

SECTION IV.D.—DOUGLAS COUNTY

Housing Affordability Analysis

This section of the report describes the results of an analysis of affordability for renter- and owner-occupied housing in Douglas County, and presents the greatest housing needs, as identified through this analysis.

Summary

This section compares Douglas County's availability of rental and for-sale housing at different price levels by household income ranges. This exercise was conducted to examine:

- If rents are appropriate to meet the affordability needs of the County's renters;
- If renters can find housing to purchase that is affordable to them at their current income level; and
- The choices current owners have if they were to move within Douglas County.

The analysis found the following:

Rental needs. The rental market in Douglas County is tailored towards households earning between \$35,000 and \$75,000 in annual wages. Once households begin earning \$75,000, homeownership becomes more viable and many households become owners. Additionally, high-end rental units, such as those that exist in downtown Denver, are not widely available in Douglas County.

- A shortage of 1,670 units exists for Douglas County households earning less than \$35,000 and seeking apartments renting for \$225 to \$800 per month. This means that these households are cost burdened because they are renting units at higher rental rates than they can afford.
- The gap in affordable rental units is fairly even across income ranges and slightly larger for households earning between \$20,000 and \$25,000 (needing units with a maximum rent of \$757).
- Most affordable rental units are located in Castle Rock, away from the major employment centers in Douglas County.

Homeownership needs. Douglas County's median home price is \$345,000, \$140,000 higher than Arapahoe County's. Buying in Douglas County is more difficult than buying in Arapahoe County, and attached housing becomes the only affordable product for low to moderate income renters who want to be homeowners. Renters earning between \$35,000 and \$50,000 could afford to buy about one-third of attached units, but just one percent of the detached units in the County. The County has a sizable proportion of renters—47 percent—who make enough to buy attached units but are choosing to rent. These renters are delaying their purchase, perhaps because they cannot find units they want to buy in the market and/or uncertain about the housing market, unemployment and the economy in general.

Currently, the for-sale market is out of balance at the low end of the income spectrum; units are lacking for households earning less than \$50,000 who desire to become homeowners. There is also a slight gap in units for households earning between \$100,000 and \$150,000.

- In 2007, there were 12,468 single family residential units and 1,711 multifamily residential units on the market or sold in Douglas County. Renters earning less than \$50,000 per year were able to afford one percent of the single family homes and 31 percent of the multifamily units. In some cases, the sellers in the MLS were listed as banks or government entities, indicating foreclosure. Homes that are affordable to these renters were often multifamily units with less than 1,100 square feet.
- Current owners who earn less than \$50,000 would find it difficult to move within Douglas County's market and not be cost burdened, unless they have significant equity in their homes.
- Eighty-seven percent of Douglas County's homeowners earn above \$50,000. The housing market has been built to accommodate such households. Thus, these households would have little difficulty purchasing another affordable home within Douglas County.
- Households earning more than \$100,000, which currently comprise 44 percent of Douglas County's population, would not have much difficulty finding high-end homes if they are looking to upgrade within the County.

Methodology

The analysis in this section examines housing need across all income levels to identify mismatches in supply and demand for all households in Douglas County. It reports the results of a modeling effort called a "gaps analysis", which compares housing affordability for households at different income levels to the supply of housing units affordable at these income levels.

The analysis used the most recent comprehensive data, which includes the following:

- Household projections from the Colorado Department of Local Affairs (DOLA) and household income ranges from the 2006 American Community Survey (ACS);
- The Apartment Association of Metro Denver, 4th Quarter 2007 (4Q07) Vacancy and Rent Survey;
- Data on subsidized rental units from the Douglas County Housing Partnership and the Colorado Division of Housing; and
- Data on home resales from The Genesis Group-a consulting firm that maintains Metrolist data.

Defining affordability. Housing is "affordable" if no more than 30 percent of a household's monthly income is needed for rent or mortgage payments and utilities. When the proportion of household income needed to pay housing costs exceeds 30 percent, a household is considered cost burdened.

Housing programs generally focus on assisting lower-income populations. HUD divides low- and moderate-income households into categories, based on their relationship to the AMI: extremely low-income (earning 30 percent or less of the AMI), very low-income (earning between 31 and 50 percent of the AMI), low-income (earning between 51 and 80 percent of the AMI) and moderate-income (earning between 81 and 100 percent of the AMI). This section presents housing needs by both income range (e.g., \$25,000 to \$50,000) and AMI level.

Rental Affordability

The distribution of rental units by price for Douglas County was based on the 4Q07 Apartment Association Vacancy and Rent Survey, which captured 8,600 units. Because the survey does not capture all of the subsidized units in the County, we obtained data on the affordability of DCHP units and affordable units overall from DCHP.

A few assumptions were necessary to complete the rental distribution:

- The Apartment Association survey does not include detached, single family homes that are rented. However, the single family vacancy survey performed by Gordon Von Stroh for the Division of Housing reported a vacancy rate of 0.9 for single family homes for rent in Douglas County for the 4th quarter of 2007, and an average monthly rent of \$1,382. The survey did not present the number of units sampled to incorporate into the overall distribution of rental units in Douglas County. Therefore, for the purpose of this analysis, it is assumed that rental rates for these single family homes are similar to the rates represented by the survey sample. Single family home rents are likely to be slightly higher than rents for an apartment of the same size, as shown by the average monthly rental rate of \$1,382 compared to multifamily average rent of \$1,043 in the same quarter. If the gaps analysis is affected by this assumption, it would occur at the higher end of the rent scale. Hence, the gaps analysis may have overestimated the mismatch between rental units and higher-income renter households.
- Market-rate units rented to tenants with Section 8 vouchers were adjusted to reflect the Section 8 subsidy making these units more affordable.
- The vacancy rate for all rental units—market-rate and subsidized—was assumed to be 7.0 percent.

What can households afford? Exhibit IV.D-1 shows the affordability of rental housing by price range. Units are affordable if no more than 30 percent of a household's income is required to pay rent and utilities. For example, households earning less than \$10,000 per year could afford to pay a maximum of \$225 in rent each month (accounting for utility costs) to avoid being cost burdened.

**Exhibit IV.D-1.
Affordable Rents by Household Income Range, Douglas County, 2007**

Note:
Rents are adjusted for utility expenses.

Source:
BBC Research & Consulting.

Income Ranges		Maximum Affordable Rent
Low	High	
\$0	\$9,999	\$ 225
\$10,000	\$14,999	325
\$15,000	\$19,999	450
\$20,000	\$24,999	575
\$25,000	\$34,999	800
\$35,000	\$49,999	1,175
\$50,000	\$74,999	1,800
\$75,000	\$99,999	2,400
\$100,000	\$149,999	3,650
\$150,000 or More		3,651 +

Exhibit IV.D-2 shows the estimated number of renter households in each income category in 2007, as well as with the number and proportion of rental units affordable to them.

**Exhibit IV.D-2.
Renter Households Compared to Rental Units by Income Ranges, Douglas County, 2007**

Income Ranges		Maximum Affordable Rent	Renters		Rental Units	
Low	High		Number	Percentage	Number	Percentage
\$0	\$9,999	\$ 225	420	2%	200	1%
\$10,000	\$14,999	325	452	3%	200	1%
\$15,000	\$19,999	450	433	2%	200	1%
\$20,000	\$24,999	575	853	5%	232	1%
\$25,000	\$34,999	800	2,157	12%	1,812	10%
\$35,000	\$49,999	1,175	3,205	18%	11,341	61%
\$50,000	\$74,999	1,800	5,096	29%	4,639	25%
\$75,000	\$99,999	2,400	2,555	15%	80	0%
\$100,000	\$149,999	3,650	1,548	9%	0	0%
\$150,000 or more		3,651 +	668	4%	0	0%
Total			17,387	100%	18,703	100%

Source: BBC Research & Consulting.

Rental mismatch summary. Exhibit IV.D-3 compares the supply of rental units to the number of renter households in each income category. The rental gap column identifies the shortages and excesses in the market—i.e., the rental unit mismatch. The gap analysis shows the following:

- In 2007, 420 renter households—two percent of all renter households in Douglas County—earned less than \$10,000 (this compares to 14 percent in Arapahoe County). These households could only afford to pay a maximum \$225 per month in rent without being cost burdened. Douglas County has approximately 200 units affordable to these renters and rental assistance vouchers—leaving a gap of 220 underserved households.
- In most communities, the rental gap is highest at the lowest income levels. In Douglas County, this is not so. Douglas County has relatively few low income renters, probably because there has never been much housing stock to serve them.
- Another 885 renter households (five percent) need apartments with rents of less than \$450 to avoid being cost burdened. These households earn between \$10,000 and \$20,000 per year. In 2007, these renters had approximately 400 affordable units and vouchers available to them, leaving a gap of 486 underserved households.
- Households earning between \$20,000 and \$35,000 were underserved by almost 970 units priced between \$450 and \$800 per month.
- The rental market in Douglas County has an abundance of units priced appropriately for households earning \$35,000 to \$49,999 per year. In some cases, households earning less than \$35,000 are renting these units and paying more than 30 percent of their incomes to reside in them. This may be a preference or a necessity, because affordable units are unavailable.
- The market is also lacking for households earning more than \$50,000 per year. The rental market has not been developed to accommodate for this price point, contrary to the for-sale housing market, which has much to offer in the attached market.

**Exhibit IV.D-3.
Rental Gaps Analysis, Douglas County, 2007**

Income Ranges		Maximum Affordable Rent	Renters		Rental Units		Rental Gap
Low	High		Number	Percentage	Number	Percentage	
\$0	\$9,999	\$ 225	420	2%	200	1%	(220)
\$10,000	\$14,999	325	452	3%	200	1%	(253)
\$15,000	\$19,999	450	433	2%	200	1%	(233)
\$20,000	\$24,999	575	853	5%	232	0%	(621)
\$25,000	\$34,999	800	2,157	12%	1,812	10%	(346)
\$35,000	\$49,999	1,175	3,205	18%	11,341	61%	8,136
\$50,000	\$74,999	1,800	5,096	29%	4,639	25%	(457)
\$75,000	\$99,999	2,400	2,555	15%	80	0%	(2,475)
\$100,000	\$149,999	3,650	1,548	9%	0	0%	(1,548)
\$150,000 or more		3,651	668	4%	0	0%	(668)

Source: BBC Research& Consulting.

Homeownership Affordability

This gaps analysis for the affordability of homes for sale was conducted to examine two facets of the for-sale:

- How easily renters at different income levels can afford to buy a home; and
- How easily current owners could afford to sell their current home and buy another home in Douglas County.

The distribution of for-sale units by price for Douglas County was based on 2007 listings and sales of homes on the market in Douglas County.

What can households afford? Exhibit IV.D-4 shows what households at different income levels could afford to buy by price range¹. Units are affordable if no more than 30 percent of a household's income is required to pay both the mortgage payment, including taxes and insurance, and utilities. For example, households earning less than \$10,000 per year could afford a home costing no more than \$33,304 (a tough price range within which to find a home).

Exhibit IV.D-4. Affordable Home Prices by Household Income Range, Douglas County, 2007

Source:
BBC Research & Consulting.

Income Ranges		Affordable price
Low	High	
\$0	\$9,999	\$33,304
\$10,000	\$14,999	\$49,958
\$15,000	\$19,999	\$66,612
\$20,000	\$24,999	\$83,266
\$25,000	\$34,999	\$116,573
\$35,000	\$49,999	\$166,534
\$50,000	\$74,999	\$249,803
\$75,000	\$99,999	\$333,072
\$100,000	\$149,999	\$499,610
\$150,000 or More		\$499,611

**Median Home
Price: \$345,000**

Renter/for-sale mismatch. Exhibit IV.D-5 shows the estimated number of renter households in each income category in 2007, along with the number and proportion of homes affordable to them at that time. This shows how the overall market is able to serve Douglas County renter households looking to buy, which is important, as renters in Douglas County are likely candidates to become Douglas County homebuyers.

A renter household, earning at least \$50,000, has a moderate amount of *multifamily* housing stock to purchase in the County. Households earning \$50,000 could buy 31 percent of the multifamily stock for sale in 2008, about 550 units from which to choose (but just one percent of the single family housing stock).

¹ Mortgage loan terms are assumed as 30-year fixed, 6.50 percent, five percent downpayment. The affordable mortgage payment is also adjusted to incorporate hazard insurance, and property taxes.

However, 43 percent of Douglas County renters earn less than \$50,000. For households earning less than \$25,000, virtually no single family and multifamily products are available at their affordability level. Households earning between \$25,000 and \$35,000 would most likely purchase from a limited number of multifamily units. Households earning between \$35,000 and \$50,000 could afford less than one-third of all multifamily units and just 1 percent of all single family units. The majority of the single family homes are affordable to households earning \$100,000 or more.

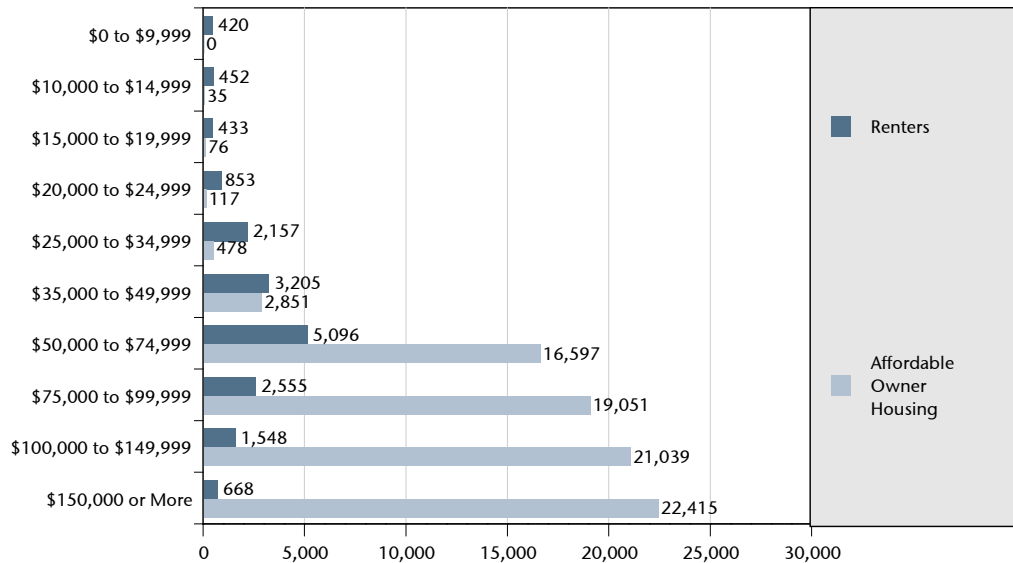
**Exhibit IV.D-5.
Comparison of Renters’ Incomes to Affordable Ownership Housing, 2007**

Income Ranges		Max Affordable Price	Affordable Multifamily Homes					Affordable Single Family Homes		
Low	High		Renters	Percentage	Number	Percentage	Cumulative Percentage	Number	Percentage	Cumulative Percentage
\$0	\$9,999	\$ 33,304	420	2%	0	0%	0%	0	0%	0%
\$10,000	\$14,999	\$ 49,958	452	3%	6	0%	0%	0	0%	0%
\$15,000	\$19,999	\$ 66,612	433	2%	12	1%	1%	1	0%	0%
\$20,000	\$24,999	\$ 83,266	853	5%	19	1%	2%	1	0%	0%
\$25,000	\$34,999	\$ 116,573	2,157	12%	74	4%	6%	8	0%	0%
\$35,000	\$49,999	\$ 166,534	3,205	18%	424	25%	31%	65	1%	1%
\$50,000	\$74,999	\$ 249,803	5,096	29%	788	46%	77%	2,059	17%	17%
\$75,000	\$99,999	\$ 333,072	2,555	15%	274	16%	93%	2,994	24%	41%
\$100,000	\$149,999	\$ 499,610	1,548	9%	106	6%	100%	3,503	28%	69%
\$150,000 or More		\$ 499,611	668	4%	8	0%	100%	3,837	31%	100%

Source: BBC Research & Consulting.

Exhibit IV.D-6 shows how the renter population matches up with prices of all for-sale and currently occupied units, in Douglas County’s owner-occupied housing market². This exhibit shows how easily renters at various income levels could find affordable homes to buy *if every home on the market were for sale*. Visually, the exhibit is a good demonstration of the value distribution of owner occupied housing.

**Exhibit IV.D-6.
Affordability of Ownership Market to Douglas County’s Renters, 2007**



Note: “Affordable owner housing” represents the price distribution of all owner-occupied units if these units were to be available for sale to renters.

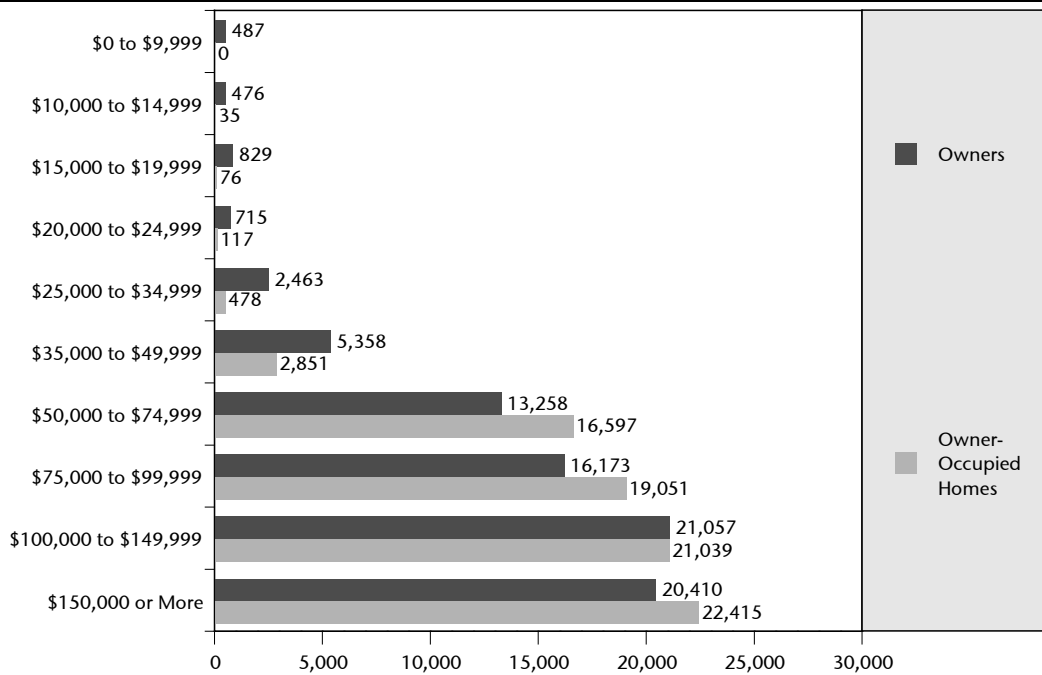
Source: BBC Research & Consulting.

² This assumes the for-sale market in 2007 was representative of the overall price distribution of owner-occupied housing.

Homeownership mismatch. Exhibit IV.D-7 (table and graph) shows how Douglas County’s owner population matches up with prices of all units in the County’s owner-occupied housing market. This analysis examines how easily current owners could move within Douglas County. Lower income homeowners have little choice in available housing stock. Households earning between \$50,000 and \$100,000 could move more easily if they desired/needed to.

**Exhibit IV.D-7.
Homeownership Gaps Analysis, Douglas County, 2007**

Income Ranges		Max Affordable Price	Owners		Owner-Occupied Homes		Ownership Gap
Low	High		Owners	Percentage	Homes	Percentage	
\$0	\$9,999	\$ 33,304	487	1%	0	0%	(487)
\$10,000	\$14,999	\$ 49,958	476	1%	35	0%	(441)
\$15,000	\$19,999	\$ 66,612	829	1%	76	0%	(753)
\$20,000	\$24,999	\$ 83,266	715	1%	117	0%	(598)
\$25,000	\$34,999	\$ 116,573	2,463	3%	478	1%	(1,985)
\$35,000	\$49,999	\$ 166,534	5,358	7%	2,851	3%	(2,507)
\$50,000	\$74,999	\$ 249,803	13,258	16%	16,597	20%	3,339
\$75,000	\$99,999	\$ 333,072	16,173	20%	19,051	23%	2,878
\$100,000	\$149,999	\$ 499,610	21,057	26%	21,039	25%	(19)
\$150,000 or More		\$ 499,611 +	20,410	25%	22,415	27%	2,004



Source: BBC Research & Consulting.

Mismatch by AMI. Exhibit IV.D-8 presents the gaps/mismatch analysis using the AMI categories for income ranges. It shows data for both rental and homeownership housing.

**Exhibit IV.D-8.
Gaps Analysis by AMI, Douglas County, 2007**

	Renters	Percentage	Rental Units	Percentage	Rental Gap
Area Median Income (AMI) = \$71,800	11,964		18,448		965
0-30% (0 to \$21,540)	1,568	9%	600	4%	(968)
31-50% (21,541 to \$35,900)	2,940	17%	4,105	21%	1,165
51-80% (\$35,901 to \$57,440)	4,529	26%	12,328	66%	7,799
81-95% (\$57,441 to \$68,210)	2,195	13%	1,303	7%	(892)
96-120% (\$68,211 to \$86,160)	2,524	15%	367	2%	(2,157)
121-150% (86,161 to \$107,700)	1,653	10%	0	0%	(1,653)
151% and above (more than \$107,700)	1,977	11%	0	0%	(1,977)
	Owners	Percentage	Ownership Units	Percentage	Ownership Gap
Area Median Income (AMI) = \$71,800	21,890		17,150		(4,739)
0-30% (0 to \$21,540)	2,012	2%	122	0%	(1,890)
31-50% (21,541 to \$35,900)	3,279	4%	682	1%	(2,597)
51-80% (\$35,901 to \$57,440)	8,982	11%	5,381	7%	(3,602)
81-95% (\$57,441 to \$68,210)	5,712	7%	7,520	9%	1,808
96-120% (\$68,211 to \$86,160)	10,820	13%	16,025	19%	5,205
121-150% (86,161 to \$107,700)	12,196	15%	13,933	17%	1,737
151% and above (more than \$107,700)	38,225	47%	38,994	47%	769

Source: BBC Research & Consulting.

Affordability by Community

Douglas County is comprised of a number of communities whose parts or entirety is confined by the County's borders. Each community has carved out a housing niche with which it serves the County's residents. Exhibit IV.D-9 displays median home prices for the incorporated municipalities in Douglas County.

Exhibit IV.D-9. Median Re-sales of Multifamily and Single Family Housing by Municipality, Douglas County, 2007

	Total Median Price	Difference from Douglas County	Median Price Multifamily	Difference from Douglas County	Median Price Single Family	Difference from Douglas County
Douglas County	\$ 345,000		\$ 199,000		\$ 370,000	
Castle Rock	\$ 375,000	\$ 30,000	\$ 189,900	\$ (9,100)	\$ 400,000	\$ 30,000
Deckers	\$ 415,000	\$ 70,000	\$ -	NA	\$ 415,000	\$ 45,000
Franktown	\$ 675,000	\$ 330,000	\$ -	NA	\$ 675,000	\$ 305,000
Highlands Ranch	\$ 310,000	\$ (35,000)	\$ 229,900	\$ 30,900	\$ 325,000	\$ (45,000)
Larkspur	\$ 625,000	\$ 280,000	\$ 273,000	\$ 74,000	\$ 630,000	\$ 260,000
Lone tree	\$ 533,450	\$ 188,450	\$ 319,900	\$ 120,900	\$ 700,000	\$ 330,000
Louviers	\$ 251,950	\$ (93,050)	\$ -	NA	\$ 251,950	\$ (118,050)
Parker	\$ 320,000	\$ (25,000)	\$ 167,000	\$ (32,000)	\$ 346,390	\$ (23,610)
Roxborough	\$ 339,950	\$ (5,050)	\$ 250,000	\$ 51,000	\$ 347,000	\$ (23,000)
Sedalia	\$ 680,000	\$ 335,000	\$ -	NA	\$ 680,000	\$ 310,000
Balance of Douglas County	\$ 592,500	\$ 247,500	\$ 185,250	\$ (13,750)	\$ 1,499,000	\$ 1,129,000

Note: The municipalities were provided by the MLS. There were 2,564 listings that had mailing addresses as Littleton, but were actually located within Highlands Ranch or Roxborough. These were relabeled accordingly. The Balance of Douglas County includes the areas labeled as Centennial, Denver, Elbert, Elizabeth, Englewood, and Littleton by the MLS.

Source: BBC Research & Consulting.

Sedalia, Franktown, and Larkspur had the highest overall median home prices; all were over \$600,000. Sedalia's for-sale housing stock (all of the units were single family homes) had a median price that exceeded the County's by \$335,000. It should be noted that these median values represent homes on the market in 2007, and are not meant to imply that the market overall is extremely high income. In these small communities, there are lower income neighborhoods, generally in the core parts of the communities. The high median prices are reflective of higher priced homes that have recently been developed and are for sale.

Louviers, Highlands Ranch, Parker, and Roxborough are the County's provider of more affordable housing options when comparing median prices to the County's median overall.

However, when looking at the total volume of affordable units, Parker and Castle Rock provide Douglas County with a substantial portion of the County's affordable housing options. Of the single family units affordable to households earning 80 percent or less of the AMI (\$57,440) in the eleven communities in Douglas County, 79 percent of those units were located in Parker and Castle Rock.

When comparing the proportion of single family units that are affordable for households earning 80 percent or less of the AMI for each municipality; Castle Rock had the largest number (124), but this accounted for only three percent of the single family homes for sale. Of the municipalities that had multifamily units available for sale, Parker provided the most homes (410) affordable to households earning 80 percent or less than the AMI, which was 68 percent of the multifamily homes for sale.

Exhibit IV.D-10 presents the location by municipality of affordable units. The left-side columns, “Number of Units,” show the number of affordable units at each AMI level in the communities. The percentage next to the “Number of Units” shows what percent of the market these affordable units represent. For example, in Douglas County overall, there were 127 multifamily units for sale in 2007 and affordable to households earning 50 percent of the AMI. These units represent seven percent of multifamily units for sale in Douglas County in 2007.

**Exhibit IV.D-10.
Location of Multifamily
and Single Family
Affordable Units,
Douglas County, 2007**

Source:
BBC Research & Consulting.

Multifamily Units	Affordable to 50% AMI		Affordable to 80% AMI	
	Number of Units	Percent of Total Units	Number of Units	Percent of Total Units
Douglas County	127	7%	786	46%
Castle Rock	46	10%	227	51%
Deckers	-	-	-	-
Franktown	-	-	-	-
Highlands Ranch	14	3%	128	26%
Larkspur	0	0%	0	0%
Lone tree	0	0%	5	4%
Louviers	-	-	-	-
Parker	67	11%	410	68%
Roxborough	0	0%	2	14%
Sedalia	-	-	-	-
Balance of Douglas County	0	0%	14	58%

Single Family Units	Affordable to 50% AMI		Affordable to 80% AMI	
	Number of Units	Percent of Total Units	Number of Units	Percent of Total Units
Douglas County	11	0%	275	2%
Castle Rock	1	0%	124	3%
Deckers	0	0%	1	14%
Franktown	0	0%	0	0%
Highlands Ranch	0	0%	24	1%
Larkspur	1	0%	2	1%
Lone tree	0	0%	0	0%
Louviers	0	0%	1	7%
Parker	3	0%	78	2%
Roxborough	2	0%	36	6%
Sedalia	4	3%	9	6%
Balance of Douglas County	0	0%	0	0%