

# Housing Needs Assessment Update 2012 

Venturoni Surveys \& Research, Inc.
Linda Venturoni, President
Jim Westkott, Senior Economist and Demographer

# Eagle County Housing Needs Assessment Update 2012 

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The mission of the Eagle County Housing Department is to provide innovative, affordable housing solutions to the working people, elderly and disadvantaged members of the Eagle County community.

# Eagle County Housing Needs Assessment Update 2012 

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## Eagle County Housing Needs Assessment Update 2012

## Introduction

Eagle County completed a Housing Needs Assessment in 2007, and a Nexus Proportionality study in 2008. The results of those two analyses were used as a basis for its 2009 Housing Guidelines.

Economic conditions in the United States, Colorado, and Eagle County have changed drastically since 2007-2008. Eagle County has gone from full employment (under 3\%) to a rate of almost $9 \%$ unemployment in 201 I . Because 2007 was the height of the prerecession growth period, the 2007 Housing Needs Assessment defined a need for affordable worker housing at its peak in recent years. Calculations in the 2008 Nexus study targeted ownership housing for workforce families earning I40\% of Area Median Income (AMI).

The 2009 Eagle County Local-Resident Housing Guidelines Section I-I00 begins with this statement of need:

> Eagle County faces a substantial County-wide gap in the availability of ownership and rental housing that is affordable for local residents. Households are burdened by high housing payments, and employees are forced to commute long distances. Overcrowding is common. Jobs remain unfilled, negatively impacting business operations, and the vast majority of employers believe that the availability of workforce housing is a critical or major problem in Eagle County.

> Housing problems have long been recognized in Eagle County. Eagle County commissioned housing needs assessment studies, completed in 1990, 1999 and 2007, that demonstrated these needs.

During 20II, Eagle County Housing and Planning Department staff met with private and municipal planners to review and discuss the 2009 Housing Guidelines. Participants in those meetings were in agreement that housing guidelines are still appropriate in Eagle County, that housing needs follow economic growth and recession cycles, and that 2012 is an appropriate time to review, simplify, and possibly modify the guidelines.

The purpose of this update is to examine the assumptions made in 2007 and 2008, update the data for current conditions, and make recommendations for possible modifications to the 2009 Housing Guidelines.

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 (CHAS), Bureau of Economic Analysis, Labor Market Information, Economic Council of Eagle County, Eagle County Clerk and Recorder, Eagle County Assessor, 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 publically-accessible data sources.

The current housing situation 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 2012 update to the Needs Assessment; an explanation of and update to the 2008 Nexus/Proportionality Study; and a final section that includes recommendations for consideration when revising Housing Guidelines.

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 and prepared as a joint project between Venturoni Surveys \& Research, Inc., and the Economic Council of Eagle County. It is presented to the Housing Department of Eagle County for use in development and potential revisions of housing policies and guidelines.

## 2007 Housing Needs Assessment: An Overview

The 2007 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 Guidelines for new development. In addition, a "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. Eagle County 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 | $\mathbf{4 , 7 7 6}$ |
| Keep - Up Needs: 2015 | 3,284 |
| Housing Demand from Job Growth | $\mathbf{8 , 0 6 0}$ |
| Demand from Replacement of Retirees | $\mathbf{1 2 , 5 0 6}$ |
| Total Keep - Up Needs |  |
| Total Housing Needs |  |

[^0]
## Housing Needs Assessment: 2012 Update

Since the peak housing demand generated by the workforce in 2007, the number of jobs has dropped dramatically (a decline of $12 \%$ from 2007 to 201I). Rather counterintuitively, the population continued to increase through 2010, albeit quite slowly compared to recent decades. Demographers ${ }^{3}$ believe that this divergence in the number of jobs and people has been accompanied by a considerable drop in labor force participation rates, as discouraged workers - those not seeking work - have not left the county. The loss in jobs of $\mathrm{I} 2 \%$ is matched with a drop in the civilian labor force of only $6 \%$ over the same time period. (The 2011 civilian labor force includes a sharp increase in the number of unemployed compared to 2007.) Total population in the County grew about $5.1 \%$ from 2007 to 20II. Most of that growth took place from 2007 to 2008.

Table 2. Population, Jobs and Employment

$$
2007-2011^{4}
$$

| YEAR | County <br> Population | Jobs | Civilian <br> Labor <br> Force | Employment | Unemployment | Unemployment <br> Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007 | 49,284 | 41,727 | 31,161 | 30,267 | 894 | $2.9 \%$ |
| 2008 | 50,301 | 40,449 | 31,851 | 30,721 | 1,130 | $3.5 \%$ |
| 2009 | 51,520 | 37,230 | 30,666 | 28,269 | 2,397 | $7.8 \%$ |
| 2010 | 52,057 | 35,750 | 29,724 | 26,897 | 2,827 | $9.5 \%$ |
| 2011 | 51,777 | 36,605 | 29,425 | 26,884 | 2,541 | $8.6 \%$ |

In spite of the slow population growth in the County, the drop in jobs has caused a corresponding drop in the need for employee housing. It is reasonable to assume that the demand for unfilled jobs is much less (there are more people, and fewer jobs). In addition, because of the dramatic decline in the county economy and persistent problems in the national and international economies, short- and middle- term expectations of job growth are significantly lower than in the 2007 Needs Assessment report.

Along with the drop in the number of units needed for employees in the County (caused by the recession) is a decline in the household income of workers and nonworkers. This drop in income has made it difficult for many families to pay for housing. Recent data released by the U. S. Census Bureau show that approximately $45 \%$ of all households, ( $43.8 \%$ of owners and $46.5 \%$ of renters) in the county pay more than $30 \%$ of their income for housing-related expenses (see Table 3, following page).

[^1]
## Table 3. Cost Burdened Households in Eagle County 2008-2010



The estimate of the need for affordable housing (see Table 4, next page) does not include any 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 affordable housing problem in Eagle County. The number of costburdened households is high, and affects people who are already living in the county.

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 affordable 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 are estimated at 4,853, which is only $39 \%$ of the need for 12,506 units predicted in 2007. By 2020, approximately 4,740 additional housing units (for a ten-year total of 9,593 ) will be needed according to current projections.

[^2]Table 4. Eagle County Housing Needs, 2011 - 2020

| Type of Need | 2007 Est. | $\begin{gathered} 2011 \\ \text { Est. } \end{gathered}$ | 2015 Est. | 2020 Est. |
| :---: | :---: | :---: | :---: | :---: |
| Catch - Up Needs |  |  |  |  |
| Demand from Unfilled Jobs in 2007 | 1,420 | 200 |  |  |
| In - Commuters | 2,469 | 1,507 |  |  |
| Units Needed to Address Overcrowding | 557 | 600 |  |  |
| Total Catch - Up Needs | 4,446 | 2,307 |  |  |
| Keep - Up Needs |  |  |  |  |
| Housing Demand from Job Growth | 4,776 |  | 1,476 | 3,372 |
| Demand from Replacement of Retirees | 3,284 |  | 1,070 | 1,368 |
| Total Keep - Up Needs | 8,060 |  | 2,546 | 4,740 |
| Total Housing Needs | 12,506 |  | $\begin{array}{r} 4,853 \\ (2011+2015) \\ \hline \end{array}$ | $\begin{array}{r} 9,593 \\ (2015+2020) \\ \hline \end{array}$ |

## Explanation of Housing Needs Estimates: Catch-Up Needs

## 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 that of a tight labor market) "concerning the number of unfilled jobs and the number of employees living in Eagle County and available for work" ${ }^{6}$. These factors have all changed now, considerably lowering this need: the number of unfilled jobs is much lower and the labor market is less tight (there are unemployed or underemployed workers available to fill jobs). The annual Workforce Survey conducted by the Economic Council ${ }^{7}$ indicates that while workforce housing is still a need for area employers, it is much less of an issue than in 2007. For this update, it is estimated that this number of housing units needed for unfilled jobs is quite small (200 units).

## In-Commuters

The 2007 Assessment also estimated a catch-up need of housing for in-commuters ${ }^{8}$. 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\%).

[^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 $12 \%$. However, there is no new estimate of the percent of these who would move into the county if affordable housing were available to them. Using the same percentage as the 2007 survey result, the number of employees who would move into the county is 2,562 and the number of housing units needed for them would be I,507 (see Table 5).

Table 5. Catch-Up Needs Generated by In-Commuting Employees

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 1}$ |
| :--- | :---: | :---: |
| Total Jobs | 41,727 | 36,605 |
| Average Jobs per Employee | 1.2 | 1.2 |
| Total Employees | 34,773 | 30,504 |
| In-Commuters | 6,351 | 3,660 |
| \% of Total Employees | $18.3 \%$ | $12.0 \%$ |
| \# who would move to Eagle County (70\%) | 4,446 | 2,562 |
| Employees per household | $1.8^{9}$ | $1.7^{10}$ |
| TOTAL HOUSING UNITS NEEDED | $\mathbf{2 , 4 6 9}$ | $\mathbf{1 , 5 0 7}$ |

## 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 1.5 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" ${ }^{\prime \prime}$, 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 yields an estimate of I,889 overcrowded units. Multiplying this number by $30 \%$ produces an estimate of 567 units needed to address the problem of overcrowding. However, given the effects of the recession, it is likely that the percentage of occupied overcrowded housing units is currently somewhat higher (lower

[^4]wages, higher unemployment). Using an estimate just slightly higher than the previous $30 \%$ produces a total of 600 units needed to address overcrowding in 20 II .

## Explanation of Housing Needs Estimates: Keep-Up Needs

## Housing Demand from Job Growth

The 2007 Needs Assessment used a jobs forecasts developed by SDO/DOLA. This forecast predicted a net gain of 4,400 jobs from 2007 to 2010 and an additional 10,316 jobs from 2010 to 2015. Because of the recession, the increase of 4,400 jobs never materialized; the number of jobs actually declined by almost $6,000(5,977)$ from 2007 to 2010. (See figures in Table 2, page 8). Furthermore, the forecasts of increases from 2010 to 2015 and beyond are now significantly reduced.

Current SDO/DOLA forecasts of job growth may be too high, and future revisions may show lower numbers. The forecasts provided on the following page in Table 6 provide a basis for an initial set of estimates of housing demand from job growth.

The assumptions of this revised forecast are that job growth in the national economy will continue to grow at a slow pace through 2013 and then at the rate of $2.0 \%$ to 2015 . During this period, Eagle County's annual average rate of job growth can be expected to be somewhat higher, I.I\% through 2013 and $2.5 \%$ from 2013 to 2015 . In the five years after that, 2015-2020, annual average job increases are likely to be higher, in the range of $3 \%-4 \%$ or more.

The slow job growth rate in the national economy is the result of both national and international woes, e.g., the U. S. government debt, and the Eurozone bailouts of struggling national economies (Greece, Portugal, Spain). The stronger expected growth in Eagle County jobs is mainly because of strong increases in the number of retirees, particularly in the Colorado metropolitan Front Range, but also in other parts of western United States. These retiree households in one way or another - as day or destination tourists, as second home occupants, or as resident retirees - will make greater use of the scenic and recreational resources of the county. Their presence, in turn, will create greater needs for tourism-related services and household and health care.

Table 6. Jobs Forecast in Eagle County, 2011-2020

|  | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 2 0}$ |
| :--- | ---: | ---: | ---: | ---: |
| Eagle County |  |  |  |  |
| $\quad$ Number of Jobs | 36,605 | 37,400 | 39,300 | 46,178 |
| Average Annual \% Change |  | $1.1 \%$ | $2.5 \%$ | $3.5 \%$ |
|  |  |  |  |  |
| United States | 131,360 | 134,500 | 140,000 | 147,000 |
| Number of Jobs (x 1,000) |  | $1.2 \%$ | $2.0 \%$ | $1.0 \%$ |
| Average Annual \% Change |  |  |  |  |

Applying this revised jobs forecast to the 2007 Needs Assessment template for estimating housing needs to fill new jobs generates housing demands of 541 in 2013, 935 in 2015, and 3,372 in 2020 (see Table 7).

Table 7. Estimate of Housing Needed to Fill New Jobs 2011-2020

|  | 2011 | 2013 | 2015 | 2020 |
| :---: | :---: | :---: | :---: | :---: |
| Total Forecasted Jobs | 36,605 | 37,400 | 39,300 | 46,178 |
| Increase in Jobs over Prior Period |  | 795 | 1,900 | 6,878 |
| Jobs per Employed Person |  | 1.2 | 1.2 | 1.2 |
| New Employed Persons Needed |  | 920 | 1,590 | 5,732 |
| Employed Persons/Housing Unit |  | 1.7 | 1.7 | 1.7 |
| Housing Demand Generated (Units) |  | 541 | 935 | 3,372 |

## Housing Demand from Replacement of Retirees

In this update, 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 Needs Assessment. In that 2007 report, it was estimated that $40 \%$, or 5,9II, of the workers between 57 and 64 in 2007 would retire by 2015. Assuming the number of employees (employed persons) per household was 1.8 , this resulted in a housing demand of 3,284 units. In this update, the number of retirees by five-year age groups over 50 is estimated on the basis of declines in their labor force participation (defined as
retirement rates) during the periods $2011-2015$ and 2016 - 2020. These new estimates of housing demand from the replacement of retirees - I,070 and I,368 respectively - are much lower than in the 2007 Needs Assessment report (for a full explanation of this chart, see Appendix l).

Table 8. Estimate of Housing Needed to Fill Jobs Vacated by Retirees, 2011-2020 ${ }^{12}$

| 2011-2015 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGE GROUP | Pop. | LFPR | In Wrkforce | Retire. <br> Rate | New <br> Ret'd | 5-Yr <br> Surv. <br> Rate | Surv. <br> Retired | Ret'd <br> /Hhld | Needed Housing |
| 50-54 | 3,711 | 0.81 | 3,021 | 0.07 | 216 | 0.982 | 213 | 1.6 | 133 |
| 55-59 | 3,081 | 0.76 | 2,328 | 0.23 | 540 | 0.973 | 525 | 1.5 | 350 |
| 60-64 | 2,519 | 0.58 | 1,458 | 0.40 | 576 | 0.960 | 553 | 1.4 | 395 |
| 65-69 | 1,533 | 0.35 | 538 | 0.24 | 127 | 0.936 | 119 | 1.3 | 91 |
| 70-74 | 738 | 0.27 | 199 | 0.42 | 84 | 0.906 | 76 | 1.2 | 63 |
| 75-79 | 408 | 0.15 | 63 | 0.52 | 33 | 0.854 | 28 | 1.1 | 25 |
| 80-84 | 201 | 0.07 | 15 | 1.00 | 15 | 0.749 | 11 | 1.0 | 11 |
| TOTAL | 12,191 |  | 7,621 |  | 1,591 |  | 1,525 |  | 1,070 |


| AGE | Pop. | LFPR | In <br> Wrkforce | 2016-2020 <br> Retire. <br> Rate |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GROUP |  |  |  |  |

(Note: LFPR = Labor Force Participation Rate)

[^5]
## Nexus and Proportionality: 2012 Update

In addition to the Housing Needs Assessment completed in 2007, the County utilized a "Nexus and Proportionality" study from 2008 to inform the 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 Guidelines. 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 2012 are shown below, along with a comparison to 2007 for $100 \%$ AMI levels.

Table 9. Area Median Income by Household Size, $2012^{13}$

|  | Household Size |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| AMI Level | 1-person | 2 persons | 3 persons | 4 persons | 5 persons |
| 50\% AMI | $\$ 29,700$ | $\$ 33,925$ | $\$ 38,175$ | $\$ 42,400$ | $\$ 45,800$ |
| 60\% AMI | $\$ 35,640$ | $\$ 40,710$ | $\$ 45,810$ | $\$ 50,880$ | $\$ 54,960$ |
| 80\% AMI | $\$ 47,520$ | $\$ 54,280$ | $\$ 61,080$ | $\$ 67,840$ | $\$ 73,280$ |
| $100 \%$ AMI | $\$ 59,400$ | $\$ 67,850$ | $\$ 76,350$ | $\$ 84,800$ | $\$ 91,600$ |
| $120 \%$ AMI | $\$ 71,280$ | $\$ 81,420$ | $\$ 91,620$ | $\$ 101,760$ | $\$ 109,920$ |
| $140 \%$ AMI | $\$ 83,160$ | $\$ 94,990$ | $\$ 106,890$ | $\$ 118,720$ | $\$ 128,240$ |
|  |  |  |  |  |  |

100\% AMI Comparison, 2007 and 2012

| AMI Level | 1-person | 2 persons | 3 persons | 4 persons | 5 persons |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 100\% - 2007 | $\$ 56,800$ | $\$ 64,900$ | $\$ 73,000$ | $\$ 81,100$ | $\$ 87,600$ |
| $100 \%-2012$ | $\$ 59,400$ | $\$ 67,850$ | $\$ 76,350$ | $\$ 84,800$ | $\$ 91,600$ |
| Change | $4.6 \%$ | $4.5 \%$ | $4.6 \%$ | $4.6 \%$ | $4.6 \%$ |

[^6]
## Income Distribution of Eagle County Households

Household income distribution by tenure (renter or owner) was calculated using 2005 2009 data from the Comprehensive Housing Affordability Strategy (CHAS) data. This data is available annually and can be used to update housing strategies. The table below shows that $68 \%$ of renters and $36 \%$ of owners (a total of $47 \%$ of all household types) earn less than I00\% AMI.

| Table 10. Eagle County Income Distribution by |
| :---: |
| Housing Tenure, 2005-2009 ${ }^{14}$ |


|  | Renters |  | Owners |  | TOTAL |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| AMI Level | $\#$ | $\%$ | $\#$ | $\%$ | $\#$ | $\%$ |
| $\leq 30 \%$ AMI | 1,395 | $24.69 \%$ | 320 | $2.96 \%$ | 1,715 | $10.41 \%$ |
| Between $30 \%$ and $50 \%$ | 745 | $13.19 \%$ | 930 | $8.59 \%$ | 1,675 | $10.17 \%$ |
| Between $50 \%$ and $80 \%$ | 920 | $16.28 \%$ | 1,300 | $12.01 \%$ | 2,220 | $13.47 \%$ |
| Between $80 \%$ and $100 \%$ | 780 | $13.81 \%$ | 1,375 | $12.70 \%$ | 2,155 | $13.08 \%$ |
| $\geq$ 100\% AMI | 1,810 | $32.04 \%$ | 6,900 | $63.74 \%$ | 8,710 | $52.87 \%$ |
| TOTAL | $\mathbf{5 , 6 5 0}$ | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 0 , 8 2 5}$ | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 6 , 4 7 5}$ | $\mathbf{1 0 0 . 0 0 \%}$ |
|  |  |  |  |  |  |  |

## Rental Limits and Affordable Housing Prices

The following table can be used to help determine the appropriate AMI levels to target through housing policies. Affordable housing prices were calculated assuming a 4\% interest rate, a fixed mortgage amortized over 30 years, 5\% down payment, and HOA/property taxes/insurance at $20 \%$ of the mortgage payment. A standard "affordable" housing payment is calculated at $30 \%$ or less of income, regardless of whether the housing is purchased or rented.

[^7]
## Table 11. HUD Median Income/Rental Rate Guidelines ${ }^{15}$

## Median Income Information

Eagle
County

| No. of Persons | \% of Median Income for Area |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 200\% | 140\% | 120\% | 100\% | 80\% | 50\% | 30\% |
| 1 | \$118,800 | \$83,160 | \$71,280 | \$59,400 | \$47,520 | \$29,700 | \$17,820 |
| 2 | \$135,700 | \$94,990 | \$81,420 | \$67,850 | \$54,280 | \$33,925 | \$20,355 |
| 3 | \$152,700 | \$106,890 | \$91,620 | \$76,350 | \$61,080 | \$38,175 | \$22,905 |
| 4 | \$169,600 | \$118,720 | \$101,760 | \$84,800 | \$67,840 | \$42,400 | \$25,440 |
| 5 | \$183,200 | \$128,240 | \$109,920 | \$91,600 | \$73,280 | \$45,800 | \$27,480 |
| 6 | \$196,800 | \$137,760 | \$118,080 | \$98,400 | \$78,720 | \$49,200 | \$29,520 |
| Rent Limits |  |  |  |  |  |  |  |
| Studio | \$2,970 | \$2,079 | \$1,782 | \$1,485 | \$1,188 | \$743 | \$446 |
| 1 bdrm | \$3,393 | \$2,375 | \$2,036 | \$1,696 | \$1,357 | \$848 | \$509 |
| 2 bdrm | \$3,818 | \$2,672 | \$2,291 | \$1,909 | \$1,527 | \$954 | \$573 |
| 3 bdrm | \$4,240 | \$2,968 | \$2,544 | \$2,120 | \$1,696 | \$1,060 | \$636 |
| 4 bdrm | \$4,580 | \$3,206 | \$2,748 | \$2,290 | \$1,832 | \$1,145 | \$687 |
| Ownership Housing |  |  |  |  |  |  |  |
| Studio | \$524,000 | \$367,000 | \$314,000 | \$262,000 | \$210,000 | \$131,000 | \$79,000 |
| 1BR | \$598,000 | \$419,000 | \$359,000 | \$299,000 | \$239,000 | \$150,000 | \$90,000 |
| 2BR | \$673,000 | \$471,000 | \$404,000 | \$337,000 | \$269,000 | \$168,000 | \$101,000 |
| 3BR | \$748,000 | \$524,000 | \$449,000 | \$374,000 | \$299,000 | \$187,000 | \$112,000 |

## 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." 16

[^8]Table 12. Affordability Gap ${ }^{17}$

|  | $\begin{gathered} 2007 \text { 100\% } \\ \text { AMI } \end{gathered}$ | $\begin{gathered} 2012 \text { 100\% } \\ \text { AMI } \end{gathered}$ | $\begin{gathered} 2012 \text { 120\% } \\ \text { AMI } \end{gathered}$ | $\begin{gathered} 2012 \text { 140\% } \\ \text { AMI } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Target Income Point (3 person HH) | \$73,000 | \$76,350 | \$91,620 | \$106,890 |
| Affordable Monthly Housing Pmt. | \$1,825 | \$1,909 | \$2,291 | \$2,672 |
| Property Taxes/ Insurance/HOA (20\%) | \$365 | \$382 | \$458 | \$534 |
| Mortgage Payment | \$1,460 | \$1,527 | \$1,832 | \$2,138 |
| Max Mortgage Amount | \$231,000 | \$319,500 | \$383,400 | \$448,200 |
| Affordable Purchase Price | \$243,150 | \$337,000 | \$404,000 | \$471,000 |
| Average Sq. Ft. of Units | 1,000 | 1,000 | 1,000 | 1,000 |
| Median Price/Sq. Ft. | \$385 | \$396 | \$396 | \$396 |
| Market Cost/Unit | \$385,000 | \$396,000 | \$396,000 | \$396,000 |
| Affordability Gap | \$141,850 | \$59,000 | -\$8,000 | -\$75,000 |

The affordability gap, plus any desired administrative fees, can be used to assess a payment in lieu of constructing new units.

The table above shows that the affordability gap has lessened considerably since 2007, due in large part to lower mortgage interest rates. In 2007, a typical mortgage incurred $7 \%$ interest; the 2012 update was calculated using a $4 \%$ rate. Households earning more than 100\% AMI do not have an affordability gap; it is appropriate in the post-2008 economy to target Eagle County housing guidelines to those households earning 100\% AMI and below.

## 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 I40\% AMI." (page 3) 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 45\% of Eagle County's households are cost-burdened ( $43.8 \%$ of all owners and $46.5 \%$ of renters). Using the ACS cost-

[^9]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 2008-2010 ${ }^{18}$


[^10]
## 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.

## Retiree Housing and Its Impact on Workforce Housing

Table 8 of this report (page 14) 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.

If retired workers move to retirement housing options, their former housing units can house future workers and remain in the workforce housing status.

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 increase in the senior population from 2000-2010, and the projected higher increases in the future 65+ population.

Given these established trends, we recommend that the County Housing Department pursue the development of appropriate senior retirement housing options that can provide for the future housing and health care needs of the elderly population. These retirement housing options would free up existing housing units that can be used for workforce housing needs.

## 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 2012.

The most recent data shows that $46.5 \%$ of all renters are cost burdened (paying more than $30 \%$ of their income for housing). It is harder to qualify for a mortgage than in the past due to a tighter credit market, and new employees moving to the County may be reluctant to purchase because they fear the housing market has not yet "hit bottom," and/or they may be uncertain about their long-term employment status.

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

## Three Major Findings

Three major changes to the recommendations of the 2007 and 2008 studies emerged in this update:
I. Shift from I40\% AMI to I00\% AMI.

While the 2007 study (and subsequent guidelines) recommended focusing on households earning $140 \%$ of AMI, this update shows that the affordability gap emerges at I00\% AMI (see Table I2, page I8).

Sixty-eight percent of renter households (3,840 households) earn less than 100\% AMI (see Table IO, page I6); $36 \%$ of owner households $(3,925$ ) fall into this AMI category.
2. Shift from $55 \%$ to $45 \%$ Mitigation Rate.

The 2008 Nexus/Proportionality study recommended a mitigation rate of $55 \%$, 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 I40\% AMI." (page 3) Using what we believe is a more solid methodology for targeting housing policies (cost-burdened households), we recommend a $45 \%$ mitigation rate.

## 3. Reduction in Number of Housing Units Needed.

The 2007 Housing Needs Assessment calculated a need for I2,506 housing units, both to catch-up with unmet demand and to meet future needs. Table 4 on page 10 and the subsequent explanatory paragraphs and tables reduce this need to 4,853 by 2015 and 9,593 by 2020 (cumulative). We feel that this is a reliable estimate based on current demographics, job forecasts, and trends.

## Future Updates to the Housing Needs Assessment

The researchers designed this study to be replicated in the future, using current data to update tables and calculations.

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. However, collecting data through surveys is time-consuming and expensive, and may not be justified given the rich data available through public sources. Future housing needs assessments will need to weigh the costs/benefits of conducting surveys.

## The Cyclical Nature of Eagle County's Economy

While the housing affordability gap is much smaller than in 2007, it may increase again with cyclical economic swings. Using the analysis provided in this report provides a way to readily update housing guidelines and policies based on current conditions.

## APPENDIX H-1

## Estimate of Housing Needed to Fill Jobs Vacated by Retirees, 2011-2020

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 the decline in labor force participation rates by five-year 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 20 II is $3,7 \mathrm{II}$. With a labor force participation rate (LFPR) of 0.8 I , then $3,02 \mathrm{I}$ of this age group are in the workforce. Four years later, in 2015, the LFPR of this cohort is 0.76 , so the decline in LFPR is $0.8 \mathrm{I}-0.76$ or 0.05 which when divided by the beginning rate of 0.8 I means that $0.05 / 0.81$ or $7 \%$ of this cohort have retired or that its "retirement rate" is 0.07. Multiplying 0.07 times $3,02 \mathrm{I}$ (those in the workforce in 201I) equals 216 , presumably the number of workers who retired during the five-year period. However, the five-year survival rate of this group is 0.982 , which means that on average, only 213 of the 216 survived ( 3 died) by 2015 . Finally, assuming that the number of workers or retirees per household for this age group is I.6, this leads to the result that the number of housing units needed for the replacement workers is 133 .

These calculations are performed for each five-year age group from 50-84 and for two five-year time periods, 201I-2015 and 2016-2020. 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 the average rate) of the genderspecific results. (Slight rounding errors result from using lengthy decimal places in the calculations.)

Appendix H-1: Estimate of Housing Needed to Fill Jobs Vacated by Retirees, 2011-2020 ${ }^{19}$

| 2011-2015: All Retirees |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGE GROUP | Pop. | LFPR | In Wrkforce | Retire. Rate | New <br> Ret'd | $5-\mathrm{Yr}$ <br> Surv. <br> Rate | Surv. Retired | Ret'd <br> /Hhld | Needed Housing |
| 50-54 | 3,711 | 0.81 | 3,021 | 0.07 | 216 | 0.982 | 213 | 1.6 | 133 |
| 55-59 | 3,081 | 0.76 | 2,328 | 0.23 | 540 | 0.973 | 525 | 1.5 | 350 |
| 60-64 | 2,519 | 0.58 | 1,458 | 0.40 | 576 | 0.960 | 553 | 1.4 | 395 |
| 65-69 | 1,533 | 0.35 | 538 | 0.24 | 127 | 0.936 | 119 | 1.3 | 91 |
| 70-74 | 738 | 0.27 | 199 | 0.42 | 84 | 0.906 | 76 | 1.2 | 63 |
| 75-79 | 408 | 0.15 | 63 | 0.52 | 33 | 0.854 | 28 | 1.1 | 25 |
| 80-84 | 201 | 0.07 | 15 | 1.00 | 15 | 0.749 | 11 | 1.0 | 11 |
| TOTAL | 12,191 |  | 7,621 |  | 1,591 |  | 1,525 |  | 1,070 |


| 2011-2015: Male Retirees |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGE GROUP | Pop. | LFPR | In Wrkforce | Retire. Rate | New <br> Ret'd | 5-Yr Surv. <br> Rate | Surv. Retired | Ret'd <br> /Hhld | Needed Housing |
| 50-54 | 1,977 | 0.856 | 1,692 | 0.10 | 166 | 0.981 | 163 | 1.6 | 102 |
| 55-59 | 1,651 | 0.772 | 1,275 | 0.19 | 239 | 0.968 | 232 | 1.5 | 154 |
| 60-64 | 1,301 | 0.627 | 816 | 0.35 | 289 | 0.957 | 276 | 1.4 | 197 |
| 65-69 | 804 | 0.405 | 326 | 0.28 | 91 | 0.929 | 84 | 1.3 | 65 |
| 70-74 | 403 | 0.292 | 118 | 0.39 | 46 | 0.879 | 40 | 1.2 | 33 |
| 75-79 | 207 | 0.179 | 37 | 0.41 | 15 | 0.817 | 12 | 1.1 | 11 |
| 80-84 | 106 | 0.106 | 11 | 1.00 | 11 | 0.730 | 8 | 1.0 | 8 |
| TOTAL | 6,449 | 0.774 | 4,274 |  | 857 |  | 816 |  | 571 |

2011-2015: Female 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 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5 0 - 5 4}$ | 1,734 | 0.766 | 1,328 | 0.04 | 50 | 0.987 | 50 | 1.6 | 31 |
| $\mathbf{5 5 - 5 9}$ | 1,430 | 0.737 | 1,054 | 0.28 | 300 | 0.977 | 293 | 1.5 | 196 |
| $\mathbf{6 0 - 6 4}$ | 1,218 | 0.527 | 642 | 0.45 | 287 | 0.963 | 277 | 1.4 | 198 |
| $\mathbf{6 5 - 6 9}$ | 729 | 0.291 | 212 | 0.17 | 36 | 0.956 | 34 | 1.3 | 26 |
| $\mathbf{7 0 - 7 4}$ | 335 | 0.242 | 81 | 0.48 | 39 | 0.937 | 36 | 1.2 | 30 |
| $\mathbf{7 5 - 7 9}$ | 201 | 0.127 | 26 | 0.69 | 17 | 0.885 | 15 | 1.1 | 14 |
| 80-84 | 95 | 0.040 | 4 | 1.00 | 4 | 0.805 | 3 | 1.0 | 3 |
| TOTAL | 5,742 | 0.700 | 3,347 |  | 734 |  | 709 |  | $\mathbf{4 9 8}$ |

[^11]| 2016-2020: All Retirees |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGE GROUP | Pop. | LFPR | In Wrkforce | Retire. Rate | New <br> Ret'd | 5-Yr <br> Surv. <br> Rate | Surv. <br> Retired | Ret'd <br> /Hhld | Needed Housing |
| 50-54 | 4,071 | 0.82 | 3,343 | 0.06 | 206 | 0.983 | 202 | 1.6 | 127 |
| 55-59 | 3,800 | 0.77 | 2,930 | 0.20 | 583 | 0.974 | 568 | 1.5 | 379 |
| 60-64 | 3,107 | 0.62 | 1,919 | 0.36 | 682 | 0.960 | 655 | 1.4 | 468 |
| 65-69 | 2,513 | 0.40 | 996 | 0.27 | 265 | 0.939 | 249 | 1.3 | 192 |
| 70-74 | 1,510 | 0.29 | 439 | 0.40 | 174 | 0.905 | 157 | 1.2 | 131 |
| 75-79 | 710 | 0.18 | 125 | 0.48 | 60 | 0.849 | 51 | 1.1 | 46 |
| 80-84 | 378 | 0.09 | 33 | 1.00 | 33 | 0.755 | 25 | 1.0 | 25 |
| TOTAL | 16,089 |  | 9,785 |  | 2,003 |  | 1,908 |  | 1,370 |


| AGE GROUP | Pop. | LFPR | 2016-2020: Male Retirees |  |  |  | Surv. <br> Retired | Ret'd /Hhld | Needed Housing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\stackrel{\text { In }}{\text { Wrkforce }}$ | Retire. Rate | New Ret'd | $\begin{aligned} & 5-\mathrm{Yr} \\ & \text { Surv. } \\ & \text { Rate } \end{aligned}$ |  |  |  |
| 50-54 | 2,093 | 0.86 | 1,800 | 0.08 | 147 | 0.982 | 144 | 1.6 | 90 |
| 55-59 | 2,012 | 0.79 | 1,589 | 0.16 | 262 | 0.969 | 253 | 1.5 | 169 |
| 60-64 | 1,646 | 0.66 | 1,086 | 0.32 | 346 | 0.957 | 331 | 1.4 | 236 |
| 65-69 | 1,285 | 0.45 | 578 | 0.29 | 167 | 0.928 | 155 | 1.3 | 119 |
| 70-74 | 770 | 0.32 | 246 | 0.38 | 92 | 0.876 | 81 | 1.2 | 67 |
| 75-79 | 367 | 0.20 | 73 | 0.40 | 29 | 0.807 | 24 | 1.1 | 22 |
| 80-84 | 175 | 0.12 | 21 | 1.00 | 21 | 0.717 | 15 | 1.0 | 15 |
| TOTAL | 8,348 | 0.76 | 5,395 |  | 1,064 |  | 1,003 |  | 720 |


| AGE GROUP | Pop. | LFPR | 2016-2020: Female Retirees |  |  |  | Surv. Retired | Ret'd <br> /Hhld | Needed Housing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | In Wrkforce | Retire. <br> Rate | New <br> Ret'd | $\begin{aligned} & 5-Y r \\ & \text { Surv. } \\ & \text { Rate } \end{aligned}$ |  |  |  |
| 50-54 | 1,978 | 0.78 | 1,543 | 0.04 | 59 | 0.987 | 59 | 1.6 | 37 |
| 55-59 | 1,788 | 0.75 | 1,341 | 0.24 | 322 | 0.978 | 315 | 1.5 | 210 |
| 60-64 | 1,461 | 0.57 | 833 | 0.40 | 336 | 0.964 | 324 | 1.4 | 231 |
| 65-69 | 1,228 | 0.34 | 418 | 0.24 | 98 | 0.956 | 94 | 1.3 | 72 |
| 70-74 | 740 | 0.26 | 192 | 0.42 | 81 | 0.937 | 76 | 1.2 | 64 |
| 75-79 | 343 | 0.15 | 51 | 0.60 | 31 | 0.889 | 27 | 1.1 | 25 |
| 80-84 | 203 | 0.06 | 12 | 1.00 | 12 | 0.820 | 10 | 1.0 | 10 |
| TOTAL | 7,741 | 0.69 | 4,390 |  | 940 |  | 905 |  | 650 |

## APPENDICES E-1 and E-2

Tables E-I and E-2 provide some basic data on the Eagle County economy from 2002 through 20I0. Table E-I presents total jobs - both wage and salary and self-employed 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 ( $82 \%$ in 2002 and $75 \%$ in 2010) it also includes monies earned outside 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 shows growth from 2002 to 2007, and then declines from 2007 to 2010 as the result of the recession. The biggest growth in the first period and then decline in the second is in construction and construction-related fields, e.g., professional services, administrative and waste (includes temporary workers), some retail and, indirectly, real estate. The second general area of growth and decline is in tourismrelated industries: accommodation and food services, retail trade, and other services (laundry and personal services).

The data on personal income show strong growth in earnings by place of work during the periods 2002 - 2005 and 2005 - 2007 ( $6.5 \%$ and $10.0 \%$ per year, respectively) followed by a - 5.4\% per year from 2007 - 20I0. Dividends, interest and rent also grew strongly during the first two periods ( $10.1 \%$ and $13.6 \%$ ) before declining a small amount (- $1.8 \%$ ) during the latter period. Personal transfer receipts, which grew at $6.5 \%$ and $8.5 \%$ per year from 2002 - 2007, jumped up to $21.3 \%$ per year from 2007 to 2010. Proprietor's income dropped - 4.2\% per year from 2005 to 2007 (as earnings remained strong) but increased with the recession (2007 to 2010) as workers offset their earnings losses with other sources of income.

## APPENDIX E-1: Estimated Total Jobs by Industry, Eagle County, 2002-2010

|  | 2002 | 2005 | 2007 | 2010 | 2002-2007 | 2007-2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Jobs | 33,851 | 36,529 | 40,163 | 35,662 | 6,312 | -4,501 |
| Agriculture | 123 | 191 | 186 | 203 | 63 | 17 |
| Mining | 7 | 11 | 14 | 17 | 7 | 3 |
| Utilities | 51 | 54 | 68 | 63 | 17 | -5 |
| Construction | 5,356 | 5,316 | 6,329 | 3,900 | 973 | -2,429 |
| Construction of buildings | 1,300 | 1,241 | 1,552 | 944 | 252 | -608 |
| Heavy construction | 328 | 270 | 254 | 112 | -74 | -142 |
| Special trade contractors | 3,728 | 3,805 | 4,523 | 2,843 | 795 | -1,680 |
| Manufacturing | 383 | 450 | 442 | 312 | 59 | -130 |
| Wholesale trade | 439 | 482 | 524 | 528 | 85 | 4 |
| Retail Trade | 3,464 | 3,557 | 3,815 | 3,433 | 351 | -382 |
| Transportation and warehousing | 555 | 581 | 653 | 536 | 98 | -117 |
| Information | 328 | 377 | 512 | 399 | 184 | -113 |
| Finance activities | 541 | 773 | 826 | 775 | 285 | -51 |
| Real estate | 2,817 | 3,032 | 3,159 | 2,963 | 342 | -196 |
| Professional \& business services | 1,956 | 2,248 | 2,472 | 2,077 | 516 | -395 |
| Management of companies | 215 | 154 | 153 | 157 | -62 | 4 |
| Admin and waste | 1,600 | 1,897 | 2,197 | 1,941 | 597 | -256 |
| Education | 155 | 287 | 278 | 255 | 123 | -23 |
| Health Services | 1,547 | 1,675 | 2,028 | 2,023 | 481 | -5 |
| Arts | 3,200 | 3,577 | 3,632 | 3,931 | 432 | 299 |
| Accommodation and food | 6,214 | 6,974 | 7,155 | 6,562 | 941 | -593 |
| Accommodation Food services, drinking | 2,478 | 2,898 | 2,852 | 2,683 | 374 | -169 |
| places | 3,736 | 4,076 | 4,303 | 3,878 | 567 | -425 |
| Other services, exc. govt. | 2,160 | 2,208 | 2,836 | 2,460 | 676 | -376 |
| Government | 2,740 | 2,686 | 2,884 | 3,128 | 144 | 244 |
| Federal and state | 363 | 352 | 353 | 383 | -10 | 30 |
| Local government | 2,377 | 2,334 | 2,531 | 2,746 | 154 | 215 |
| Total Jobs | 33,851 | 36,529 | 40,163 | 35,662 | 6,312 | -4,501 |

## APPENDIX E-2: Personal Income of Residents by Components, Eagle County, 2002-2010, part 1

| (In Millions of Dollars) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Component | 2002 |  | 2005 |  | 2007 |  | 2010 |  |
| Total Personal Income | Amt. | $\begin{gathered} \% \text { of } \\ \text { TI } \end{gathered}$ | Amt. | $\begin{gathered} \% \text { of } \\ \mathrm{TI} \\ \hline \end{gathered}$ | Amt. | $\begin{gathered} \% \text { of } \\ \mathrm{TI} \\ \hline \end{gathered}$ | Amt. | $\begin{gathered} \% \text { of } \\ \mathrm{TI} \\ \hline \end{gathered}$ |
| Earnings by Place of Work | \$1,491 | 82\% | \$1,792 | 81\% | \$2,033 | 78\% | \$1,881 | 75\% |
| Wage \& Salary Disbursements | \$972 | 54\% | \$1,174 | 53\% | \$1,421 | 55\% | \$1,205 | 48\% |
| Supplements to Wages \& Salaries | \$181 | 10\% | \$229 | 10\% | \$255 | 10\% | \$239 | 10\% |
| Proprietors Income | \$338 | 19\% | \$388 | 18\% | \$357 | 14\% | \$437 | 17\% |
| Earnings by Place of Work | \$1,491 | 82\% | \$1,792 | 81\% | \$2,033 | 78\% | \$1,881 | 75\% |
| - Payments for Government Social Ins. | \$(147) | -8\% | \$(182) | -8\% | \$(209) | -8\% | \$(182) | -7\% |
| + Residency Adj. for Commuting | \$24 | 1\% | \$26 | 1\% | \$25 | 1\% | \$34 | 1\% |
| $=$ Net Earnings by Place of Residency | \$1,368 | 76\% | \$1,635 | 74\% | \$1,849 | 71\% | \$1,733 | 69\% |
| + Dividends, Interest, Rent | \$387 | 21\% | \$516 | 23\% | \$666 | 26\% | \$631 | 25\% |
| + Personal Transfer Receipts | \$56 | 3\% | \$68 | 3\% | \$80 | 3\% | \$142 | 6\% |
| = TI. Personal Income (Residents) | \$1,811 | 100\% | \$2,219 | 100\% | \$2,594 | 100\% | \$2,507 | 100\% |
| Population (U.S. Census Bureau) | 44,227 |  | 47,205 |  | 49,803 |  | 52,064 |  |
| Per Capita Income (Actual \$) | \$40,958 |  | \$47,004 |  | \$52,095 |  | \$48,149 |  |

# APPENDIX E-2: Personal Income of Residents by Components, Eagle County, 2002 - 2010, part 2 

| Component <br> Total Personal Income | Annual Average Pct. Change |  |  |
| :---: | :---: | :---: | :---: |
|  | '02-'05 | '05-'07 | '07-10 |
| Earnings by Place of Work | 6.3\% | 6.5\% | -2.5\% |
| Wage \& Salary Disbursements | 6.5\% | 10.0\% | -5.4\% |
| Supplements to Wages \& Salaries | 8.2\% | 5.4\% | -2.1\% |
| Proprietors Income | 4.8\% | -4.2\% | 7.0\% |
| Earnings by Place of Work | 6.3\% | 6.5\% | -2.5\% |
| - Payments for Govrnmt Social Ins. | 7.4\% | 7.2\% | -4.5\% |
| + Residency Adj. for Commuting <br> = Net Earnings by Place of | 1.6\% | -1.0\% | 10.9\% |
| Residency | 6.1\% | 6.3\% | -2.1\% |
| + Dividends, Interest, Rent | 10.1\% | 13.6\% | -1.8\% |
| + Personal Transfer Receipts | 6.5\% | 8.5\% | 21.3\% |
| = TI. Personal Income (Residents) | 7.0\% | 8.1\% | -1.1\% |
| Population (U.S. Census Bureau) | 2.2\% | 2.7\% | 1.5\% |
| Per Capita Income (Actual \$) | 4.7\% | 5.3\% | -2.6\% |

## APPENDIX P-1: Eagle County Population by Municipality, 2000-2011

The population of the county grew at an average annual rate of nearly $2 \%$ per year during the period 2000-20I0. Eagle and Gypsum had the highest percentage growth during the decade. Most notable is the continued growth in the County during the years 2007 - 2010 when there was an II\% decline in jobs. Draft estimates for 2011 prepared by the State Demography Office show a modest decline (- 0.5\%) from 2010 for Eagle County.

| Area | Colorado State Demography Estimates |  |  |  |  | Avg. Annual Rate Of Change |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { July } \\ & 2000 \end{aligned}$ | $\begin{array}{r} \text { July } \\ 2005 \end{array}$ | $\begin{aligned} & \text { July } \\ & 2007 \end{aligned}$ | $\begin{gathered} \text { July } \\ 2010 \end{gathered}$ | $\begin{gathered} \text { July } \\ \text { 2011* } \end{gathered}$ | 00-05 | 05-07 | 07-10 | 10-11 |
| EAGLE COUNTY | 43,289 | 47,278 | 49,284 | 52,057 | 51,777 | 1.8 | 2.1 | 1.8 | -0.5 |
| Avon | 6,124 | 6,570 | 6,524 | 6,413 | 6,375 | 1.4 | -0.4 | -0.6 | -0.6 |
| Basalt (Part) | 2,031 | 2,470 | 2,630 | 2,919 | 2,899 | 4.0 | 3.2 | 3.5 | -0.7 |
| Eagle | 3,071 | 4,289 | 5,371 | 6,483 | 6,459 | 6.9 | 11.9 | 6.5 | -0.4 |
| Gypsum | 4,151 | 4,956 | 5,528 | 6,517 | 6,496 | 3.6 | 5.6 | 5.6 | -0.3 |
| Minturn | 1,079 | 1,084 | 1,100 | 1,035 | 1,034 | 0.1 | 0.7 | -2.0 | -0.1 |
| Red Cliff | 298 | 298 | 293 | 269 | 267 | 0.0 | -0.8 | -2.8 | -0.7 |
| Vail | 4,825 | 4,613 | 4,592 | 5,278 | 5,242 | -0.9 | -0.2 | 4.8 | -0.7 |
| Unincorp. Area | 21,710 | 22,998 | 23,246 | 23,143 | 23,005 | 1.2 | 0.5 | -0.1 | -0.6 |

## APPENDIX P-2: Eagle County Population by Age, 2007-2015

Tables P-2A and P-2B show the population by age for the County. In contrast to the state, Eagle County has a higher proportion of its population in the age group 25 to 44 and a lower percentage over the age of 65 . However, its proportion of population of the younger adults ( 25 to 44 ) has declined over the previous ten years and is expected to continue to do so through 2015. Concurrently, the percentage of the population over 65 in Eagle County has increased and is expected to do so more rapidly through 2015.

Table P-2A. Population by Age, Eagle County, 2007-2015

|  | 2000 |  | 2007 |  | 2010 |  | 2015 |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age Group | Number | \% of Total | Number | \% of Total | Number | $\%$ of Total | Number | \% of Total |
| 0 to 17 | 10,111 | $23 \%$ | 11,941 | $24 \%$ | 12,777 | $25 \%$ | 16,062 | $26 \%$ |
| 18 to 24 | 4,961 | $11 \%$ | 3,720 | $8 \%$ | 4,362 | $8 \%$ | 4,198 | $7 \%$ |
| 25 to 44 | 18,198 | $42 \%$ | 19,308 | $39 \%$ | 18,778 | $36 \%$ | 20,542 | $33 \%$ |
| 45 to 64 | 8,723 | $20 \%$ | 11,981 | $24 \%$ | 13,205 | $25 \%$ | 15,715 | $25 \%$ |
| $65 \&$ Over | 1,297 | $3 \%$ | 2,334 | $5 \%$ | 3,003 | $6 \%$ | 5,328 | $9 \%$ |
| Total | 43,290 | $100 \%$ | 49,284 | $100 \%$ | 52,125 | $100 \%$ | 61,845 | $100 \%$ |

Table P-2B. Population by Age, Eagle County and Colorado, 2000-2010

| Age Group | Eagle County |  |  |  | Colorado |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 |  | 2010 |  | 2000 |  | 2010 |  |
|  |  |  |  |  |  | (numbers in | thousand |  |
|  | Number | \% of Total | Number | \% of Total | Number | \% of Total | Number | \% of Total |
| 0 to 17 | 10,111 | 23\% | 12,777 | 26\% | 1,109 | 26\% | 1,228 | 24\% |
| 18 to 24 | 4,961 | 11\% | 4,362 | 9\% | 433 | 10\% | 489 | 10\% |
| 25 to 44 | 18,198 | 42\% | 18,778 | 38\% | 1,411 | 33\% | 1,432 | 28\% |
| 45 to 64 | 8,723 | 20\% | 13,205 | 27\% | 966 | 22\% | 1,347 | 27\% |
| 65 \& Over | 1,297 | 3\% | 3,003 | 6\% | 419 | 10\% | 555 | 11\% |
| Total | 43,290 | 100\% | 52,125 | 106\% | 4,339 | 100\% | 5,051 | 100\% |

## APPENDIX P-3: Population, Households, and Housing Units in Eagle County, 2000-2010

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.

|  | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 0}$ |
| :--- | ---: | ---: | ---: | ---: |
| Total Population | 43,289 | 47,278 | 49,284 | 52,067 |
| Group Quarters Pop. | 353 | 353 | 353 | 55 |
| Household Population | 42,936 | 46,925 | 48,931 | 52,012 |
| Persons per Household | 2.73 | 2.74 | 2.75 | 2.71 |
| Total Housing Units | 25,145 | 28,711 | 30,271 | 31,390 |
| Occupied Units (Households) | 15,751 | 17,124 | 17,818 | 19,209 |
| Occupancy Rate (Residents) | $63 \%$ | $60 \%$ | $59 \%$ | $61 \%$ |
| $\quad$ Owner Occupied | 10,033 |  |  | 12,326 |
| $\quad$ Pct. of Occupied Units | $63.7 \%$ |  |  | $64.2 \%$ |
| $\quad$ Renter Occupied | 5,718 |  |  | 6,883 |
| $\quad$ Pct. of Occupied Units | $36.3 \%$ |  |  | $35.8 \%$ |
| Vacant Units | 9,394 | 11,587 | 12,453 | 12,181 |
| Vacancy Rate | $37 \%$ | $40 \%$ | $41 \%$ | $39 \%$ |
| Seasonal Use Units* | 6,739 | 8,297 | 9,003 | 9,731 |
| Pct. of Total | $27 \%$ | $29 \%$ | $30 \%$ | $31 \%$ |

Note: All data are as of July 1 for all years, from the State Demography Office.

* Estimate prepared for this study.


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


|  | Colorado <br> Household Type |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | :---: |
|  | Number | 2000 <br> (numbers in thousands) <br> $\%$ 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]:    ${ }^{3}$ Staff, State Demography Office of Colorado Department of Local Affairs.
    ${ }^{4}$ State Demography Office and Labor Market Information.

[^2]:    ${ }^{5}$ American Community Survey, 2012.

[^3]:    ${ }^{6}$ Eagle County Housing Needs Assessment, 2007, p. 80.
    ${ }^{7}$ Economic Council of Eagle County, 2011-2012 Workforce Survey.
    ${ }^{8}$ Eagle County Housing Needs Assessment, 2007, p. 82.

[^4]:    ${ }^{9}$ Eagle County Housing Needs Assessment, 2007, p. 83.
    ${ }^{10}$ American Community Survey 2006 - 2010, Table B.
    ${ }^{11}$ American Community Survey 2006 - 2010, Table B08202.

[^5]:    ${ }^{12}$ Source of data on population and labor force participation rates: State Demography Office, Colorado Department of Local Government.

[^6]:    ${ }^{13}$ Housing and Urban Development

[^7]:    ${ }^{14}$ CHAS Data, 2005-2009 Analysis

[^8]:    ${ }^{15}$ Analysis and calculations using HUD AMI data
    ${ }^{16}$ Nexus/Proportionality Analysis for Commercial Development/Workforce Housing Linkage, January 2008, RRC Associates, Inc., Rees Consulting, Inc.

[^9]:    ${ }^{17}$ Analysis and calculations using HUD AMI data and Eagle County real estate sales data.

[^10]:    ${ }^{18}$ American Community Survey, 2012.

[^11]:    ${ }^{19}$ Source of data on population and labor force participation rates: State Demography Office, Colorado Department of Local Government.

