Pitkin County, Colorado
Affordable Housing Regulation
Support Study

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AFFORDABLE HOUSING REGULATION SUPPORT STUDY

A. INTRODUCTION

There is little debate that there is a housing affordability problem in Pitkin County and Aspen. In response to this problem, both the county and City of Aspen developed an affordable housing program that, in the 1970s when it was originally conceived, was one of the most aggressive programs in the country.

In 2000, the county began exploring the possible use of an affordable housing mitigation fee that documented needs for affordable housing created by both non-residential and residential development in the county. A draft study was produced by Clarion Associates and Dr. James Nicholas documenting the demand for affordable housing created by both types of development. No affordable housing mitigation fee was adopted by the Board of County Commissioners at that time. Recently, the county requested that the data used in support of the 2000 study be reviewed and updated in order to provide the foundation for further discussion of a proposed mitigation fee. This Affordable Housing Support Study ("the Study) contains that updated data.

This Support Study contains five sections. After this introduction, the second section describes the housing affordability problem in Pitkin County (Part B: "Problem Description"). It shows that while employment in Pitkin County has grown over the past decade, wages have tended to be stagnant while housing offerings at prices that the large majority of the local employment base can afford have declined. One of the most dramatic results is that the county's workforce is relocating to places where housing prices are more affordable. In 1985, 73 percent of all Pitkin County employees lived in the county. This percentage declined to 46 percent in 2000. Employment projections indicate that the local portion of total employment will continue to decline to 38 percent by 2020 unless additional housing is provided in the county within the prices ranges that are affordable to local employees. This out-migration of the Pitkin County work force has placed increasing stress on the capacity of the local community to maintain a viable work force. If these trends continue, an essential component of the county's community character will be damaged, since most of the county's work force and their families will no longer reside in the community, attend schools in the county, participate in local civic organizations, worship in the community, or express their ideas at the ballot box.

Based upon the problem description, the Study next explores both the existing and future affordable housing needs of Pitkin County. (Part C: "The Need for Affordable Housing in Pitkin County"). To perform the analysis, an assumption needs to be made as to the percentage of employees that are to be provided housing through the mitigation fee. In the course of the 2000 study, Clarion Associates and county staff jointly determined that it was unreasonable to calculate fees for 100% of county employees, because not all employees desire to live in Pitkin County, and because the resulting fees would be extremely high. Instead, a baseline assumption was made that the county might want to provide housing for 75% of the employees in the county. We also provided a supplemental memorandum indicating how the calculated impact fees would change if alternative goals were used instead.

Since the year 2000, all indications are that there have been significant increases in land and housing construction costs in Pitkin County. As a result, we have chosen to perform the baseline analysis in 2004 using an assumed affordable housing target of 60 percent -- i.e., that affordable housing needs to be provided for 60 percent of employees in the county and their families. We again provide analyses of how the calculated fee would change if different goals were adopted. We understand that Pitkin County has not adopted a 60 percent affordable housing goal, and that an alternative goal may be chosen. The analysis in this section shows that, based on this general goal of providing affordable housing to 60 percent of the work force, the year 2004 affordable housing needs of the county total 6,092 units. At present, 4,481 units are being provided by the market and the public sector, leaving an existing need of 1,611 units.

This general analysis of need is followed by a review of the existing inventory of affordable units in the county, as well as an evaluation of how many additional affordable units will be provided by public sources and the market by 2010 (Part D: "The Inventory of Affordable Housing"). This analysis demonstrates that, after accounting for those affordable housing units currently under construction, those that the Aspen/Pitkin County Housing Office believes it will build in the next 10 years, and those that may be supplied by turnover in the private market, the county will face a deficit of 913 affordable housing units. The county will need to find alternative sources of funds to provide these units – which represent accumulated deficit from past (as opposed to future) growth, and will need to ensure that affordable housing mitigation requirements are not used to meet this current deficit.

The concluding section (Part E: "The Demand for Affordable Housing Created by Development; Mitigation") outlines that it will be necessary for all new residential, commercial and tourist accommodation development to mitigate for the affordable housing needs of its employees if 60 percent of all those employed in the county are to be housed in the county. It outlines the most appropriate ways to measure the impacts on affordable housing from residential, commercial and tourist accommodation development, and outlines four types of mitigation. The **first** is payment of a fee/subsidy for the difference between the cost of housing in the county for the employee(s) serving the development and what the employee(s) can reasonably afford. A **second** is the construction of affordable housing units for the employee. A **third** is the dedication of land for affordable housing that is of equal value to the fee/subsidy amount needed. A final and **fourth** option is the conversion of existing market units to affordable units. Proposed formulas and fee schedules are outlined for the fee/subsidy, and relevant parameters are outlined for implementation of the three other forms of mitigation.

B. PROBLEM DESCRIPTION

There is no dispute that the price of housing is expensive in Pitkin County. The high price of housing presents a distinct set of problems for each community where it occurs. One is that local employees suffer economic stress as housing prices tend to outstrip wage and salary incomes. In many instances this phenomena encourages employees to move out of the community, substituting an alternative location where housing is more affordable. In Pitkin County this has occurred with local employees moving down valley into Garfield and Eagle counties. The inevitable consequences are increased commuting, diminished real incomes due to increased commuting costs, increased traffic congestion, higher road construction and maintenance costs, and deterioration in the social, economic and political fabric created by the general sense of community that occurs when persons and families that work in the community also live in the community.

These trends are exacerbated by the growing boom in second home construction – not only nationally but particularly in Colorado's mountain resort counties. Earlier this year, the Northwest Colorado Council of Governments concluded a study titled "Second Homes and the Amenity Based Economy". Among its findings were the following:

- 55% of homes in Pitkin County are second homes (which is higher than the 49% figure for neighboring Eagle County);
- 43% of all single family homes in Pitkin County are second homes;
- 67% of all condos and multi-family units in Pitkin County are second homes;
- Second homes are the largest economic driver in the five-county NWCOG study area;
- Second homes cause job growth and the need for more workers;
- Second homeowners are in competition with the local workers for both the existing housing market and the limited supply of developable land for future housing; and
- This driver is crowding out all other users in the competition for land use.

Clearly, if second home construction is crowding out market rate first home construction, then it is also crowding out those in need of more affordable housing.

Collectively these phenomena reduce the supply of labor, denying the community a critical component needed to ensure the long-term sustainability of the local economy. In addition, they result in a general loss of community character and identity. For these reasons, communities experiencing housing affordability problems commonly undertake programs to increase the supply of such housing at prices that local employees and their families can afford.

Housing affordability, however, is a relative concept – when inquiring about affordability, it is necessary to ask the question: "Affordable with respect to what?" Normally, housing affordability is assessed by comparing the price of housing to prevailing wage and salary incomes. Table 1 summarizes changes in employment and earnings by employment sector in Pitkin County from 1998 to 2001.

Table 1: Non-Agricultural Employment and Earnings, Pitkin County, 1998 - 2001

	Employment 1998	Annual Earnings (in Thousands)	Employment 2001	Annual Earnings (in Thousands)	Average Annual Growth Rate in Jobs	Annual Average Growth Rate in Earnings
Total	16,543	$401,314	16,280	$529,233	-0.53%	9.65%
Ag Services	30	$589	33	$755	3.22%	8.64%
Mining	10	$317	16	$718	16.94%	31.23%
Utilities	22	$1,001	21	$951	-1.54%	-1.68%
Const.	1,017	$41,929	1,215	$61,152	6.10%	13.39%
Manufacturing	289	$8,861	237	$9,998	-6.39%	4.10%
Wholesale	208	$9,313	185	$13,028	-3.83%	11.83%
Retail	2,094	$48,190	2,069	$56,334	-0.40%	5.34%
T.C.U.	249	$4,626	225	$5,066	-3.32%	3.07%
Information	309	$9,791	172	$8,628	-17.72%	-4.12%
Finance & ins.	283	$15,171	300	$30,726	1.96%	26.49%
Real estate	711	$23,438	793	$32,203	3.70%	11.16%
Services	11,303	$237,459	11,000	$309,290	-0.90%	9.20%
Unclassified	9	$289	14	$382	15.85%	9.82%
Source: Bureau of the Census, County Business Patterns, website www.census.gov.						
Note: All annual earning are adjusted to constant prices as of July 2004.						

Table 2 summarizes the changes reflected in Table 1 over the same period.

Table 2: Change in Non-Agricultural Employment and Earnings					
Category	New Jobs	Additional Earnings (000)	Category	New Jobs	Additional Earnings (000)
Total	-263	$127,919	Retail	-25	$8,145
Ag Services	3	$166	T.C.U.	-24	$440
Mining	6	$401	Information	-137	-$1,163
Utilities	-1	-$50	Finance & ins.	17	$15,555
Const.	198	$19,223	Real estate	82	$8,765
Manufacturing	-52	$1,137	Services	-303	$71,830
Wholesale	-23	$3,715	Unclassified	5	$94
Source: Table 1					

What is most striking about Tables 1 and 2 is the very slow job growth in most categories, and the overall loss of jobs in Pitkin County over the period. In fact, the only categories to add significant numbers of jobs were construction, real estate, and finance and insurance, which shows the growing dominance of the real estate economy in the county. The wage increases in these sectors were relatively modest. Overall, wages in Pitkin County grew by an average annual rate of 9.65% over the time period.

In August 2002, the Colorado Department of Local Affairs produced a study titled "What is Affordable Housing in Your Area". Table 3 below summarizes the portion of that analysis applicable to Pitkin County.

Table 3: Colorado DOLA Analysis of Affordability in Pitkin County								
County	3-Person Area Median Income	Affordable Payment	Average Rent 2/02	Affordable Sales Price	Median Sales Price	Bench-mark Home Value	No. of units available < 80% AMI	No. of units available < 60% AMI
Pitkin	Median $79,000	$1,975	$953 Aspen	$266,498	$460,000 single family; $500,000 condo in Aspen	$898,727	15 single family; 9 condo	13 single family; 8 condo
	< 80% $48,950	$1,224		$165,128				
	< 60% $47,400	$1,185		$159,899				
	< 50% $39,500	$988		$133,249				
	< 30% $23,700	$593		$79,949				
Source: Colorado Department of Local Affairs								

Definitions:
AMI - January 2002 Area Median Income for 3 person families, by county, as calculated by HUD.
Affordable Payment - equals 30% of monthly income, including rent or PITI and utilities.
Average rents are for two bedroom/one bath units, not including utilities, from the February 2002 Multi-Family Housing Vacancy & Rental Survey from the Colorado Division of Housing and the Metro Apartment Association.
Affordable Sales Price - assumes 25% of monthly income pays for principle & interest only on an FHA mortgage with 3% down, 6.66% interest, and 30 year term. Assumes 4% of monthly income pays for taxes & insurance.
Interest Rate - 6.57% is the average effective rate for 30 year, fixed rate FHA mortgages, as quoted by the Mortgage Bankers Association of America for the week ending 8/2/02.

Median Sales Price - is based on June 2002, Multiple Listing Service (MLS) information from the Colorado Association of Realtors, Metrolist, & IRES. This data is county specific, unless an MLS area is noted in the chart.
Benchmark Home Value - is the average value of 1300 square foot single family units as of January 1, 2002. It is based on an analysis of assessment data prepared by ValueWest, Inc.
Units Available - is the number of single family and condo units available for sale at or below the "Affordable Sale Price" for 3 person households earning 80% AMI. It is based on listings in Realtor.com, Recolorado.com, Coloproperty.com and MLSToday.com, found during August 2002.

In addition, the Colorado Department of Local Affairs publishes statistics on "cost burdened rental households". Data from December 2003 is shown in Table 4 below.

Table 4: 2004 Rental Households by 2003 HUD Income Limits and Percent of Income Paid in Rent, Pitkin County			
2003 HUD Median Family Income		$100,400	
2004 Renter-occupied Households		2,945	
% of HUD Median Family Income	**Four Person Income Limit**	**HH at or Below Median Range**	**HH paying 30% or more of income in rent**
0 to 30%	$27,200	816	660
31 to 50%	$45,200	1,424	1,012
51 to 60%	$54,240	1,679	949
61 to 80%	$56,500	1,733	1,002
Source: Colorado Department of Local Affairs; County Income and Earnings Data http://dola.colorado.gov/housing/HUDLim.cfm			

Finally, the market for land and houses in Pitkin County is "gentrifying" as the population ages. Many current residents (employees) bought their homes 20 or 30 years ago, when prices were more affordable. As a result, they were able to pay for their home and live in Pitkin County over the intervening decades on moderate incomes. However, as these residents age and retire, many of their homes will enter the resale market and will be sold at the market price for such homes – which is basically not affordable to most existing residents/employees. This will lead to homes currently occupied by middle income households being occupied in the future by higher income households – further reducing the stock of housing available for or occupied by moderate income families/employees.

In combination, these materials demonstrate that, while employment in Pitkin County has remained almost unchanged, wages have risen moderately, while housing offerings available at lower prices have tended to decline. As shown later in this study, housing prices in general have risen dramatically over the past several years. This is the housing affordability problem in Pitkin County.

C. THE NEED FOR AFFORDABLE HOUSING IN PITKIN COUNTY

Table 5 below contains historic and projected employment for Pitkin County from the U.S. Department of Commerce, Bureau of Economic Analysis, as reported by the Colorado Department of Local Affairs. The historic data are for the period from 1985 to 2002 and the projected data are for the years 2005 to 2020. Total employment is broken out by those employed within Pitkin County who reside within Pitkin County and those that are employed in Pitkin County and reside outside of the county. In 1985, 73 percent of all those employed in the county lived in the county. By 1990, this percentage had dropped to 49 percent, and by 2004 it had declined further to 44 percent. Employment projections indicate that the local portion of total employment will continue to decline to under 37 percent by 2025 unless additional housing is provided in the county within the price ranges that are affordable to local employees.

Table 5: Employment and Wages in Pitkin County 1990-2025							
	Total Employment	**Local Employment**	**In-Migrant Employees**	**Percent Local**	**Self Employed**	**Wage & Salary Jobs**	**ES202 W & S Jobs**
1990	16,182	7,853	8,329	48.5%	2,154	14,028	12,748
1991	14,982	7,205	7,777	48.1%	1,995	12,988	11,822
1992	15,541	7,279	8,262	46.8%	2,068	13,473	12,261
1993	17,109	8,073	9,036	47.2%	2,277	14,832	13,514
1994	18,215	8,655	9,560	47.5%	2,425	15,790	14,447
1995	18,256	8,696	9,560	47.6%	2,430	15,826	14,486
1996	18,712	8,642	10,071	46.2%	2,491	16,221	14,929
1997	19,352	8,898	10,455	46.0%	2,576	16,776	15,571
1998	19,577	8,956	10,621	45.7%	2,606	16,971	15,822
1999	19,211	8,700	10,510	45.3%	2,558	16,653	15,659
2000	19,527	8,780	10,747	45.0%	2,599	16,928	15,924
2001	19,695	8,842	10,853	44.9%	2,622	17,073	16,985
2002	19,204	8,756	10,448	45.6%	2,602	16,602	15,614
2003	19,121	8,571	10,550	44.8%	2,603	16,518	15,656
2004	18,923	8,351	10,572	44.1%	2,587	16,336	15,591
2005	18,610	8,096	12,609	43.5%	2,554	16,056	15,420
2010	24,092	9,941	15,551	41.3%	3,355	20,737	19,865
2015	29,644	11,700	18,469	39.5%	4,179	25,465	24,319
2020	34,576	13,091	21,643	37.9%	4,930	29,646	28,236
2025	38,462	14,027	24,914	36.5%	5,541	32,921	31,288
Source: Colorado Department of Local Affairs, September 2004							

The data set out in Table 5 can also be used to project the existing need for affordable housing. As discussed in the Introduction, we have assumed for purposes of these calculations that 60 percent of those employed in the county need to be housed in the county. Table 6 takes the total and local employment data from Table 5 and derives the demand for employee housing based on this goal. It is derived by first determining 60 percent of the county's employees based on the total number of employees, and then contrasting this 60 percent of total Pitkin County employment with locally employed Pitkin County residents. The difference represents the number of employees still needing affordable housing in the county, if 60 percent of the local work force is going to live in the county. The 2002 Aspen Affordable Housing Strategy Plan, prepared by EPS, found that the average worker holds more than one job. Based on the EPS data and experience from other resort communities, it appears that the average worker in this market holds 1.065 jobs. Aspen/Pitkin County Housing Office estimates that there are approximately 1.75 employees per household in the county today. Applying these ratios to the employees in need of housing results (i.e. dividing the number of jobs by the number of jobs per employee, and then dividing the resulting number of employees by the number of employees in a housing unit) shows the net need for affordable housing in Pitkin County from 1990 to 2025. This information is summarized in Table 6.

Table 6: Need for Affordable Employee Housing; Pitkin County 1990-2025							
	Total Employ-ment	**Total Individuals Employed**	**60% of Employees**	**Local Employ-ment**	**Local Individuals Employed**	**Employees in Need of Affordable Housing**	**Needed Housing Units**
1990	16,182	15,194	9,117	7,853	7,374	1,743	996
1991	14,982	14,068	8,441	7,205	6,766	1,675	957
1992	15,541	14,592	8,755	7,279	6,834	1,921	1,098
1993	17,109	16,065	9,639	8,073	7,580	2,059	1,177
1994	18,215	17,103	10,262	8,655	8,127	2,135	1,220
1995	18,256	17,142	10,285	8,696	8,165	2,120	1,212
1996	18,712	17,570	10,542	8,642	8,114	2,428	1,387
1997	19,352	18,171	10,903	8,898	8,354	2,548	1,456
1998	19,577	18,382	11,029	8,956	8,409	2,620	1,497
1999	19,211	18,038	10,823	8,700	8,169	2,653	1,516
2000	19,527	18,335	11,001	8,780	8,244	2,757	1,575
2001	19,695	18,493	11,096	8,842	8,302	2,793	1,596
2002	19,204	18,032	10,819	8,756	8,222	2,598	1,484
2003	19,121	17,954	10,772	8,571	8,048	2,724	1,557
2004	18,923	17,768	10,661	8,351	7,842	2,819	1,611
2005	18,610	17,474	10,485	8,096	7,602	2,882	1,647
2010	24,092	22,622	13,573	9,941	9,334	4,239	2,422
2015	29,644	27,835	16,701	11,700	10,986	5,715	3,266
2020	34,576	32,466	19,479	13,091	12,292	7,187	4,107
2025	38,462	36,115	21,669	14,027	13,171	8,498	4,856
Source: Table 5							

Table 6 shows that Pitkin County has had a net housing need for affordable housing since at least 1990. Since then there has been an increasing need in Pitkin County for affordable housing. This sharp increase in the net need for housing is closely associated with the equally sharp decline of housing units being offered in the price ranges that the local work force can afford. The data support the historical trend that the affordable housing problem in the county will continue to grow as housing becomes more expensive and employment continues to grow.

Table 6 reveals that if the county were to provide housing for 60 percent of all employees in 2004, then a total of 10,661 employees would have needed housing. A total of 7,842 employees are currently living in the county, which leaves a gap of 2,819 employees for whom additional housing would have been needed. The Aspen/Pitkin County Housing Office estimates that each affordable housing unit houses 1.75 employees, which means that the gap of 2,820 employees in need of housing would have required an additional 1,611 housing units. Since Table 5 shows that 44.1 percent of employees currently live in the county, this gap of 1,611 housing units represents the difference between the current 44.1% local housing rate and the assumed county target of 60% local housing.[1]

[1] The 2002 Aspen Affordable Housing Strategy Plan (prepared by EPS) found a shortfall of 995 units as of 2000. Some of the differences between these two findings can be explained by the fact that this study uses 2004 data, and some may be caused by differential assumptions about employees per unit (1.75 vs. 1.80).

This need is expected to grow significantly between 2005 and 2025. Table 7 shows this increase in demand that the growth of employment will have over the next 21 years.

Table 7: Need for Affordable Employee Housing; Pitkin County 2005-2025					
	Individuals Employed	60% of Employees	Local Individuals Employed	Employees in Need of Affordable Housing	Needed Housing Units
2005	17,474	10,485	7,602	2,882	1,647
2010	22,622	13,573	9,334	4,239	2,422
2015	27,835	16,701	10,986	5,715	3,266
2020	32,466	19,479	12,292	7,187	4,107
2025	36,115	21,669	13,171	8,498	4,856
Source: Table 6					

D. THE INVENTORY OF AFFORDABLE HOUSING

1) Overview

There are potentially five different types of affordable housing units available today for employees in the Pitkin County, Aspen and Snowmass work force. They include Category units, resident occupancy units (RO units), employee dwelling units (EDUs), caretaker dwelling units (CDUs) and accessory dwelling units (ADUs).

The Category units are ownership and rental units that are regulated as to size, type, occupancy, and sale/rental price pursuant to the Aspen/Pitkin County Housing Guidelines. The units have been built either by the private sector pursuant to county or city regulations, or by the Housing Authority, Snowmass, or the Village of Snowmass, and sometimes by other public entities. There are four different types of Category units; they are for low (Category 1), moderate (Categories 2 and 3) and middle (Category 4) income employees and their families (Aspen/Pitkin County Housing Guidelines). In order to address the range of housing demand of county employees and their families, the Category units include studios; one bedroom, two bedroom, three bedroom, and four bedroom multi-family units; and single family homes.

Resident occupancy units (RO unit) primarily serve local professionals and business owners. The units have been built by the private sector and must be sold to an employee, subject to deed restrictions. The nature of RO units in the supply of affordable housing has changed over time. Initially, RO units were not subject to either income or asset limits; then for a period of time they were subject to both income and asset limits; and they are now subject to asset (but not income) limits. Even when they were most tightly restricted, however, the income limits, sale prices, and sizes of the RO units were set higher than those for Category units. For example, an RO unit cannot exceed 2,200 square feet in size and must be deed restricted to maintain price levels within the general range of the purchase price, adjusted for inflation and/or CPI. Most RO units are single family homes.

Attached or detached employee dwellings units (EDUs) are permitted as of right in the R-30, AFR-2, AFR-10, RS-20, RS-30 and RR-160 zone districts (subject to certain restrictions), and are allowed as a special review use in certain other zone districts in Pitkin County (Sec. 3-150-

120, PCLUC). The EDU must be between 700 and 1,500 net livable square feet, and must be deed restricted and rented to employees who work within the jurisdictional limits of the county or City at maximum rental rates that do not exceed the Housing Office Category 3 levels (Sec. 3-150-120 D. 3, PCLUC).

The City of Aspen permits owners of residential units to build accessory dwelling units (ADUs) (subject to specific development limitations). The ADU must be between 300 and 700 square feet of net livable area, and deed restricted and rented to county or city employees by the owner if it is occupied (Sec. 26.40.090, Aspen Code). The Aspen/Pitkin County Housing Office estimates that virtually none of the existing ADUs are rented out and available to meet affordable housing needs, so these units are not included in the available supply.

Caretaker dwelling units (CDUs) are allowed, subject to specific development standards, in a number of residential zone districts in the county (Sec. 3-150-130, PCLUC). Generally, CDUs may be built up to 700 net livable square feet in size, but they cannot exceed 400 net livable square feet in several specific instances. If the CDU is occupied (occupation is not a requirement), it may only be occupied by members of the immediate family or resident employees. The county's regulations state that the CDUs shall: "be limited to occupancy by not more than two (2) adults, and related children, who qualify as (and have been found by the Housing Office to be) employees of the community under such guidelines as may from time to time be established by said authority…" The caretaker dwelling unit may be occupied by members of the immediate family even though they may not qualify as employees of the community." (Secs. 3-150-130 A.4 and B.3, PCLUC).

2) The Inventory of Existing Affordable Housing Units

The Aspen/Pitkin County Housing Office maintains an inventory of all the built and planned affordable housing units in the county. That inventory is attached to this Study as Appendix A, and includes a breakdown of the units by location and by number of bedrooms. A summary of the inventory of built units is set forth in Table 8 below.

Table 8: Inventory of Affordable Housing Units 2004

Location	Ownership	Rental	Total
Category and RO Units			
Within Aspen	690	1,068	1,758
Outside Aspen	563	17	580
Total	1,253	1,085	2,338
Rental EDUs		28*	28*
Rental CDUs		43**	43**
Total Affordable Units	1,253	1,156	2,409

Source: Aspen/Pitkin County Housing Office and Pitkin County Planning Office, see Exhibit A.
* The inventory of EDUs is currently being updated. This represents an estimate from staff of the Aspen/Pitkin County Housing Office.
** In 2000, there were 57 CDUs in the county, and the inventory has not been updated since. The Housing Office estimates that approximately 75% (43) of those units are assumed to be rented and available to address affordable housing needs.

What the inventory demonstrates is that there are a total of 2,338 affordable units plus 71 Employee Dwelling Units and Caretaker Dwelling Units that contribute to the affordable housing supply, for a total of 2,409 affordable housing units in Pitkin County. Of this amount, the large majority are Category units. Only 477 of the units are Resident Occupancy (RO) units (i.e. ownership units constructed by the private sector that must be sold to an employee of the owner, subject to deed restrictions).

In addition, the inventory in Exhibit A clarifies that there are currently 98 affordable housing units in the various stages of the planning and development approval process. When those units are added to the figures above, the result is a total of 2,507 built or planned-for-but-unbuilt affordable housing units in Pitkin County.

3) Affordable Housing Units Expected to be Constructed by Housing Authority

In the 1970s, the county and the City of Aspen initiated a program to build new affordable housing units through the Aspen/Pitkin Housing Office. This effort is currently supported through a real estate transfer tax that has been approved by the City of Aspen and allocated to the Housing Office for the construction of affordable housing units for low, moderate, and middle income employees. This is the source of funding that the Housing Office has used in the past, along with some limited funding through city and county affordable housing mitigation requirements, to acquire land and build affordable housing units. Based on conversations with the Housing Office staff, that office estimates that it will build approximately an additional 400 Category housing units over the next 10 years.[2]

4) Addressing 2004 Affordable Housing Needs

Table 6 reveals that in 2004, 7,842 Pitkin County employees were living in the county. At 1.75 employees per dwelling unit, this means that 4,481 dwelling units were already being provided for these employees. Since 2,409 of units were being provided from the stock of the affordable housing units, the remaining 2,072 were being provided by the private market. Table 6 also reveals a remaining need for 1,611 units if 60% of employees are to be housed within Pitkin County. When this number is reduced by the amount of affordable housing units currently under construction (98) and those the authority will build over the next ten years (400), the anticipated unmet need after ten years is 1,113 affordable housing units.

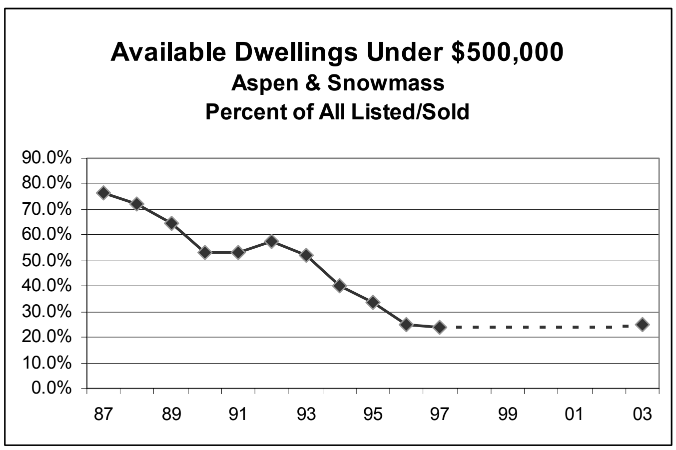
A portion of the needed units will be provided by private market activity, as they have in the past. The calculation of unmet need should therefore also be reduced by the amount of housing expected to be supplied by the private market at affordable prices during the next 10 years. The 2002 Aspen Affordable Housing Strategy Plan concluded that the market might provide approximately 350 units. Table 9 shows the distribution of housing sold for under $500,000 in Aspen and Snowmass in 2003-04.

[2] Conversation with Cindy Christensen, Aspen/Pitkin County Housing Office, June 22, 2004.

Table 9: Dwelling Units By Price Range in Aspen & Snowmass							
	Listings < $500,000				All Listings		
	SF Unit	Condo	Both	%	SF Unit	Condo	Both
1988	43	329	468	76.3%	172	412	613
1989	28	241	269	64.4%	151	267	418
1990	22	227	249	52.9%	205	266	471
1991	29	304	333	53.4%	260	364	624
1992	20	300	320	57.6%	211	345	556
1993	12	235	247	52.2%	185	288	473
1994	7	134	141	40.2%	170	181	351
1995	7	118	125	33.8%	200	170	370
1996	4	91	95	25.1%	217	162	379
1997	2	80	82	23.9%	197	146	343
03-04	2	86	88	25.0%	132	220	352

Source: Aspen Appraisal Group, Ltd., "Aspen-Snowmass Market Overview," 2000. Aspen/Pitkin County Housing Office, 2004.

Table 9 shows that the percentage of residential listings under $500,000 has fallen from over 75% 16 years ago to approximately 50% 11 years ago, and then fallen further to 25% in 1996. It seems to have stabilized at that level. The number of units sold in this price range also seems to have stabilized between 90 and 100. This information is graphically presented below.



The apparent stabilization of private market supply over the past 8 years is helpful in predicting future market supply.

It is unlikely that there will be significant construction of new market units within affordable price ranges. An examination of units sold under $500,000 suggests few, if any, are recently built. Nevertheless, previously built units remain in the lower price bracket. Table 10 shows that, of the 88 units listed and sold in 2003-04, only 19 were priced under $200,000 (which is slightly higher than the $188,667 maximum affordable housing price for a median income family of three – see "Buying Power" on page 23 below). All of the units sold under $200,000 were condominiums or town houses.

Table 10: Units Sold Under $500,000 Aspen and Snowmass	
Price Range	**Number Sold**
< $100,000	2
100,000- 150,000	8
150,000 – 200,000	9
200,000 – 250,000	13
250,000 – 300,000	5
300,000 – 350,000	15
350,000 – 400,000	18
400,000 – 450,000	10
450,000 – 500,000	13
Source: Multi-List Service, 2004	

Since rising costs of land and construction for new development tend to raise prices for resales of existing units, there is little reason to believe that the private market will supply more affordable units in the next 10 years than it has in the past few years. In fact, present conditions suggest that the number supplied could fall further. Under the most favorable conditions, market provision of affordable housing could reach 20 per year, or 200 units over the next 10 years. If 200 units were supplied through resales of existing units, it would reduce the total unmet from demand from 1,113 to 913 units

Table 11 summarizes the information presented above.

Table 11: Comparison Of Year 2004 Affordable Housing Needs And Public Programs To Address Needs		
	Year 2004 Needs and Supply	**Additional Units to Address Year 2004 Needs**
Total Number of Employees to be Housed in Pitkin County	10,661	
Total Number of Affordable Housing Units Needed (1.75 emp/du)	6,092	
Existing Provision (includes existing affordable housing units)	4,481	
Existing Need	1,611	
Affordable Housing Units Currently Under Construction		98
New Affordable Housing Units Estimated to be Constructed by Housing Office, 2004-2014		400
Net Need Excluding Private Market Activity		1,113
New Units Provided by Market		200
REMAINING NEED		**913**
Source: Table 6 and Aspen/Pitkin County Housing Office		

Since mitigation fees may only be imposed to address the affordable housing needs created by new growth in the county, and not to fund pre-existing deficits, the county will need to either: (a) identify other sources of funds to address this deficit of 913 affordable housing units, or (b) administer the mitigation fees so as to ensure that those who provide mitigation are receiving the benefits for those payments instead of reducing the existing deficit.

E. MITIGATING THE DEMAND FOR AFFORDABLE HOUSING CREATED BY NEW DEVELOPMENT

The need to provide affordable housing for local employees in Pitkin County comes from all new development that demands labor (employees). This includes residential development, commercial development, and tourist accommodations.

1) Background: Basic Sector versus Local Sector

It is tempting to think that a community may be divided neatly into an economic sector and a residential sector. The economic sector provides the employment and incomes for the residents and the residential sector provides for the needs of the local employees and their families. However, in a place like Pitkin County, this distinction between an economic sector and residential sector is misleading. Instead, it is more useful to conceive of an economy that is divided into two general sectors: the basic sector and the local sector. The basic sector is that part of a regional economy that brings income into the region and distributes that income as wages and salaries within the region. The local sector is that part of the economy that produces goods and services for sale to residents of the region. The basic sector is active while the local sector is reactive.

For a region like Detroit, this model is workable. Automobiles and associated products are made in the region and sold to (shipped to) consumers living outside of the Detroit region. The firms engaged in the production of automotive goods are paid for the goods and services they provide in the process of making automotive products. Their incomes are spent within the local economy on a wide variety of goods and services. The essential reason for using this model is that the economic health of the region is dependent upon the economic success of the basic sector. Frequently the basic sector is called the export sector because it produces goods and services for export (to other regions and not necessarily internationally).

Pitkin County experiences these same economic forces, but the forces play out a bit differently. The economic base of Pitkin County is visitors. Some of these visitors are traditional tourists. Others are part-time residents. Still others are present in the area for long periods. The essence of these visitors is that they come to the area (and sometimes return) if their visits are pleasant. This is equally true of tourists, part-time residents, and even retirees. All are attracted to the area because of the natural and man-made amenities of the region combined with a community that has an attraction to those people. All of these groups constitute the economic base of the county. They bring money into the county and then spend that money on goods and services produced within the region. The incomes earned by that production leads to spending in the local sector. The residential development of Pitkin County is very much a part of the economic base of the community. As such, residential development shares many of the characteristics of other and more typical components of the economic base (such as Detroit's auto industry).

2) Residential Development

Residential development in Pitkin County has two economic impacts. The first is the construction of the residence. The second is the operation and maintenance of that residence when it is completed. Both activities generate employment. This employment will be of the type where most of those employed will receive wages and salaries that place them in a position of economic stress in terms of their ability to purchase or rent housing in the county. Each component that has an economic impact is discussed below in terms of the demands it places on the need for affordable housing in the county.

(a) Residential Construction Impacts

Clearly, the construction of residential units or the expansion or renovation of a residential unit requires the employment of contractors and construction workers to do the work. In addition, it requires the purchase of materials to construct the unit.

The calculation of construction related demand for affordable housing is a three-step process. The first step is to document the amount of residential and non-residential construction authorized in the county. The second step is to determine how many construction workers were involved in the construction process. For purposes of this calculation, we have only included employees that actually work in residential construction (rather than in related trades, such as cabinetry or electricians), since the related trades often work on repair jobs unrelated to the construction of new residential and non-residential space. Those types of repairs are more accurately treated as the costs of operating and maintaining units once they have been built, and are covered in subsection b below. Table 12 summarizes the relationship between residential construction and number of employees required for that construction.

Table 12: Square Feet Constructed per Construction Employee in Pitkin County

	Residential Floor Area	Residential Construction Employment	Feet per Employee
1999	715,464	537	1,332
2000	921,150	563	1,636
2001	877,075	481	1,823
2002	993,606	598	1,662
2003	1,489,991	524	2,845
Totals	4,997,285	2,703	1,849

Source: Pitkin County Building Department and
Bureau of the Census, http://censtats.census.gov/cgi-bin/cbpnaic/cbpdetl.pl

Table 12 illustrates that, on average, one employee directly involved in residential construction builds an average of 1,849 square feet of residential space in a year. Put another way, it takes an estimated 0.541 employee-years to construct 1,000 square feet of residential floor area. Larger construction projects require more construction time (either more people working over the same period of time, or the same number of people working for a longer time) to complete.

Table 13 sets out the employment impact and the number of dwelling units associated with that impact by size of dwelling. This table displays the number of employees it takes to construct the unit and the number of dwelling units required to house construction workers based on the size of house being constructed. Construction employees will require housing only during the construction period, but the average construction worker career is 40 years. The calculation of construction employee years is therefore divided by 40 to convert to needed housing. The employee equivalent is then divided by the number of employees per dwelling unit (1.75) to calculate the fraction of a dwelling unit needed to house the employees engaged in residential construction of homes of different sizes.

Table 13: Construction Employment and Need for Housing in Pitkin County			
Unit Size	**Employee Years**	**Permanent Employment**	**Dwelling Units**
500	0.270	0.007	0.004
1,000	0.541	0.014	0.008
2,000	1.082	0.027	0.015
3,000	1.623	0.041	0.023
4,000	2.163	0.054	0.031
5,000	2.704	0.068	0.039
6,000	3.245	0.081	0.046
7,000	3.786	0.095	0.054
8,000	4.327	0.108	0.062
9,000	4.868	0.122	0.070
10,000	5.408	0.135	0.077
12,000	6.490	0.162	0.093
Source: U.S. Census Data; Aspen/Pitkin Housing Office			

This issue was also addressed in the 2004 study by the Northwest Colorado Council of Governments (NWCOG) of “Second Homes and the Amenity-Based Economy”. Table 14 summarizes NWCOG’s findings on the impact of second home construction on employment.

Table 14: Employment Generation by Second Home Construction in Five County Area				
Economic Driver	**Basic Jobs**	**Total Jobs**	**Basic Jobs per Unit**	**Total Jobs per Unit**
2nd home construction < 3K sf unit	430	883	3.3	6.8
2nd home construction 3K+ sf unit	1,086	2,229	9.1	18.7
Source: NWCOG “Second Homes and the Amenity-Based Economy”, April 2004				

The figures in Table 14 differ from those in Table 13 because the NWCOG study focused on second home owners (rather than all home owners), and because the NWCOG numbers reflect an average across five mountain resort counties (rather than being specific to Pitkin County).

(b) Residential Operations and Maintenance Impacts

Once a dwelling is completed it will be occupied, operated and maintained. These activities will require labor inputs and thus employ people.

To evaluate these impacts, a survey of homeowners in Pitkin County was conducted in June 2004. The survey, administered by RRC Associates, contacted 2,500 Pitkin County homeowners using a mailback survey technique. All non-duplicated households with units in excess of 4,000 square feet, as identified through County Assessor records, were contacted, as well as a random sample of owners of smaller units (with an overweighting of units of 3,000 – 3,999 square feet in size). A total of 743 surveys were returned by the response cutoff date, for a strong response rate of 29.7 percent.

The survey asked respondents to specify their spending and/or direct employment for the operations and maintenance of their home, broken out by the following types of service providers:

- Homeowners associations
- Property management firms
- Other contracted services
- Caretakers and other direct employees of the household

For each of these employment categories, respondents were asked to provide annual spending estimates, as well as employment estimates (if known). Annual spending amounts were converted into employment using a combination of wage data and assumptions regarding non-labor costs. Wage data was based on annualized wage rates for Pitkin, Eagle and Garfield counties for specified industry sectors, as extrapolated from second quarter 2003 ES202 data. Specific assumptions for individual service providers are as follows:

- Homeowners associations: We assumed a conversion ratio of $58,000 in homeowners' dues per direct job. This is based on an assumption of a $27,900 average wage for HOA employees (regional ES202 data – NAICS code 813990); total cost per employee to employer of $34,800 (adding an assumed 20 percent factor for payroll taxes and benefits); and an assumption that 60 percent of HOA costs are for labor-related expenses (based on interviews with Home Owners Associations (HOAs) in other mountain resort communities, as well as national financial data for HOAs).

- Property management firms: We assumed a conversion ratio of $58,700 in property management fees per direct job. This is based on an assumption of a $28,200 average wage for residential property management employees (regional ES202 data – NAICS code 531311); total cost per employee of $35,200 (adding an assumed 20 percent factor for payroll taxes and benefits); and an assumption that 60 percent of property management costs are for labor-related expenses (based on interviews with property management firms in other mountain resort communities).

- Other contracted services: We assumed a conversion ratio of $37,000 in contracted service fees per direct job. This is based on an assumption of a $23,500 average wage for buildings & dwellings services employees (regional ES202 data – NAICS codes 5616 & 5617); total cost per employee to employer of $29,400 (adding an assumed 20 percent factor for payroll taxes and benefits); and an assumption that 80 percent of service costs are for labor-related expenses.

- Direct employees and caretakers: We assumed a conversion ratio of $42,000 in employment costs per direct job. This is based on an assumption of a $33,700 average wage for private household employees (regional ES202 data – NAICS code 814110); and total cost per employee to employer of $42,000 (adding an assumed 20 percent factor for payroll taxes and benefits).

As a "check" on these conversion factors, the data was also analyzed using inflation-adjusted 1997 Economic Census data (national or regional data, depending on availability) for the ratio of receipts to employment in applicable industries. Very similar employment estimates were obtained, adding confidence in the results.

The employment estimates resulting from these extrapolations are similar to, although not quite precisely the same as, "full-time equivalents" (FTE's). Rather, the employment estimates represent "employee equivalents" for the respective service occupations, i.e. the number of persons that would typically be employed to complete the work, based on existing employment patterns in the respective industries, which presumably includes a blended hybrid of full-time and part-time employees.

A total of 446 survey responses contained sufficient data to determine both estimated employment and total home square footage (finished and unfinished combined). The distribution of responses by home size is illustrated in Table 15 below.

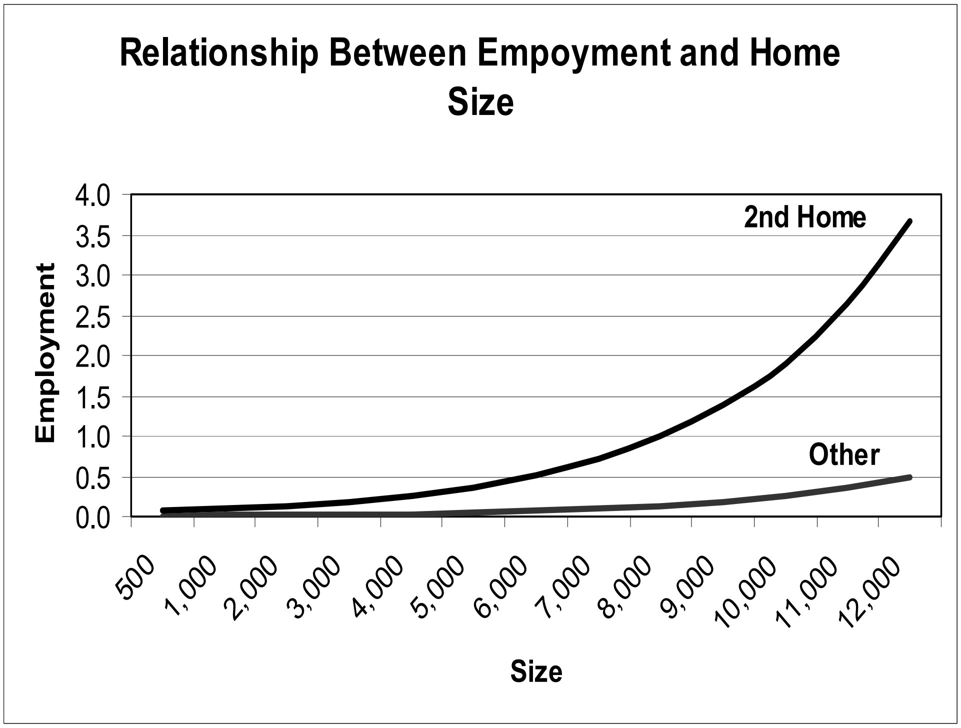
Table 15: Number of Usable Survey Cases by Home Size	
Home Size	**Usable Cases**
< 1,000 sf	40
1,000 - 1,999 sf	82
2,000 - 2,999 sf	51
3,000 - 3,999 sf	57
4,000 - 4,999 sf	88
5,000 - 5,999 sf	64
6,000 - 6,999 sf	22
7,000 - 7,999 sf	15
8,000 - 8,999 sf	7
9,000 - 9,999 sf	6
10,000 - 10,999 sf	6
11,000 - 11,999 sf	3
12,000 - 12,999 sf	1
13,000 - 13,999 sf	2
14,000 - 15,000 sf	2
Grand Total	**446**
Source: RRC survey	

Data at the top end of the home size distribution is somewhat erratic due to the small number of underlying usable cases, but for much of the observed distribution, the specified exponential trend line closely matches actually observed data, as indicated by the R^2 value of 0.336. The basic forms of the equation are:

$$\text{Ln(y 2}^{\text{nd}}\text{ Home)} = -4.64138 + (0.000328 * \text{Size in Sq.Ft.}) + 2.00514$$

$$\text{Ln(y All Other Homes)} = -4.64138 + (0.000328 * \text{Size in Sq.Ft.})$$

These equations point to the fact that there are significant differences in employment generation between second homes and all other homes, and that second homes use many more employees, on average, than other types of homes. The graph below illustrates this difference.



The exponential relationship is specified as follows:

$$y = -4.67138\, e^{(0.000328\, x) + 2.01}$$

Where y = employment and x = square footage

The exponential relationship above effectively describes employment as a function of home size for units of 9,000 square feet and under. For units larger than 9,000 square feet, it is recommended that the ratios for the 9,000 foot unit be applied on a proportional basis per 1,000 feet. The results of applying this formula, as adjusted, to local occupancy homes and second homes of varying sizes is shown in Table 16 below.

Table 16: Modeled Relationship Between Home Size and Post Construction Employment

	Local Occupancy	2nd Home
500	0.011	0.082
1,000	0.013	0.096
2,000	0.018	0.134
3,000	0.025	0.186
4,000	0.035	0.258
5,000	0.048	0.358
6,000	0.067	0.497
7,000	0.093	0.691
8,000	0.129	0.959
9,000	0.179	1.331
10,000	0.199	1.479
11,000	0.219	1.627

Table 16: Modeled Relationship Between Home Size and Post Construction Employment		
	Local Occupancy	**2nd Home**
12,000	0.239	1.774
13,000	0.259	1.922
14,000	0.279	2.070
15,000	0.299	2.218
Source: RRC		

These findings are generally consistent with several findings from the 2004 NWCOG study on "Second Homes and the Amenity-Based Economy". Among other findings, that study determined that second homes generate about 5,000 jobs to the Pitkin County economy, and that, compared to the average single property owner, the second home owner spends five times as much on lawn care, home security, pest control, and housecleaning. Table 17 summarizes NWCOG's estimate of this impact on employment.

Table 17: Employment Generation by Second Home Services in Five County Area				
Economic Driver	Basic Jobs	Total Jobs	Basic Jobs per Unit	Total Jobs per Unit
2nd home spending < 3k sf	6219	8793	0.7	1.1
2nd home spending 3K+ sf	2283	3228	1.3	1.8
Source: NWCOG "Second Homes and the Amenity-Based Economy", April 2004				

The figures in Table 16 differ from those in Table 17 because the NWCOG study focused on second home owners (rather than all home owners), and because the NWCOG numbers reflect an average across five mountain resort counties (and are not specific to Pitkin County).

(c) Combined Impacts of Construction, Operations and Maintenance of Residential Development

The two separate analyses outlined above can be used to estimate the amount of employment that construction and operations and maintenance activities generate to build and then service residential development in Pitkin County. Table 18 estimates this individually and then combines the employment estimates for construction and operation and maintenance activities.

Table 18: Residential Employment and Need for Housing											
Unit Size	Construction			Local Occupancy				Second Homes			
				Post Construction		Total		Post Construction		Total	
	Employee Years	Perma-nent Employ-ment	Dwelling Units	Perma-nent Employ-ment	Dwelling Units	Employ ment	Dwelling Units	Perma-nent Employ-ment	Dwelling Units	Employ ment	Dwelling Units
500	0.270	0.007	0.004	0.011	0.006	0.018	0.010	0.082	0.047	0.089	0.051
1,000	0.541	0.014	0.008	0.013	0.007	0.027	0.015	0.096	0.055	0.110	0.063
2,000	1.082	0.027	0.015	0.018	0.010	0.045	0.026	0.134	0.077	0.161	0.092
3,000	1.623	0.041	0.023	0.025	0.014	0.066	0.037	0.186	0.106	0.227	0.129
4,000	2.163	0.054	0.031	0.035	0.020	0.089	0.051	0.258	0.148	0.312	0.178
5,000	2.704	0.068	0.039	0.048	0.028	0.116	0.066	0.358	0.205	0.426	0.243
6,000	3.245	0.081	0.046	0.067	0.038	0.148	0.085	0.497	0.284	0.579	0.331
7,000	3.786	0.095	0.054	0.093	0.053	0.188	0.107	0.691	0.395	0.785	0.449
8,000	4.327	0.108	0.062	0.129	0.074	0.237	0.136	0.959	0.548	1.067	0.610
9,000	4.868	0.122	0.070	0.179	0.102	0.301	0.172	1.331	0.760	1.452	0.830
10,000	5.408	0.135	0.077	0.199	0.114	0.334	0.191	1.479	0.845	1.614	0.922
12,000	6.490	0.162	0.093	0.239	0.137	0.401	0.229	1.774	1.014	1.937	1.107
15,000	8.113	0.203	0.116	0.299	0.171	0.501	0.287	2.218	1.267	2.421	1.383
Above 9,000 sf -- use the results for 9,000 sf plus the following amounts per 1,000 FT² over 9,000											
Per 1,000 FT²	0.541	0.014	0.008	0.020	0.011	0.033	0.019	0.148	0.084	0.161	0.092
SOURCE: RRC											
NOTE: Continuing employees will require housing on a continuing basis while construction employees will require housing only during the construction. Therefore, construction employee years is divided by 40 to convert to needed housing.											

(d) Residential Mitigation

The wages and salaries paid to Pitkin County's low, moderate, and middle-income employees are generally insufficient to allow these employees to obtain market housing. Consequently, it will be necessary for residential development to mitigate for local housing costs for employees if the county is going to achieve its affordability goal. Mitigation can come in several forms. The first is through payment of a fee/subsidy for the difference between the cost of housing in the county for the employee and what the employee can reasonably afford. A second is to provide land for affordable housing that is of equal value to the fee/subsidy amount needed. A third is the construction of affordable housing units for the employee. A final and fourth option is to convert existing market units to affordable units.

The mitigation fee/subsidy amount is based on the difference between the cost of housing in the county for the employee and what the employee can reasonably afford. In Pitkin County, this mitigation fee/subsidy amount is calculated below at $31,627 per employee. This subsidy amount is based on an average subsidy amount that identifies the difference between 2004 costs (land and construction) to construct the general range of Category units for low, moderate, and middle income persons, and the average payments that the Category employees can afford based on their income.

(i) Fee Subsidy

The fee subsidy is a calculation of the amount by which the buying power of a typical household in need of affordable housing in Pitkin County falls short of the amount needed to obtain affordable housing. The estimate first involves determining the difference between the cost to construct a typical two-bedroom residential unit and what a median income household of three can afford. This figure is then adjusted to a per employee subsidy, based on the number of employees that are housed in a residential unit in Pitkin County. In order not to overstate this amount, the calculation is made for a small family (three persons) and a small unit (two-bedrooms). The gap for larger family units may be larger. For purposes of this calculation, we use the smaller unit sizes and lower construction costs applicable to construction of affordable units (rather than free market units) based on past experience in the county. Because the Housing Office has not constructed single-family units to date, the figures are for a multi-family affordable housing unit.

Affordable Unit Cost

Unit Size. Pursuant to the Housing Office's guidelines, the minimum permitted size for a 2-bedroom multi-family unit for a Category 1 or 2 household is 850 square feet, and the minimum permitted size for a Category 3 or 4 household is 950 square feet. Over the past 12 years, Category units have been built to approximately these sizes, and not larger. This calculation uses a blended size assumption of 900 square feet.

Construction Cost. The Aspen/Pitkin County Housing Office has received bids to construct affordable housing at $160 per square foot of living area (heated space). This cost is the cost of constructing a "utilitarian" building and excludes land acquisition, infrastructure, design, permitting, finance and "soft costs."

Land costs within Pitkin County are difficult to characterize. Nevertheless, a cost of $1,250,000 per acre near Aspen and $500,000 per acre outlying from Aspen will be used. Closer to Aspen, dwellings per acre should average 12 units and further out units per acre should equal 8. This yields a simple average land cost per dwelling unit of $87,500. Given an average unit size of 1,250 square feet for actual affordable units built (versus the 900 square feet prototype unit), the estimated land cost per square foot is $70.00.

Land closer to Aspen will have lower costs of providing infrastructure while outlying sites will have higher costs. This cost tends to offset the advantage of lower outlying land cost. Recent experience by the Aspen/Pitkin County Housing Office would indicate a per unit infrastructure cost of $16,667, or $13.33 per square foot of affordable housing unit (based on the average unit size of 1,250 square feet, for the average unit built).

The "soft costs" include design, permitting, administration and general supervision. While the Aspen/Pitkin County Housing Office performs these tasks without charge, any other provider would incur those costs. These costs are estimated at 7.5% of constriction "hard" and infrastructure costs.

The final cost included is interest. Some entity will have to pay the cost of materials and labor. These costs will be recouped when the unit is sold. In the interim, interest costs will be incurred. This cost is estimated at 10%. Table 19 shows the calculation of a Pitkin County affordable housing cost of providing a living unit.

Table 19: Affordable Housing Construction Costs 2004		
Category	**Cost per Square Foot**	**Cumulative**
Basic Utilitarian Construction	$160.00	$160.00
Infrastructure	$13.33	$173.33
Soft Costs	7.50%	$186.33
Land	$70.00	$256.33
Interest/Finance	10.00%	$281.97
Source: Clarion Associates and Aspen/Pitkin County Housing Office		

Cost Calculation

(900 sf * $281.97 land and construction cost) = $ 253,773/unit

Buying Power

Subsidy Needed for Median Household of Three. The median household income in Pitkin County in 2004 for a household of three persons is $65,306. If a residential unit is going to be affordable for a household of three in Pitkin County, it must sell for $193,970 (this assumes that the household should be able to carry a mortgage on the unit that does not exceed 30% of the monthly income of the family). Since the cost of an average two-bedroom multifamily affordable housing unit is $253,773, a subsidy of $59,803 is necessary to make a typical two bedroom residential unit affordable to a household of three with a median income in the county.

Per Employee Subsidy. According to the Aspen/Pitkin County Housing Office, the number of employees per residential unit in the county is approximately 1.75. Dividing the per unit subsidy calculated above by the number of employees per unit results in a per employee subsidy of $34,173. In order to determine the fee/subsidy amount for an individual residential development, the following formula is used:

Number of Employees =
[(0.00368 * Unit Size/40) + Size $^{1.3211}$ * 0.00000681)]

Basic fee/subsidy = Total Employees (from Table 17) * $34,173
Fee/subsidy at 60% target = Total Employees (from Table 16)* $20,504

** = Times (multiply)*
Unit Size = Size of residential unit in square feet

Even though it will be necessary to calculate the fee/subsidy amount for each individual residential development since each will vary in size, a schedule for specific sizes of residential development that demonstrates employees generated, the affordable housing units needed and the subsidy/fee amount is set down in Table 20.

Table 20: Fee/Subsidy for Residential Development							
Size of Residential Development	Dwelling Units		Number of Employees		Subsidy per Employee @ 60% Target	Fee Subsidy @ 60% Target	
	Local Occupancy	**2nd Home**	**Local Occupancy**	**2nd Home**		**Local Occupancy**	**2nd Home**
500	0.010	0.051	0.018	0.089	$20,504	$365	$1,818
1,000	0.015	0.063	0.027	0.110	$20504	$544	$2,256
2,000	0.026	0.092	0.045	0.161	$20,504	$924	$3,301
3,000	0.037	0.129	0.066	0.227	$20504	$1,345	$4,645
4,000	0.051	0.178	0.089	0.312	$20,504	$1,822	$6,402
5,000	0.066	0.243	0.116	0.426	$20504	$2,375	$8,734
6,000	0.085	0.331	0.148	0.579	$20,504	$3,037	$11,863
7,000	0.107	0.449	0.188	0.785	$20504	$3,847	$16,100
8,000	0.136	0.610	0.237	1.067	$20504	$4,864	$21,874
9,000	0.172	0.830	0.301	1.452	$20,504	$6,169	$29,781
10,000	0.191	0.922	0.334	1.614	$20504	$6,854	$33,090
12,000	0.229	1.107	0.401	1.937	$20,504	$8,225	$39,708
15,000	0.287	1.383	0.501	2.421	$20504	$10,282	$49,635
Above 9,000 sf – figures reflect the formula for a 9,000 sf home plus these amounts per 1,000 sf over 9,000							
Per 1,000 sf	0.019	0.092	0.033	0.161	$20,504	$685	$3,309
Source: Table 17 and fee subsidy calculation							

(ii) Dedication of Land

Mitigation through an offer to dedicate land for affordable housing that is of equal value to the fee/subsidy amount can also serve as an appropriate form of mitigation, as long as land is needed for the construction of affordable housing, the land dedicated is at an appropriate location, and the land can be reasonably developed for affordable housing. Such determinations will need to be made on a case-by-case basis.

(iii) Construction of Units

In order to ensure fair and adequate mitigation in instances when a residential development proposes to construct the necessary affordable housing to provide for the needs of its employee(s), it is necessary to determine the number of employees that serve the development, and then the type and size of affordable housing units that are needed to accommodate the employee(s). The number of employees that serve the development can be derived from the initial part of the formula outlined above for determination of the fee/subsidy amount.

$$\text{Number of Employees} = [\,(\,0.00368 * \text{Unit Size}/40\,) + \text{Size}^{1.3211} * 0.00000681)]$$

The type, size, and occupancy standards applied for the units to be constructed should be based on the occupancy, type, and size requirements established in the Aspen/Pitkin County Housing Guidelines.

(iv) Conversion of Units

Finally, assurance that there is fair and adequate mitigation in instances when residential development proposes to convert the necessary market housing to affordable housing can be accomplished in the same ways outlined for the construction of new affordable housing.

3) Non-Residential Development

The other basic sector in Pitkin County that employs workers is non-residential development. This includes both commercial and tourist accommodations. Based upon prior experience, the county has established employee generation estimates for the number of employees that are generated by commercial developments. They do not include estimates for construction workers. The most current study of non-residential employee generation rates in the Aspen/Pitkin area was completed by EPS in 2002. Since most of the non-residential land uses in Pitkin County are located on the periphery of Aspen, it is reasonable to assume that these generation rates are generally applicable in the area. The EPS employee generation levels are identified in Table 21. However this table has been modified in order to avoid double counting service employees. Since the RRC survey demonstrates that the need for those employees is generated by the construction of homes, and mitigation for those employees has been calculated in Table 20, the commercial businesses that employee those individuals should not also be required to mitigate for their impacts. Approximately two-thirds of service employees have been attributed to housing-related services, while the remaining one-third have been attributed to service employment unrelated to the construction and servicing of new homes.

Table 21 Employee Generation For Commercial Development and Tourist Accommodations	
Full Time Equivalent (FTE) Employees Generated (2002)	
Tourist Accommodations (per room)	
Hotel -- Luxury	1.1
Hotel -- Historic	0.3
Commercial Development (per 1,000 sf)	
Office – General	4.5
Office – Real Estate	5.9
Office – Non-Profit	3.8
Retail – Guest Market	2.9
Retail – Local Market	2.3
Service (repair, personal, business)	3.4
Assigned to Residence	2.3
Assigned to Place of Business	1.1
Restaurant/Bar	7.4
Governmental	3.9
Source: EPS Aspen Employee Generation Study 2002	

Given the fact that most employees that work at either new commercial development or tourist accommodations are considered to be of either low, moderate of middle income, it will be necessary for nonresidential development to mitigate for local housing costs for their employees if the county is going to achieve its affordable housing goal. Mitigation could occur through any of the four mechanisms discussed for mitigation of residential impacts.

As is discussed in the previous section on residential development, on average the fee/subsidy amount necessary to ensure that local housing is available to all low, moderate, and middle-income employees is $34,173 per employee, and the figure for an assumed target of 60% of the workforce is $20,504. In order to determine the fee/subsidy amount for an individual commercial development, the following formula is applied.

Total Employees = Unit Size* Employee Generation

Basic Fee/subsidy = Total Employees * $34,173
Fee/subsidy at 60% target = Total Employees * $20.504

** = Times (multiply)*
Unit Size = Size of commercial development in square feet
Employee Generation = Employee Generation Rate from Table 21 Employee Generation for Commercial Development and Tourist Accommodations.

In order to determine the fee/subsidy for tourist accommodations the following formula is applied.

Total Employees = Unit Size* Employee Generation

Basic Fee/subsidy = Total Employees * $34,173
Fee/subsidy at 60% target = Total Employees * $20,504

** = Times (multiply)*
Unit Size = Number of Tourist Units
Employee Generation = Employees Generation Rate from Table 21 Employee Generation for Commercial Development and Tourist Accommodations

Even though it will be necessary to calculate the fee/subsidy amount for each individual development since nonresidential development will vary in size, a schedule for specific sizes and types of commercial development and tourist accommodations that demonstrate employees generated, the affordable housing units needed and the subsidy/fee amount is set down in Tables 22 and 23.

Table 22: Housing Subsidy By Size Of Commercial Development

Unit Size (in sf)	Nos. of Employees Generated	Subsidy Per Employee	Fee/Subsidy @ 60% Target
Office – General			
1,000	4.5	$20,504	$92,268
2,500	11.25	$20504	$230,670
5,000	22.5	$20,504	$461,340
7,500	33.75	$20504	$692,010
10,000	45	$20,504	$922,680
15,000	67.5	$20504	$1,384,020
20,000	90	$20,504	$1,845,360

Table 22: Housing Subsidy By Size Of Commercial Development			
Unit Size (in sf)	Nos. of Employees Generated	Subsidy Per Employee	Fee/Subsidy @ 60% Target
Office – Real Estate			
1,000	5.9	$20,504	$120.974
2,500	14.75	$20504	$302,434
5,000	29.5	$20,504	$604,868
7,500	44.25	$20504	$907,302
10,000	59	$20,504	$1,209,736
15,000	88.5	$20504	$1,814,604
Office – Non-Profit			
1,000	3.8	$20,504	$77,915
2,500	9.5	$20504	$194,788
5,000	19	$20,504	$389,576
7,500	28.5	$20504	$584,364
10,000	38	$20,504	$779,152
15,000	57	$20504	$1,168,728
20,000	76	$20,504	$1,558,304
Retail – Guest Market			
1,000	2.9	$20,504	$59,462
2,500	7.25	$20504	$148,654
5,000	14.5	$20,504	$297,308
7,500	21.75	$20504	$445,962
10,000	29	$20,504	$594,616
15,000	43.5	$20504	$891,924
20,000	58	$20,504	$1,189,232
25,000	72.5	$20,504	$1,486,540
Retail -- Local Market			
1,000	2.3	$20,504	$47,159
2,500	5.75	$20504	$117,898
5,000	11.5	$20,504	$235,796
7,500	17.25	$20504	$353,694
10,000	23	$20,504	$471,592
15,000	34.5	$20504	$707,388
20,000	46	$20,504	$943,184
25,000	57.5	$20,504	$1,178,980
Service -- repair, personal, business			
1,000	1.13	$20,504	$23,215
2,500	2.83	$20504	$58,037
5,000	5.66	$20,504	$116,073
7,500	8.49	$20504	$174,110
10,000	11.32	$20,504	$232,146
15,000	16.98	$20504	$348,219
20,000	22.64	$20,504	$464,293
25,000	28.31	$20,504	$580,366
Restaurant/Bar			
1,000	7.4	$20504	$151,730
2,500	18.5	$20,504	$379,324
5,000	37	$20,504	$758,648
7,500	55.5	$20,504	$1,137,972

Table 22: Housing Subsidy By Size Of Commercial Development			
Unit Size (in sf)	Nos. of Employees Generated	Subsidy Per Employee	Fee/Subsidy @ 60% Target
Government			
1,000	3.9	$20,504	$79,966
2,500	9.75	$20504	$199,914
5,000	19.5	$20,504	$399,828
7,500	29.25	$20504	$599,742
10,000	39	$20,504	$799,656
15,000	58.5	$20504	$1,199,484
20,000	78	$20,504	$1,599,312
25,000	97.5	$20,504	$1,999,140
Source: Table 21 and fee subsidy calculation			

Table 23: Housing Subsidy By Size For Tourist Accommodations			
Unit Size (rooms)	Nos. of Employees Generated	Subsidy/Fee Per Employee	Fee/Subsidy @ 60% Target
Hotel – Luxury			
1	1.1	$20,504	$22,554
5	5.5	$20504	$112,772
10	11	$20,504	$225,544
20	22	$20504	$451,088
40	44	$20,504	$902,176
100	110	$20,504	$2,255,448
Hotel – Historic			
1	.3	$20,504	$6,151
5	1.5	$20504	$30,756
10	3	$20,504	$61,512
20	6	$20504	$123,024
40	12	$20,504	$246,048
100	30	$20,504	$615,120
Source: Table 21 and fee subsidy calculation			

The parameters for implementation of the other mitigation options (dedication of land for affordable housing, construction of affordable housing and conversion of market units to affordable units) for nonresidential development is similar to that for residential development.

F. AFFECT OF ALTERNATIVE AFFORDABLE HOUSING TARGETS

As stated previously, the analysis above is based on an affordable housing target of 60%. In the tables below, we have outlined how some of the key calculations would change if a target of 50% or 70% were adopted instead.

Table 24 shows that the analysis of Pitkin County's current affordable housing deficit is very sensitive to the choice of an affordable housing target. If Pitkin County were to choose a target of 50%, then anticipated construction by the Housing Office and the private market over the next 10 years would eliminate the current deficit (i.e., the construction underway, or planned, plus resales of affordable housing units, will provide enough housing to meet the 50% target for employees generated by development up through 2004). On the other hand, if the county adopted a target to house 70% of Pitkin County workers and their families, the current deficit would more than double to 1,928 units.

Table 24: Additional Housing Needed at 2004 Under Different Affordable Housing Targets			
Housing Target	50%	60%	70%
Total employees to be housed at target percentage	8,884	10,661	12,438
Total housing units needed at target percentage	5,077	6,092	7,107
Total number of affordable units being provided 2004	-4,481	-4,481	-4,481
Existing Need	596	1,611	2,626
Affordable housing units currently under construction	-98	-98	-98
Affordable housing units to be built by Housing Office, 2004-2014	-400	-400	-400
Existing need to be met by private market activity	-200	-200	-200
Deficit in 2004 (number of additional housing units Housing Office would have to construct – beyond expected 400 -- to address deficit by 2014)	**-102 (no deficit)**	**913**	**1,928**
Source: Clarion Associates			

Table 25 shows how the same variation in affordable housing targets affects the fee subsidy that would be charged for various types of development listed in Tables 23 and 24 above.

Table 25: Change in Potential Impact Fees Under Different Affordable Housing Targets				
Affordable Housing Target	50%	60%	70%	100%
Single Family Home – Local Occupancy				
3,000 sq. ft.	$1,121	$1,345	$1,569	$2,242
5,000 sq. ft.	$1,980	$2,375	$2,771	$3,959
10,000 sq. ft.	$5,712	$6,854	$7,997	$11,424
15,000 sq. ft.	$8,568	$10,282	$11,995	$17136
Single Family Home – 2nd Home				
3,000 sq. ft.	$3,870	$4,645	$5,419	$7,741
5,000 sq. ft.	$7,278	$8,734	$10,189	$14,556
10,000 sq. ft.	$27,575	$33,090	$38,605	$55,150
15,000 sq. ft.	$41,363	$49,635	$57,908	$82,726
Non-Residential Development				
5,000 sq. ft. of Office, General	$384,450	$461,340	$538,230	$768,900
5,000 sq. ft. of Retail, Local Market	$196,497	$235,796	$275,095	$392,993
5,000 sq. ft. of Service Establishment	$96,728	$116,073	$135,419	$193,455
10 Room Luxury Hotel	$187,953	$225,544	$263,135	$375,907
Source: Clarion Associates				

APPENDIX A: AFFORDABLE HOUSING INVENTORY

City of Aspen and Pitkin County Affordable Housing – June 2004

Source: City of Aspen Community Development Department and the Aspen/Pitkin County Housing Authority

Ownership in City:						
Category:	**1**	**2**	**3**	**4**	**RO**	
Studio:	2	9	14	17	0	42
One-Bedroom:	8	35	37	72	0	152
Two-Bedroom:	3	27	28	134	1	193
Three-Bedroom:	0	7	45	60	8	120
Four-Bedroom:	0	4	1	22	5	32
Single-Family:	1	0	18	40	111	170
	14	82	143	345	125	**709**

Rental in City:			
(not sorted by Type*)	131		
Studio:	197		
One-Bedroom:	218		
Two-Bedroom:	295		
Three-Bedroom:	30		
Four-Bedroom:	10		
Dormitory:	201		
	1082	**1791**	**City Total**

Ownership in County:						
Category:	**1**	**2**	**3**	**4**	**RO**	
Studio:	1	0	0	0	0	1
One-Bedroom:	0	3	3	2	0	8
Two-Bedroom:	5	12	6	64	0	87
Three-Bedroom:	0	4	2	26	39	71
Four-Bedroom:	0	0	1	2	0	3
Single-Family:	0	0	59	22	312	393
	6	19	71	116	351	**563**

Rental in County:			
(not sorted by Type*)	11		
Studio:	0		
One-Bedroom:	0		
Two-Bedroom:	6		
Three-Bedroom:	0		
Four-Bedroom:	0		
Dormitory:	0		
	17	**580**	**County Total**

Ownership Total	**1272**

Rental Total	**1099**	**2371**	**Total**

* “not sorted by type” are rental units for which unit type is not specified

See attached tables for detail on ownership and rental units.

Affordable Housing Ownership Units within City of Aspen – June 2004

Source: Aspen/Pitkin County Housing Office

	Studios					One-Bedroom					Two-Bedroom					Three-Bedroom					Four-Bedroom					Single-Family					
PROJECT	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**TOTAL**
Alpine Cottages								4															1	1	4						10
Aspen Highlands Village						8	8											28	1					21					1		67
Aspen West #5											1																				1
Benedict Commons		4	7				1	11	4																						27
Billings Place		1	1									4						1													7
Cemetery Lane (City)																				3											3
Centennial				10					38					38					6												92
Cipriano-Taylor															1										1						2
Common Ground							6	2				2	3				4	4													21
Curton Condo																			1												1
East Cooper / 1230																			1												1
East Cooper Court													1																	1	2
East Hopkins																			4												4
East Hopkins Alley														3																	3
Five Trees																												18	11	2	31
Hopkins Roan								1						1																	2
Hunter Creek				1				1			1		9	63					4												79
Juan Street													1						4										1		6
Lacet Court								2	1				2	1					4	3					1						14
Little Victorian/634 W Mn								1																							1
Lone Pine				4					14					10																	28
MCC/1151 Tiehack																										1					1
Marthinsson-Nostdahl												8	2																		10
Midland Park									8					14					15												37

Affordable Housing Ownership Units within City of Aspen – June 2004

Source: Aspen/Pitkin County Housing Office

	Studios					One-Bedroom					Two-Bedroom					Three-Bedroom					Four-Bedroom					Single-Family					
PROJECT	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**TOTAL**
Park Avenue 407-B																			1												1
Park Circle/425 A-1							1																								1
Park Pl./411 E Cooper									2																						2
Red House Enclave							3	1					1					1													6
Sagewood Condo														1																	1
Seventh & Main							5	6					1																		12
Shadow Mtn 00A																		1													1
Smuggler Cove												2							1												3
Smuggler Subdivision																														87	87
Smuggler Run MHP																													17		17
Snyder							1	4	4								1	2	3												15
Tom Thumb			3																												3
Trainors' Landing																			4											3	7
Ute Park																													7		7
Valley Condo 1135 Cem. Ln.																		1													1
Victorians at Bleeker				2					1											2											5
Vincenti Condos	1										1																				2
Water Place (City)		2	1				1	4					3	3					4										1	3	22
West Hopkins							3					4	2				1	1													11
Williams Ranch							4					6						4				4							2	15	35
Winfield Arms			1																												1
TOTAL	1	7	13	17	0	8	33	37	72	0	3	26	25	134	1	0	6	43	53	8	0	4	1	22	6	1	0	18	40	111	690

Affordable Housing Ownership Units in Pitkin County (outside City of Aspen) – June 2004

Source: Aspen/Pitkin County Housing Office

	Studios					One-Bedroom					Two-Bedroom					Three-Bedroom					Four-Bedroom					SFH					
PROJECT	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**1**	**2**	**3**	**4**	**RO**	**TOTAL**
AABC Rowhouse																				12											12
AABC, 415D Bldg G											1																				1
AABC, 413A													1																		1
Aspen Village																														150	150
Castle Crk Ranch																													4		4
East Owl Creek																													4		4
Fairway III														12					18												30
Highland Villas														16																	16
Lazy Glen																														100	100
North 40																				13										59	72
Oh-Be-Joyful																												5			5
Pitkin Iron							1	1					1	5				2	2				1	2							15
Pitkin Park Pl./AABC											4		1																		5
Sopris Creek Cabins	1							2					3																		6
Twin Ridge									2					4					6										13		25
Two Moon																													1		1
Williams Woods							2					12					4														18
W/J Ranch *														27						14										3	44
Woody Creek MHP																												54			54
TOTAL OWNERSHIP	1	0	0	0	0	0	3	3	2	0	5	12	6	64	0	0	4	2	26	39	0	0	1	2	0	0	0	59	22	312	563

Affordable Housing Rental Units within City of Aspen – June 2004

Source: Aspen/Pitkin County Housing Office

PROJECT	Year Complete	Category	STU	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom	DORM	Not sorted	TOTAL
715 Cemetery Lane (school)									1	1
985 Maroon Creek (City)					1					1
Alpina Haus	1990	RO						44		44
Anderson Parcel									1	1
Aspen Country Inn	1999	1, 2	4	33	3					40
Aspen Highlands Village	2001	1						38		38
Aspen Highlands Village	2001	3		2	4	2				8
Beaumont (Hospital)	2000	?		34		1				35
Bell Mountain									5	5
Castle Ridge	1981	3	24	9	40	7				80
Cemetery Lane (City)									2	2
Centennial	1979	3	39	50	45	14				148
Copper Horse	1990	RO						13		13
Cortina	?	1	16							16
Holiday House									35	35
Hunter Longhouse	1979	3		14	19					33
Isis		3				2				2
MAA Seasonal	2001	3		1	100					101
Marolt	1990	3, RO				4		96		100
Marolt House (City)									1	1
Maroon Creek Club									42	42
Mill Street Condos (Draco)	2001	3		4	3					7
Mountain Oaks	1989	Hospital	8	6	7					21
Puppy Smith (City)									1	1
Puppy Smith Apartments									18	18

Affordable Housing Rental Units within City of Aspen – June 2004

Source: Aspen/Pitkin County Housing Office

PROJECT	Year Complete	Category	STU	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom	DORM	Not sorted	TOTAL
River Glen									12	12
River Park									3	3
Smuggler Mtn. Apartments	1990	1	8	1	2					11
Truscott Place	2002	2,3,RO	69	20	19					108
Truscott Place LLLP	2002	2,3	22	26	39					87
Ullr Commons	2000	3, 4	1	6	9			10		26
Ute City Place (St. Regis)	1994	2, 3	6	12	4					22
Water Place (City)									5	5
West Ranch (School Dist)		4					10		5	15
TOTAL RENTAL IN CITY			197	218	295	30	10	201	131	**1082**

Affordable Housing Rental Units in Pitkin County (outside City of Aspen) – June 2004

Source: Aspen/Pitkin County Housing Office

PROJECT	Year Complete	Category	STU	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom	DORM	Not sorted	TOTAL
AABC Apartments	1970's	3			6					6
Animal Shelter									1	1
Heatherbed	?	?			0					0
West Ranch (school)									10	10
TOTAL RENTAL IN COUNTY			0	0	6	0	0	0	11	17

Affordable Housing Progress Towards 2000 AACP Goal						June 2004
All projects recognized in 2000 AACP and considered since 2.2000 adoption						
(Includes Public, Private, and Mitigation units.)						
Source: City of Aspen Community Development Department						
Site	**Status @ 2.2000**	**Current Status**	**Built Units**	**Planned Units**	**Potential Units (low est.)**	**Potential Units (high est.)**
Aspen Country Inn	Occupied	Occupied	40			
Snyder	Occupied	Occupied	15			
MAA Seasonal	Under Const.	Occupied	101			
Moore PUD AH	Under Const.	Occupied	31			
Highlands AH	Under Const.	Occupied	122			
North Forty	Under Const.	Occupied	72			
7th and Main	Under Const.	Occupied	12			
Truscott Expansion	Concept App.	Occupied	99			
DRACO Inc.	Pre-Plan	Occupied	7			
Ullr Commons	Planning	Occupied	26			
Christiana	N/A	Under Const.		2		
Christmas Inn	N/A	Under Const.		2		
Mountain Chalet	N/A	Under Const.	2			
AMPUD Lot 3	N/A	Under Const.		4		
AMPUD Lot 5	N/A	Under Const.		9		
Aspen Alps	N/A	Under Const.	2			
Bavarian	Pre-Plan	Under Const.	19			
Murphy SCI (1)	N/A	Approved		3		
Innsbruck LP	N/A	Approved		1		
Hotel Aspen	N/A	Approved		2		
Boomerang	N/A	Approved		2		
Stillwater	Pre-Plan	Approved, on-hold		17		
Obermeyer	N/A	Approved		21		
Burlingame Parcel D	Pre-Plan	Plan		39		
Burlingame Village	Pre-Plan	Plan			225	330
Truscott Phase III	Pre-Plan	Pre-Plan			20	40
7th & Hallam (USFS)	Pre-Plan	Discontinued			0	0
Aspen Mass (2)	Pre-Plan	Discontinued			0	0
7th & Hopkins private	Pre-Plan	Discontinued			0	0
Moore Property (3)	N/A	N/A			0	30

Buttermilk Base	N/A	Private pre-plan			0	40
AABC Infill	N/A	Private pre-plan			0	40
In Town Infill	N/A	Private			0	100

Total*ado*