\% | 1,815 | 9.86\% |
| 50\% and 80\% | 1450 | 21.94\% | 1,480 | 12.54\% | 2,930 | 15.92\% |
| 80\% and 100\% | 710 | 10.74\% | 1,060 | 8.98\% | 1,770 | 9.61\% |
| AMI | 2,335 | 35.33\% | 7,750 | 65.68\% | 10,085 | 54.78\% |
|  | 6,610 | 100.00\% | 11,800 | 100.00\% | 18,410 | 100.00\% |

[^8]
## Rental Limits and Affordable Housing Prices

The following table can be used to help determine the appropriate AMI levels to target through housing policies. A standard "affordable" housing payment is calculated at $30 \%$ or less of income, regardless of whether the housing is purchased or rented.

Table 11. HUD Median Income/Rental Rate Guidelines ${ }^{14}$

| 2016 \% Area Median Income |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Household size | 160\% | 140\% | 120\% | 100\% | 80\% |  | 60\% |  | 50\% |  | 30\% |  |
| 1-person | \$ 99,040 | \$ 86,660 | \$ 74,280 | \$ 61,900 | \$ | 49,250 | \$ | 37,140 | \$ | 30,950 | \$ | 18,750 |
| 2-person | \$ 113,280 | \$ 99,120 | \$ 84,960 | \$ 70,800 | \$ | 56,640 | \$ | 42,480 | \$ | 35,400 | \$ | 21,240 |
| 3-person | \$ 127,360 | \$ 111,440 | \$ 95,520 | \$ 79,600 | \$ | 63,680 | \$ | 47,760 | \$ | 39,800 | \$ | 23,880 |
| 4-person | \$ 141,440 | \$ 123,760 | \$ 106,080 | \$ 88,400 | \$ | 70,720 | \$ | 53,040 | \$ | 44,200 | \$ | 26,520 |
| 5-person | \$ 152,800 | \$ 133,700 | \$ 114,600 | \$ 95,500 | \$ | 76,400 | \$ | 57,300 | \$ | 47,750 | \$ | 28,650 |
| 6-person | \$ 164,160 | \$ 143,640 | \$ 123,120 | \$ 102,600 | \$ | 82,080 | \$ | 61,560 | \$ | 51,300 | \$ | 30,780 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2016 Rent Limits |  |  |  |  |  |  |  |  |  |  |  |  |
| Unit type | 160\% | 140\% | 120\% | 100\% |  | 80\% |  | 60\% |  | 50\% |  | 30\% |
| Studio | \$ 2,476 | \$ 2,167 | \$ 1,857 | \$ 1,548 | \$ | 1,238 | \$ | 929 | \$ | 774 | \$ | 469 |
| 1 Bdrm | \$ 2,832 | \$ 2,322 | \$ 1,991 | \$ 1,659 | \$ | 1,327 | \$ | 995 | \$ | 829 | \$ | 531 |
| 2 Bdrm | \$ 3,184 | \$ 2,786 | \$ 2,388 | \$ 1,990 | \$ | 1,592 | \$ | 1,194 | \$ | 995 | \$ | 597 |
| 3 Bdrm | \$ 3,536 | \$ 3,218 | \$ 2,759 | \$ 2,299 | \$ | 1,839 | \$ | 1,379 | \$ | 1,149 | \$ | 663 |
| 4 Bdrm | \$ 3,820 | \$ 3,591 | \$ 3,078 | \$ 2,565 | \$ | 2,052 | \$ | 1,539 | \$ | 1,283 | \$ | 716 |

## Affordability Gap

The figures in Table II, above, can be used to calculate the affordability gap for different AMI levels. According to the 2008 Nexus/Proportionality Analysis, "The difference between prevailing market prices and what targeted low-income households can afford to pay for housing is the gap that must be taken into consideration when determining the amount of fee that could be paid in lieu of producing units under certain circumstances." 15

[^9]Table 12. Affordability Gap ${ }^{16}$

|  | 2007 | 2012 |  |  | 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 2007 \text { 100\% } \\ \text { AMI } \end{gathered}$ | 100\% AMI | 120\% AMI | 140\% AMI | 100\% AMI | 120\% AMI | 140\% AMI |
| Target Income Point (3 person HH) | \$73,000 | \$76,350 | \$91,620 | \$106,890 | \$79,600 | \$95,520 | \$111,440 |
| Affordable Monthly Housing Pmt. | \$1,825 | \$1,909 | \$2,291 | \$2,672 | \$1,990 | \$2,388 | \$2,786 |
| Property Taxes/ Insurance/HOA (20\%) | \$365 | \$382 | \$458 | \$534 | \$398 | \$478 | \$557 |
| Mortgage Payment | \$1,460 | \$1,527 | \$1,832 | \$2,138 | \$1,592 | \$1,910 | \$2,229 |
| Max Mortgage Amount | \$231,000 | \$319,500 | \$383,400 | \$448,200 | \$306,621 | \$368,141 | \$429,660 |
| Affordable Purchase Price | \$243,150 | \$337,000 | \$404,000 | \$471,000 | \$340,690 | \$409,045 | \$477,400 |
| Median Sales Price | \$599,000 | \$425,000 | \$425,000 | \$425,000 | \$575,000 | \$575,000 | \$575,000 |
| Affordability Gap | \$141,850* | \$88,000 | \$21,000 | -\$46,000 | \$234,310 | \$165,955 | \$97,600 |

*Affordability Gap in 2007 calculated using a different methodology (MedianPrice/Sq.Ft). 2012 and 2016 numbers are calculated using Median Sales Price of all residential units sold in Eagle County at that time.

The table above shows that the affordability gap has increased significantly since 2012. Affordable purchase prices were calculated assuming a $4.5 \%$ interest rate, a fixed mortgage amortized over 30 years, $10 \%$ down payment, and HOA/property taxes/insurance at $20 \%$ of the mortgage payment. The median sales price of homes sold in Eagle County in 2007 was $\$ 599,000$. During the recession homes prices declined. In 2012, the median sales price had fallen to $\$ 425,000$. In 2012, a family of three earning I00\% AMI (\$76,350) had an affordability gap of \$88,000. At I20\% AMI, the gap lessened to $\$ 2$ I,000. At I40\% AMI that home was affordable.

In the current Eagle County housing market (2015 full year sales data), the median sales price has risen to $\$ 575,000$, close to pre-recession levels. In this four-year time period from 2012 to 2016, the AMI level has risen $4 \%$ while the median sales price of a home in Eagle County has risen $35 \%$. When we look at the current affordability gap we see a $\$ 234,310$ gap for that I00\% AMI family, and even at I $40 \%$ AMI, there is still a $\$ 97,600$ gap.

These new affordability gap numbers point to the increased need for more affordable housing options for the current and future Eagle County workforce.

[^10]
## Level of Service Estimates: the Mitigation Rate

The 2008 Nexus/Proportionality Analysis calculated a 55\% mitigation rate, based on the belief that " $55 \%$ of all households generated by jobs in Eagle County live in the county and have incomes equal to or less than 140\% AMI." ${ }^{17}$ This $55 \%$ was a target service level to address through housing guidelines and policies.

Using the more statistically sound method of cost burdened households provided by the American Community Survey (ACS), we see that 50.7\% of Eagle County's homeowners with a mortgage are cost-burdened. $46.5 \%$ of renters are cost-burdened. Using the ACS cost-burdened percentages produces a result consistent with the 2008 study methodology, but provides a more easily replicable and defensible source of data.

Table 3. Cost Burdened Households in Eagle County 2010-2014 ${ }^{18}$ (Average)


[^11]
## Conclusions and Recommendations

This update to the Housing Needs Assessment is intended to be factual and supported by accessible data sources. A few conclusions and recommendations are included in this final section, for use in informing future housing policies in Eagle County.

## Focus on Rental Housing

While the 2007 Housing Needs Assessment, the 2008 Nexus/Proportionality Study, and the 2009 Housing Guidelines focused most of the attention on ownership housing, it is clear from a review of the updated data that inclusion of rental housing is appropriate in 2016.

The most recent data shows that $46.5 \%$ of all renters are cost burdened (paying more than $30 \%$ of their income for housing). The most recent HUD Comprehensive Housing Affordability Strategy data (see Table 10, page 20) indicates that 66\% of owners earn 100\% or more of the Eagle County AMI. Only 35\% of renters meet this level. 32\% of renters earn 50\% or less AMI.

Currently and anecdotally, we understand that units that were long term workforce rentals are being removed from that market as they are converted into short term rentals. This has the potential to grow both catch-up and keep-up needs for workforce housing. The emerging short term rental market and its effect on long term workforce housing in Eagle County needs additional research and data so it can be included in housing policy moving forward.

For these reasons, we recommend that the Eagle County housing department place more emphasis on the need for affordable rental housing.

## Retiree Housing and Its Impact on Workforce Housing

Table 8 of this report (page 17) shows the number of new workers needed to replace current Eagle County workers who retire. As current workers retire, their housing units change in status from units that house workers to units that do not house workers (assuming the retirees stay in their homes). The new employees who fill the jobs vacated by retired workers create a demand for new housing units.

It is important to note that the retiree numbers in the report do not include second homeowners or amenity-seeking retirement migrants who may retire to Eagle County in the future. Both of these in-migration trends have been well documented and show up in the projected increase in the senior population from 2010-2025 (Appendix P-2). In 2010, the 65+ population comprised 6\% of the total Eagle County population. By 2025 that number is projected to rise to $17 \%$.

There is a need for more retirement/independent living options for the growing 65+ population in Eagle County. Additional housing options for retirees would have the added benefit of freeing up existing housing units that can be used to house the workforce that replaces them.

## Major Findings

Major changes to the recommendations of the 2012 study emerged in this update:
I. Shift back to $140 \%$ AMI

The rebounding of the housing market back to 2007 levels has caused households earning I40\% AMI to be impacted by the affordability gap. Housing targeted at I40\% AMI households was recommended in the 2007 study. The recession impacted numbers in the 2012 update, recommended lowering the emphasis to $100 \%$ AMI households. Now, with this new look at the numbers, we see that households earning up to $140 \%$ AMI are again experiencing a significant affordability gap.
2. Number of Housing Units Needed.

Table 4 on page II and the subsequent explanatory paragraphs and tables estimate the need for 11,960 housing units by 2025. The housing demand will be driven by two primary factors, housing demand from job growth and demand from replacement of retirees. The 2015 estimate of need is 4,466 . By 2020 that need will grow by 3,883 units to 8,349 (cumulative). By 2025, we add the need for another $3,6 \mathrm{II}$ units to bring the collective total to $I I, 960$. We feel that this is a reliable estimate based on current demographics, job forecasts, and trends.

## Future Updates to the Housing Needs Assessment

A focus on cost-burdened households through new American Community Survey data allows a way to assess the success of future housing policies (a reduction in the number of cost-burdened households could indicate success). This data can be monitored annually.

The 2007 Needs Assessment included four different surveys: household, in-commuting employees, employer, and realtor/property manager. Collecting data through surveys allows a broader and more qualitative approach to housing planning and policies, and may allow analysis at smaller geographic levels.

The changes in the Eagle County economy from 2007 to 2016 have been extensive. The recession data from 2010-2012 displayed dramatic changes to the number of jobs and to the unemployment rate, resulting in a lessening of the need for affordable housing. The more recent data is displaying an almost complete recovery in the employment sectors. Job generation projections for the future are positive. New surveys are needed to more accurately assess both the catch-up need and housing preferences for affordable housing in Eagle County.

## APPENDIX H-1

## Estimate of Housing Needed to Fill Jobs Vacated by Retirees, 2016-2025

In this update of the 2007 Housing Needs Assessment, the number of housing units needed for the "workforce required to replace members who retire" is estimated in a new way, based on "retirement rates" derived from the decline in labor force participation rates by higher age groups. The following describes how these new calculations are made.

Referring to the very first row on the table, the total population, ages 50 to 54 in 2016 is 3,659 . With a labor force participation rate (LFPR) of 0.84 , then 3,065 of this age group are in the workforce. Four years later, in 2020, the LFPR of this cohort is 0.78 , so the decline in LFPR is $0.84-0.78$ or 0.06 , which when divided by the beginning rate of 0.84 means that 0.06 / 0.84 or $7 \%$ of this cohort have retired, or that its "retirement rate" is 0.07 . Multiplying 0.07 times 3,065 (those in the workforce in 2016) equals 224, presumably the number of workers in this cohort who retired during this five-year period. However, the five-year survival rate of this group is 0.984 , which means that on average, only 220 of the 224 survived (four died) by 2020. Finally, assuming that the number of workers or retirees per household for this age group is 1.6 , this leads to the result that the number of housing units needed for the replacement of workers for this age group is 138 .

These calculations are performed for each five-year age group from 50-84 and for two five-year time periods, 2016-2020 and 2021-2025. The total number of units for each period is presented in bold in the lower right hand corner of each panel. The calculations were actually performed by gender - shown on the two lower panels - with the total (male and female) calculated as the sum (or average rates) of the genderspecific results. (Slightly rounding errors may have resulted from using length decimal places in the calculations.)

## Appendix H-1: Estimate of Housing Needed to Fill Jobs Vacated by Retirees, 2016-2025 ${ }^{19}$

## 2016-2020: All Retirees

| AGE <br> GROUP | Pop. | LFPR | In <br> Wrkforce | Retire. <br> Rate | New <br> Ret'd | $5-Y r$ <br> Surv. <br> Rate | Surv. <br> Retired | Ret'd <br> /Hhld | Needed <br> Housing |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5 0 - 5 4}$ | 3,659 | 0.84 | 3,065 | 0.07 | 224 | 0.984 | 220 | 1.6 | 138 |
| $\mathbf{5 5 - 5 9}$ | 3,624 | 0.78 | 2,812 | 0.20 | 576 | 0.974 | 561 | 1.5 | 374 |
| $\mathbf{6 0 - 6 4}$ | 3,126 | 0.62 | 1,933 | 0.37 | 717 | 0.960 | 689 | 1.4 | 492 |
| $\mathbf{6 5 - 6 9}$ | 2,448 | 0.39 | 947 | 0.30 | 283 | 0.939 | 266 | 1.3 | 205 |
| $\mathbf{7 0 - 7 4}$ | 1,564 | 0.27 | 424 | 0.43 | 181 | 0.902 | 163 | 1.2 | 136 |
| $\mathbf{7 5 - 7 9}$ | 728 | 0.16 | 114 | 0.51 | 58 | 0.846 | 49 | 1.1 | 45 |
| $\mathbf{8 0 - 8 4}$ | 370 | 0.07 | 28 | 1.00 | 28 | 0.752 | 21 | 1.0 | 21 |
| TOTAL | 15,519 | 0.60 | 9,323 |  | 2,066 |  | 1,968 |  | $\mathbf{1 , 4 1 2}$ |

2016-2020: Male Retirees

| AGE GROUP | Pop. | LFPR | In Wrkforce | Retire. Rate | New Ret'd | $5-\mathrm{Yr}$ <br> Surv. <br> Rate | Surv. <br> Retired | Ret'd <br> /Hhld | Needed Housing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50-54 | 1,937 | 0.88 | 1,705 | 0.09 | 155 | 0.982 | 152 | 1.6 | 95 |
| 55-59 | 1,879 | 0.80 | 1,503 | 0.16 | 244 | 0.969 | 237 | 1.5 | 158 |
| 60-64 | 1,663 | 0.67 | 1,114 | 0.33 | 366 | 0.957 | 350 | 1.4 | 250 |
| 65-69 | 1,258 | 0.45 | 566 | 0.31 | 176 | 0.928 | 163 | 1.3 | 126 |
| 70-74 | 806 | 0.31 | 250 | 0.42 | 105 | 0.876 | 92 | 1.2 | 77 |
| 75-79 | 383 | 0.18 | 69 | 0.44 | 31 | 0.807 | 25 | 1.1 | 22 |
| 80-84 | 183 | 0.10 | 18 | 1.00 | 18 | 0.717 | 13 | 1.0 | 13 |
| TOTAL | 8,109 | 0.64 | 5,225 |  | 1,095 |  | 1,032 |  | 743 |

[^12]2016-2020: Female Retirees

| AGE | Pop. | LFPR | In <br> GROUP |  |  | Wrkforce |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Retire. | Rate |
| :---: |


| AGE GROUP | Pop. | LFPR | 2021-2025: All Retirees |  |  |  | Surv. Retired | Ret'd <br> /Hhld | Needed Housing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { In } \\ & \text { Wrkforce } \end{aligned}$ | Retire. Rate | New Ret'd | $5-\mathrm{Yr}$ Surv. Rate |  |  |  |
| 50-54 | 3,554 | 0.84 | 2,987 | 0.08 | 253 | 0.989 | 250 | 1.6 | 156 |
| 55-59 | 3,623 | 0.77 | 2,778 | 0.18 | 503 | 0.979 | 493 | 1.5 | 328 |
| 60-64 | 3,561 | 0.63 | 2,231 | 0.41 | 907 | 0.965 | 875 | 1.4 | 625 |
| 65-69 | 3,018 | 0.37 | 1,128 | 0.27 | 306 | 0.942 | 289 | 1.3 | 222 |
| 70-74 | 2,276 | 0.27 | 616 | 0.43 | 262 | 0.910 | 238 | 1.2 | 199 |
| 75-79 | 1,396 | 0.16 | 217 | 0.52 | 112 | 0.847 | 95 | 1.1 | 86 |
| 80-84 | 616 | 0.08 | 46 | 1.00 | 46 | 0.754 | 35 | 1.0 | 35 |
| TOTAL | 18,044 | 0.55 | 10,003 |  | 2,390 |  | 2,275 |  | 1,655 |


| AGE GROUP | Pop. | LFPR | 2021-2025: Male Retirees |  |  |  | Surv. <br> Retired | Ret'd <br> /Hhld | Needed Housing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | In Wrkforce | Retire. <br> Rate | New Ret'd | $\begin{aligned} & 5-\mathrm{Yr} \\ & \text { Surv. } \\ & \text { Rate } \end{aligned}$ |  |  |  |
| 50-54 | 1,996 | 0.88 | 1,756 | 0.09 | 160 | 0.987 | 158 | 1.6 | 98 |
| 55-59 | 1,906 | 0.80 | 1,525 | 0.15 | 229 | 0.973 | 223 | 1.5 | 148 |
| 60-64 | 1,829 | 0.68 | 1,244 | 0.35 | 439 | 0.962 | 422 | 1.4 | 302 |
| 65-69 | 1,587 | 0.44 | 698 | 0.30 | 206 | 0.933 | 192 | 1.3 | 148 |
| 70-74 | 1,151 | 0.31 | 357 | 0.39 | 138 | 0.881 | 122 | 1.2 | 101 |
| 75-79 | 703 | 0.19 | 134 | 0.47 | 63 | 0.811 | 51 | 1.1 | 47 |
| 80-84 | 313 | 0.10 | 31 | 1.00 | 31 | 0.720 | 23 | 1.0 | 23 |
| TOTAL | 9,485 | 0.61 | 5,745 |  | 1,266 |  | 1,190 |  | 869 |

2021-2025: Female Retirees

| AGE |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GROUP | Pop. | LFPR | In <br> Wrkforce | Retire. <br> Rate | New <br> Ret'd | $5-Y r$ <br> Surv. <br> Rate | Surv. <br> Retired | Ret'd <br> /Hhld | Needed <br> Housing |
| $\mathbf{5 0 - 5 4}$ | 1,558 | 0.79 | 1,231 | 0.08 | 93 | 0.992 | 93 | 1.6 | 58 |
| $\mathbf{5 5 - 5 9}$ | 1,717 | 0.73 | 1,253 | 0.22 | 275 | 0.983 | 270 | 1.5 | 180 |
| $\mathbf{6 0 - 6 4}$ | 1,732 | 0.57 | 987 | 0.47 | 468 | 0.969 | 453 | 1.4 | 324 |
| $\mathbf{6 5 - 6 9}$ | 1,431 | 0.30 | 429 | 0.23 | 100 | 0.961 | 96 | 1.3 | 74 |
| $\mathbf{7 0 - 7 4}$ | 1,125 | 0.23 | 259 | 0.48 | 124 | 0.942 | 117 | 1.2 | 97 |
| $\mathbf{7 5 - 7 9}$ | 693 | 0.12 | 83 | 0.58 | 49 | 0.893 | 43 | 1.1 | 39 |
| $\mathbf{8 0 - 8 4}$ | 303 | 0.05 | 15 | 1.00 | 15 | 0.824 | 12 | 1.0 | 12 |
| TOTAL | 8,559 | 0.50 | 4,258 |  | 1123 |  | 1,084 |  | $\mathbf{7 8 6}$ |

## APPENDICES E-1 and E-2

Tables E-I and E-2 provide some basic data on the Eagle County economy from 2007 through 2014. Table E-I presents total jobs - both wage and salary and self-employed persons and proprietors. - by industrial sector. Table E-2 provides information on personal income by component. While personal income has largely consisted of earnings by place of work ( $71 \%$ in 2007 and $64 \%$ in 2014 ), it also includes monies earned outside of the county (residency adjustment), dividends, interest and rent, and personal transfer receipts from government (retirement and disability, medical, income maintenance, unemployment and veteran benefits) and from non-profits.

The data on jobs (Table E-I) show declines in total jobs from 2007 to 2010, and then increases from 2010 to 2014. The decline in the first period is mostly in construction and construction related fields, e.g., professional services, administrative and waste (includes temporary workers), some retail and, indirectly, real estate, and other services (laundry and personal services). The growth in the second period(s) is in tourismrelated industries: accommodation and food services, retail trade, administrative, and other services.

The data on personal income show a decline in earnings by place of work from 2007 to 2010 followed by increases of $0.9 \%$ and $5.3 \%$ per year during the periods of $2010-2012$ and $2012-2014$, respectively. Dividends, interest and rent also declined during the first period ( $-6.9 \%$ ) and then bounced up to $17.0 \%$ and $4.9 \%$ in the following two two-year periods. Personal transfer receipts, which grew $24.7 \%$ in the first period (2007-20I0), dropped to $0.3 \%$ and $4.8 \%$ in the following four years. Proprietors' income dropped from 2007 -2012, then picked back up in the last two years.

## APPENDIX E-1: Estimated Total Jobs by Industry, Eagle County, 2007-2014

|  | 2007 | 2010 | 2012 | 2014 | 2007-2010 | 2010-2012 | 2012-2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Jobs | 40,276 | 35,635 | 36,616 | 38,423 | -4,641 | 981 | 1,807 |
| Agriculture | 186 | 193 | 208 | 218 | 7 | 15 | 10 |
| Mining | 14 | 17 | 16 | 22 | 3 | -1 | 6 |
| Utilities | 68 | 66 | 68 | 84 | -2 | 2 | 16 |
| Construction | 6,328 | 3,616 | 3,334 | 3,771 | -2,712 | -282 | 437 |
| Construction of buildings | 1,551 | 874 | 723 | 896 | -677 | -151 | 173 |
| Heavy construction | 254 | 143 | 123 | 141 | -111 | -20 | 18 |
| Special trade contractors | 4,523 | 2,599 | 2,488 | 2,734 | -1,924 | -111 | 246 |
| Manufacturing | 442 | 274 | 321 | 383 | -168 | 47 | 62 |
| Wholesale trade | 524 | 516 | 411 | 635 | -8 | -105 | 224 |
| Rotail Trado | 3,814 | 3,319 | 3,532 | 3,694 | -495 | 213 | 162 |
| Transportation and warehousing | 653 | 543 | 648 | 686 | -110 | 105 | 38 |
| Information | 512 | 402 | 368 | 356 | -110 | -34 | -12 |
| Finance activities | 826 | 794 | 733 | 732 | -32 | -61 | -1 |
| Real ostate | 3,159 | 2,993 | 3,027 | 3,142 | -166 | 34 | 115 |
| Profossional \& businoss srvcs | 2,472 | 2,059 | 2,158 | 2,257 | -413 | 99 | 99 |
| Management of companies | 153 | 119 | 116 | 63 | -34 | -3 | -53 |
| Admin and wasto | 2,197 | 1,865 | 1,989 | 2,148 | -332 | 124 | 159 |
| Education | 278 | 331 | 353 | 436 | 53 | 22 | 83 |
| Health Services | 2,026 | 2,155 | 2,166 | 2,345 | 129 | 11 | 179 |
| Arts | 3,630 | 3,674 | 3,878 | 4,092 | 44 | 204 | 214 |
| Accommodation and food | 7,154 | 6,845 | 7,429 | 7,546 | -309 | 584 | 117 |
| Accommodation | 2,851 | 2,949 | 3,367 | 3,205 | 98 | 418 | -162 |
| Food services, drinking places | 4,303 | 3,896 | 4,062 | 4,341 | -407 | 166 | 279 |
| Other services, exc. govt. | 2,955 | 2,495 | 2,612 | 2,513 | -460 | 117 | -99 |
| Government | 2,885 | 3,359 | 3,249 | 3,300 | 474 | -110 | 51 |
| Federal and state | 227 | 278 | 249 | 253 | 51 | -29 | 4 |
| Local government | 2,658 | 3,081 | 3,000 | 3,047 | 423 | -81 | 47 |
| Total Jobs | 40,276 | 35,635 | 36,616 | 38,423 | -4,641 | 981 | 1,807 |
|  | 40,276 | 35,635 | 36,616 | 38,423 | -4,641 | 981 | 1,807 |

## APPENDIX E-2: Personal Income of Residents by Components, Eagle County, 2007 - 2014, part 1

| (In Millions of Dollars) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Component | 2007 |  | 2010 |  | 2012 |  | 2014 |  |
| Total Personal Income | Amt. | $\begin{gathered} \% \text { of } \\ \mathrm{TI} \\ \hline \end{gathered}$ | Amt. | $\begin{gathered} \% \text { of } \\ \mathrm{TI} \\ \hline \end{gathered}$ | Amt. | $\begin{gathered} \% \text { of } \\ \text { TI } \end{gathered}$ | Amt. | $\begin{gathered} \% \text { of } \\ \text { TI } \end{gathered}$ |
| Earnings by Place of Work | \$ 1,967 | 71\% | \$ 1,739 | 70\% | \$ 1,769 | 63\% | \$ 1,962 | 64\% |
| Wage \& Salary Disbursements | \$ 1,394 | 51\% | \$ 1,189 | 48\% | \$ 1,234 | 44\% | \$ 1,382 | 45\% |
| Supplements to Wages \& Salaries | \$ 246 | 9\% | \$ 227 | 9\% | \$ 229 | 8\% | \$ 256 | 8\% |
| Proprietors Income | \$ 327 | 12\% | \$ 323 | 13\% | \$ 306 | 11\% | \$ 324 | 11\% |
|  |  |  |  |  |  |  |  |  |
| Earnings by Place of Work | \$ 1,967 | 71\% | \$ 1,739 | 70\% | \$ 1,769 | 63\% | \$ 1,962 | 64\% |
| - Pymnts for Govrnmt Social Ins. | \$ (213) | -8\% | \$ (181) | -7\% | \$ (171) | -6\% | \$ (215) | -7\% |
| + Residency Adj. for Commuting | \$ 38 | 1\% | \$ 40 | 2\% | \$ 55 | 2\% | \$ 73 | 2\% |
| $=$ Net Earnings by Place of Residency | \$ 1,792 | 65\% | \$ 1,599 | 65\% | \$ 1,654 | 59\% | \$ 1,820 | 59\% |
| + Dividends, Interest, Rent | \$ 880 | 32\% | \$ 709 | 29\% | \$ 970 | 35\% | \$ 1,067 | 35\% |
| + Personal Transfer Receipts | \$ 83 | 3\% | \$ 161 | 7\% | \$ 162 | 6\% | \$ 178 | 6\% |
| $=$ TI. Personal Income (Residnts) | \$ 2,755 | 100\% | \$ 2,469 | 100\% | \$ 2,786 | 100\% | \$ 3,065 | 100\% |
| Population (U.S. Census Bureau) | 49,803 |  | 52,099 |  | 51,951 |  | 52,921 |  |
| Per Capita Income (Actual \$) | \$55,317 |  | \$47,395 |  | \$53,618 |  | \$57,927 |  |

## APPENDIX E-2: Personal Income of Residents by Components, Eagle County, 2007-2014, part 2

| Component | Annual Average Pct. Change |  |  |
| :---: | :---: | :---: | :---: |
| Total Personal Income | '07-10 | '10-12 | '12-14 |
| Earnings by Place of Work | -4.0\% | 0.9\% | 5.3\% |
| Wage \& Salary Disbursements | -5.2\% | 1.9\% | 5.8\% |
| Supplements to Wages \& Salaries | -2.6\% | 0.4\% | 5.7\% |
| Proprietors Income | -0.4\% | -2.7\% | 2.9\% |
| Earnings by Place of Work | -4.0\% | 0.9\% | 5.3\% |
| - Payments for Govrnmt Social Ins. | -5.3\% | -2.8\% | 12.1\% |
| + Residency Adj. for Commuting | 1.7\% | 17.3\% | 15.2\% |
| = Net Earnings by Place of Residency | -3.7\% | 1.7\% | 4.9\% |
| + Dividends, Interest, Rent | -6.9\% | 17.0\% | 4.9\% |
| + Personal Transfer Receipts | 24.7\% | 0.3\% | 4.8\% |
| = TI. Personal Income (Residents) | -3.6\% | 6.2\% | 4.9\% |
| Population (U.S. Census Bureau) | 1.5\% | -0.1\% | 0.9\% |
| Per Capita Income (Actual \$) | -5.0\% | 6.4\% | 3.9\% |

## APPENDIX P-1: Eagle County Population by Municipality, 2000-2014

The population of the county grew at an average annual rate of nearly . $4 \%$ per year during the period 2010-2014. Gypsum had the highest percentage growth (1.2\%) during this time period. Most notable is the continued growth in the County during the years 2007 - 2010 when there was an II\% decline in jobs.

| Table P-1. Total Population by Municipality, Eagle County, 2000-2014 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Colorado State Demography Estimates |  |  |  |  | Avg. Annual Rate Of Change |  |  |  |
| Area | July 2000 | July 2005 | July 2007 | July 2010 | July 2014 | 00-05 | 05-07 | 07-10 | 10-14 |
| EAGLE COUNTY | 43,289 | 47,278 | 49,284 | 52,057 | 52,831 | 1.8 | 2.1 | 1.8 | 0.4 |
| Avon | 6,124 | 6,570 | 6,524 | 6,413 | 6,478 | 1.4 | -0.4 | -0.6 | 0.2 |
| Basalt (Part) | 2,031 | 2,470 | 2,630 | 2,919 | 2,964 | 4.0 | 3.2 | 3.5 | 0.4 |
| Eagle | 3,071 | 4,289 | 5,371 | 6,483 | 6,570 | 6.9 | 11.9 | 6.5 | 0.3 |
| Gypsum | 4,151 | 4,956 | 5,528 | 6,517 | 6,797 | 3.6 | 5.6 | 5.6 | 1.2 |
| Minturn | 1,079 | 1,084 | 1,100 | 1,035 | 1,043 | 0.1 | 0.7 | -2.0 | 0.4 |
| Red Cliff | 298 | 298 | 293 | 269 | 264 | 0.0 | -0.8 | -2.8 | -0.2 |
| Vail | 4,825 | 4,613 | 4,592 | 5,278 | 5,320 | -0.9 | -0.2 | 4.8 | 0.2 |
| Unincorp. Area | 21,710 | 22,998 | 23,246 | 23,143 | 23,395 | 1.2 | 0.5 | -0.1 | 0.2 |

## APPENDIX P-2: Eagle County Population by Age, 2000-2025

Table P-2A shows the population by age for the County. The youngest age group (0-I7) has been decreasing from $23 \%$ of the total population in 2000 to a projected $20 \%$ by 2025. In contrast, the oldest age group (65+) has been increasing from just 3\% in 2000 to $9 \%$ in 2015 , and then projected to reach $15 \%$ in 2025.

Table P-2B compares Eagle County's population by age group to that of the State of Colorado from 2010 to 2025.

Table P-2A. Population by Age, Eagle County, 2000-2025

|  | 2000 |  | 2010 |  | 2015 |  | 2025 |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age Group | Amount | Pct. of TI. | Amount | Pct. of TI. | Amount | Pct. of TI. | Amount | Pct. of TI. |
| 0 to 17 | 10,148 | $23 \%$ | 12,762 | $25 \%$ | 12,795 | $24 \%$ | 13,053 | $20 \%$ |
| 18 to 24 | 4,940 | $11 \%$ | 4,356 | $8 \%$ | 5,089 | $10 \%$ | 6,797 | $10 \%$ |
| 25 to 44 | 18,147 | $42 \%$ | 18,753 | $36 \%$ | 16,668 | $31 \%$ | 20,602 | $32 \%$ |
| 45 to 64 | 8,755 | $20 \%$ | 13,188 | $25 \%$ | 13,823 | $26 \%$ | 14,720 | $23 \%$ |
| 65 \& Over | 1,298 | $3 \%$ | 3,005 | $6 \%$ | 4,928 | $9 \%$ | 9,874 | $15 \%$ |
| Total | 43,288 | $100 \%$ | 52,064 | $100 \%$ | 53,303 | $100 \%$ | 65,046 | $100 \%$ |

Table P-2B. Population by Age, Eagle County and Colorado, 2010-2025

| Age Group | Eagle County |  |  |  | Colorado |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2025 |  | 2010 |  | 2025 |  |
|  |  |  |  |  |  | (numbers in | housand |  |
|  | Number | \% of Total | Number | \% of Total | Number | \% of Total | Number | \% of Total |
| 0 to 17 | 12,762 | 25\% | 13,053 | 20\% | 1,227 | 24\% | 1,436 | 22\% |
| 18 to 24 | 4,356 | 8\% | 6,797 | 10\% | 489 | 10\% | 628 | 10\% |
| 25 to 44 | 18,753 | 36\% | 20,602 | 32\% | 1,431 | 28\% | 1,778 | 28\% |
| 45 to 64 | 13,188 | 25\% | 14,720 | 23\% | 1,346 | 27\% | 1,521 | 24\% |
| 65 \& Over | 3,005 | 6\% | 9,874 | 15\% | 554 | 11\% | 1,089 | 17\% |
| Total | 52,064 | 100\% | 65,046 | 100\% | 5,047 | 100\% | 6,452 | 100\% |

## APPENDIX P-3: Population, Households, and Housing Units in Eagle County, 2000-2014

Table P-3 contains data on households and housing units. Not much has changed during the last decade in the relationship among these variables. The number of persons per household has remained constant at a little over 2.7. Occupancy rates (of residents) have been just above $60 \%$, with owners constituting $64 \%$ of the occupied units and renters $36 \%$. Approximately three-quarters the vacancies, or $30 \%$ of the total units, are for seasonal or recreational use.

|  | 2000 | 2005 | 2007 | 2010 | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total Population | 43,289 | 47,278 | 49,284 | 52,067 | 52,831 |
| Group Quarters Pop. | 353 | 353 | 353 | 55 | 70 |
| Household Population | 42,936 | 46,925 | 48,931 | 52,012 | 52,761 |
| Persons per Household | 2.73 | 2.74 | 2.75 | 2.71 | 3 |
| Total Housing Units | 25,145 | 28,711 | 30,271 | 31,390 | 31,675 |
| Occupied Units (Households) | 15,751 | 17,124 | 17,818 | 19,209 | 19,447 |
| Occupancy Rate (Residents) | 63\% | 60\% | 59\% | 61\% |  |
| Owner Occupied | 10,033 |  |  | 12,326 | 12343 |
| Pct. of Occupied Units | 63.7\% |  |  | 64.2\% | 64 |
| Renter Occupied | 5,718 |  |  | 6,883 | 6,893 |
| Pct. of Occupied Units | 36.3\% |  |  | 35.8\% | 36 |
| Vacant Units | 9,394 | 11,587 | 12,453 | 12,181 | 12,228 |
| Vacancy Rate | 37\% | 40\% | 41\% | 39\% | 39\% |
| Seasonal Use Units* | 6,739 | 8,297 | 9,003 | 9,731 | 9,710 |
| Pct. of Total | 27\% | 29\% | 30\% | 31\% | 31\% |
|  | Note: All data are as of July 1 for all years, from the State Demography Office. |  |  |  |  |

## APPENDIX P-4: Households by Type, Eagle County and Colorado, 2000 and 2010

Family households in Eagle County comprised 60\% and 62\% (note the small increase) of total households in 2000 and 2010, respectively. Statewide, $65 \%$ of households were family households in 2000, and $64 \%$ in 2010. The percentage of non-family households in Eagle County is slightly higher than the statewide average, but that difference has decreased over the ten-year period.

## Eagle County

|  | 2000 |  | 2010 |  |
| :---: | ---: | ---: | ---: | ---: |
| Household Type | Number | \% of Total | Number | \% of Total |
| Total Households | 15,148 | $100 \%$ | 19,236 | $100 \%$ |
| Family Households | 9,020 | $60 \%$ | 11,991 | $62 \%$ |
| With own children under 18 | 4,947 | $33 \%$ | 6,357 | $33 \%$ |
| Husband \& wife | 4,025 | $27 \%$ | 5,090 | $26 \%$ |
| Female Householder | 612 | $4 \%$ | 841 | $4 \%$ |
| Nonfamily Households | 6,128 | $40 \%$ | 7,245 | $38 \%$ |
| Householder living alone | 3,168 | $21 \%$ | 4,269 | $22 \%$ |
| Householder alone 65+ | 287 | $2 \%$ | 660 | $3 \%$ |


|  | Colorado <br> Household Type <br> 2000 <br> (numbers in thousands) |  |  |  |
| :---: | ---: | ---: | ---: | ---: |
|  | Number | \% of Total | Number | \% of Total |
| Total Households | 1,658 | $100 \%$ | 1,973 | $100 \%$ |
| Family Households | 1,084 | $65 \%$ | 1,262 | $64 \%$ |
| With own children under 18 | 544 | $33 \%$ | 590 | $30 \%$ |
| Husband \& wife | 405 | $24 \%$ | 423 | $21 \%$ |
| Female Householder | 102 | $6 \%$ | 118 | $6 \%$ |
| Nonfamily Households | 574 | $35 \%$ | 711 | $36 \%$ |
| Householder living alone | 436 | $26 \%$ | 551 | $28 \%$ |
| Householder alone 65+ | 116 | $7 \%$ | 154 | $8 \%$ |

NOTE: Census Data, as of April I.


[^0]:    ${ }^{1}$ See "Eagle County Nexus / Proportionality Analysis for Commercial Development / Workforce Housing Linkage", prepared by RRC Associates, Inc./Rees Consulting, Inc., January 2008.
    ${ }^{2}$ Eagle County Housing Needs Assessment, 2007 prepared by RRC Associates, Inc./Rees Consulting, Inc., December 2007, pp. $7-8$, and $80-85$.

[^1]:    ${ }^{3}$ State Demography Office and Colorado Labor Market Information.

[^2]:    ${ }^{4}$ American Community Survey, 2014.

[^3]:    ${ }^{5}$ Eagle County Housing Needs Assessment, 2007, p. 80.
    ${ }^{6}$ Economic Council of Eagle County, 2011-2012 Workforce Survey.
    ${ }^{7}$ Eagle County Housing Needs Assessment, 2007, p. 82.

[^4]:    ${ }^{8}$ Eagle County Housing Needs Assessment, 2007, p. 83.
    ${ }^{9}$ Eagle County Housing Needs Assessment, 2007, p. 83.

[^5]:    ${ }^{10}$ Source: State Demography Office and Colorado Labor Market Information

[^6]:    ${ }^{11}$ Source of data on population and labor force participation rates: State Demography Office, Colorado Department of Local Government.

[^7]:    ${ }^{12}$ Housing and Urban Development

[^8]:    ${ }^{13}$ Comprehensive Housing Affordability Strategy Data, 2008-2012 Analysis

[^9]:    ${ }_{15}^{14}$ Analysis and calculations using HUD AMI data
    ${ }^{15}$ Nexus/Proportionality Analysis for Commercial Development/Workforce Housing Linkage, January 2008, RRC Associates, Inc., Rees Consulting, Inc.

[^10]:    ${ }^{16}$ Analysis and calculations using HUD AMI data and Eagle County real estate sales data.

[^11]:    ${ }^{17}$ Nexus/Proportionality Analysis for Commercial Development/Workforce Housing Linkage, January 2008, RRC Associates, Inc., Rees Consulting, Inc.
    ${ }^{18}$ American Community Survey, 2014.

[^12]:    ${ }^{19}$ Source of data on population and labor force participation rates: State Demography Office, Colorado Department of Local Government.

