An Analysis of the Aspen Housing Market

by

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Bachelor of Science in Civil Engineering, 1996

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Submitted to the Department of Urban Studies and Planning in Partial Fulfillment of theRequirements for the Degree of Master of Science in Real Estate Development

at the

Massachusetts Institute of Technology

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Abstract

Aspen, Colorado, has a booming economy, and there is the potential for working residents to earn substantial incomes. Purchasing a home is not an option for most wage earners, though, because the average home price is over a million dollars. Much of the existing housing stock in Aspen and Pitkin County is owned by very wealthy second-home owners. As a result, Aspen's attractiveness as a home to local employees is limited by its housing market.

The real estate industry thrives in part due to the scarcity of developable property in the narrow valley, but primarily due to Aspen's distinction as a world class resort. Pitkin County is located in a beautiful section of the Rocky Mountains. This part of Colorado has excellent skiing 180 days out of the year, and is blessed with sunshine 80% of the time. Additionally, there are five 18-hole golf courses and numerous other outdoor activities. Aspen continues to grow as a year round resort.

Pitkin County is roughly 960 square miles in area, but 83% of the county is public land. Getting to Aspen is very difficult. Aspen is located at the end of a horseshoe-shaped valley more than 60 miles from an interstate highway. Pitkin County is analogous to a small resort island due to its isolation and desirable location. The area surrounding this mountain valley is primarily public land and the roads were not designed for commuter traffic.

The community has approximately 1,900 rent-controlled or deed-restricted "affordable" units. This large number of subsidized units is still not sufficient to meet the demand at realistic rents. Thus many workers must live far from there jobs and commute to work.

The purpose of this study is to analyze the Aspen and Pitkin County housing market. Emphasis is placed on what has happened in Pitkin County to cause these problems, and what is being done to alleviate the stresses on the housing market. Insight into what an isolated resort economy in the United States has done to deal with its housing problems can hopefully be useful to similar economies around the world.

Thesis Supervisor: Henry Pollakowski Title: Visiting Scholar

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1. INTRODUCTION

1.1. Introduction

Aspen, Colorado, is a city of approximately 6,600 residents nestled in a narrow valley carved through the Rocky Mountains by the Roaring Fork River. This City was made world famous in 1947 with the opening of the Aspen Ski Area and remains a popular skiing destination today. Aspen became known for its incredible powder skiing and spectacular terrain, but its reputation has grown as it has been transformed into a year round resort.

There are currently four ski areas in the Upper Roaring Fork Valley: Aspen Highlands, Buttermilk, Snowmass and the original Aspen Mountain. There are five 18-hole golf courses, and the Frying Pan and Roaring Fork rivers host some of the best fly fishing in the world. People come to this valley not only to enjoy all of the activities it has to offer, but also to just relax. It is an incredibly beautiful region with a spectacular climate. The mountains are blessed with enough snow to accommodate more than 180 days of skiing each year, and Colorado has about 300 days of sunshine. This region appeals to people with an active and outdoor lifestyle.

The fact that Aspen and the surrounding Pitkin County are so beautiful and facilitate so many activities also make this county a desirable place to live and work. Many people have chosen to settle in this county, and it has gained the attention of corporations too. It is not a typical area for companies to locate their headquarters, but rather one in which CEO's and other high net-worth individuals choose to locate their second homes and corporate retreats. The purchasing power of

these individuals is such that sellers can command top dollar for their property and the median home price in the city of Aspen has risen to more than \$1 million.¹

While the demand for housing in Aspen has increased so dramatically the supply of housing has not. Pitkin County passed a growth management plan in 1977 limiting total growth to 3.4% per year. As building slowed, rents increased, and just one year later there was a shortage of employees. In 1990, there were 9,837 housing units in Pitkin County.² Of these approximately 1,900 were "affordable" housing units and it is estimated that they housed 2,400 local employees.

The drastic increase in home prices over the past twenty years has made this area too expensive for most year-round residents to purchase homes in the open market. Wage earners cannot afford to purchase property in this drastically inflated market and as a result go elsewhere to live. Many still commute into Aspen to work. When the day is over, however, the city empties and the workforce commutes home. Currently less than 30% of Aspen's labor force lives in Aspen³ and as a result the city is losing much of the character that it once had. Aspen is no longer a community in which people work and play, but instead one in which people commute to service wealthy second-home owners and tourists and then disappear.

¹ Amy Margerum and David Tolen, "Aspen's Affordable Housing Program Helps Create Community," *Colorado Municipalities* (November/December 1994) p. 8.

² U.S. Bureau of Census, "Census of Housing," 1990.

³ Bob Nevins, "Housing Roundtable Discussion," Aspen/Pitkin County Planning Department, January 8, '98, p. 6-8

The question then is whether the character of Aspen will change significantly enough to cause it to lose its desirability if the "locals" are no longer there. Most have considered Aspen to be a beautiful, quaint city with a strong community and truly individual character. One can imagine this area losing the vitality it currently has. If none of the labor force lives in Aspen, what will happen to its sense of community and at what point will the labor force decide to seek employment elsewhere? What can similarly supply-constrained housing markets learn from the city of Aspen and Pitkin County? After seeing what has been done in the past, can these markets make decisions to ensure a prosperous future?

1.2. Outline

This paper consist of six chapters: 1) Introduction; 2) History of The Roaring Fork Valley; 3) Demand for Residential Housing; 4) Governmental Regulations and Their Effects on the Housing Stock; 5) Housing Demand; and 6) Results and Conclusions including comparisons to Bermuda. The first chapter of this paper, The Introduction, frames the issues to be discussed and the questions to be answered. It outlines the format in which data and information will be presented and sets the foundation upon which this paper will build. The second chapter, History of The Roaring Fork Valley, outlines the historical growth and decline in the area and provides a background to help understand the factors that lead to the current situation.

The paper will present a detailed economic and statistical analysis of the housing market in Pitkin County. Chapter Three addresses the supply side of the housing market focusing on what currently exists in the residential housing arena, how it has developed over time, and what is possible in the near future. The fourth chapter, Governmental Regulations and Their Effects on the Housing Stock, explains what governmental agencies have done to guide and control the growth and housing issues in Aspen and Pitkin County. This county has been pro-active in addressing the issues facing it and previously enacted policies very much determine what happens today.

Chapter Five focuses on the demand for residential housing. This chapter looks at who lives in this area and why. It explores who the primary employers in this area are, what is happening in the tourist industry, and the factors driving the expensive second-home market.

Finally, in Chapter Six, this paper compares and contrasts the Pitkin County housing market to that of Bermuda. Bermuda is clearly different in several ways. Certainly the most obvious of these is the fact that Bermuda is a true island and people cannot commute to work from someplace else. Aspen and Bermuda are, however, similar in many ways not apparent at first glance.

Pitkin County has been very pro-active in dealing with its housing shortage and may prove to be a good role model for Bermuda. The last chapter, Results and Conclusions, will summarize the findings from this study, draw several conclusions, and answer the question of what similarly supply-constrained housing markets can learn from the city of Aspen and Pitkin County, Colorado.

2. HISTORY OF THE ROARING FORK VALLEY

2.1. The Mining Boom

The Civil War had been over for 15 years when the first settlers found their way into the Roaring Fork Valley. The year was 1879, and families of miners and ranchers were beginning to spread into the Rockies. The transcontinental railroad was ten years, old while the state of Colorado was just three. America was in the middle of four decades of unprecedented mineral exploration. The California Gold Rush of 1848 had set the stage for the first discovery of gold in Colorado in 1859. Over one hundred thousand miners flocked to the Rocky Mountains in hope of striking it rich.

Aspen's first prospectors were almost all from Leadville, Colorado. Leadville had experienced years of disappointing gold mining when in 1877 several rich silver deposits were discovered. In 1879 over nine million dollars of silver was extracted from the mountains beneath Leadville. Leadville was full of entrepreneurs looking for new or richer pastures. Prospectors had learned that geological formations could reveal information about hidden mineral deposits; after the state-commissioned mapping of Colorado's geological and topographical features, these miners had the tool they needed to expedite exploration in new areas. With that, several prospectors set their sights on Leadville's neighboring valley.

In the summer of 1879, the first prospectors began the arduous 72-mile journey from Leadville to the Roaring Fork Valley. After traversing the steep and treacherous mountains, these first explorers set to work staking out several mining and ranching claims. After what was probably

several days of work, these men then returned to Leadville to register their claims with the county clerk. It did not take long for news of these new discoveries to spread, and the Roaring Fork Valley quickly became the focus of much attention. Within sixty days of the first explorations, dozens of prospectors and suppliers found their way to the Roaring Fork Valley. About thirty-five people spent this first winter in what was dubbed Ute City after the native Ute Indians.

Several men worked together to build a cabin on the outskirts of town, while others lived together in tents and set to work digging. Several Swedes in the camp initiated the prospectors in the craft of making "Norwegian snowshoes". These snowshoes were, in fact, crude skis which made navigating the deep snow in the Valley much easier. Some argue this was the beginning of recreational skiing in the Valley.

The first years of Ute City were filled with speculation, and many property rights and mining claims changed hands before any digging was done. In 1880 the first survey of Ute City was completed, giving B. Clark Wheeler the development rights to the town site. After completing the survey, Wheeler managed to persuade the residents to change the name of the camp to Aspen. Shortly thereafter, Wheeler formed the Aspen Town and Land Company. In May of that year, he began to lay out the town's first subdivision.

During the summer of 1880, The Aspen Town and Land Company cut a road over Taylor Pass to Buena Vista. The population swelled to more than 500; the town had a second-hand store, four saloons, and a log cabin. In May of 1881, the area surrounding Aspen became Pitkin County - - named after the governor. That same month Aspen became incorporated, and the first election took place with 322 registered voters.⁴ In spite of its isolation, Aspen grew in a rather distinguished, or cultural, fashion that was not common for such early mining towns. Churches, schools, and family homes grew in the same proportions as saloons, boarding houses, and businesses. The influx of nearly 800 people that summer created a building boom, and soon lumber became the town's second largest industry.

In June of 1882 the county managed to string a telegraph wire over Taylor Pass, connecting Aspen to the outside world. The town had swelled to more than 2000 residents. A vague loss of optimism, however, hung over the town because Aspen did not have a smelter to melt down the mined ore and extract the silver to a more manageable form. The lack of rail service prevented shipping raw ore, and in the four years following its settlement Aspen did not produce a single bar of silver.

It was not until 1884 that Aspen began to produce silver. A wealthy businessman from New York purchased the parts of a half-finished smelter, which became operational on July 4th amidst great celebration. That summer 500 miners were at work producing an estimated \$1.26 million per annum of concentrate worth \$600 a ton.⁵ The concentrate was shipped out by mule to the railroad in Granite and then on to Pennsylvania for Refining.

⁴ Sally Barlow-Perez, A History of Aspen (Aspen, Colorado: Who Press 1991), p. 18

⁵ Ibid, p. 22

By 1885, Pitkin County had a population of 4,484⁶. Mining, construction, retailing, transportation, and freighting were all booming. Over 1000 homes had been built and the Aspen Water Company piped water two and a half miles from the hills into town. Soon thereafter the Aspen Electric Light and Power Company was formed, making Aspen one of the first cities in the state to have completely lighted streets. Socially, Aspen's elite boasted a lifestyle similar to that in any other "civilized" city.

Until 1887, Aspen was really a slave to its isolation. The arrival of the railroad changed the town more than any other single event. The Denver & Rio Grande Railroad reached Aspen on October 27th. 1887, and the first official train came with 25 cars on November 1st. Just four months later, the Colorado Midland Railroad Company arrived via another route; before long there were feeder lines to every major mine in town. The arrival of the two railroads triggered an incredible economic change. Aspen was no longer a sleepy mining town, but instead a busy industrial center.

In 1893, just fourteen years after the first settler found his way into the Roaring Fork Valley, Aspen had a population of more than 10,000. Almost 3,100 men were employed in mining operations 24 hours a day. Three shifts of men worked hundreds of feet bellow the surface. The average mining salary was three dollars a day and a family home could be "had" for 25 dollars a month. The future looked good for most people in Aspen.

⁶ Sally Barlow-Perez, A History of Aspen (Aspen, Colorado: Who Press 1991), p. 22

All that changed, however, in the spring of 1893 when President Grover Cleveland called a Special Session of Congress to repeal the Sherman Act and "de-monazite" silver. As word spread to Colorado, silver prices fell. By the end of 1893 80% of Aspen's businesses were bankrupt. By the end of the century, Aspen's population was 3,303. By 1910, it fell further to 1,834.⁷

2.2. Skiing in the Roaring Fork Valley

Aspen's rebirth as a skiing destination actually began in another beautiful mountain village, Garmisch-Partenkirchen. This quaint village in the German Alps was the site of the 1936 Winter Olympics. This event not only helped popularize alpine skiing, but it also brought together two enthusiastic American outdoorsmen who met and discussed the need for truly first-class skiing in the States. Theodore Ryan and William Fiske agreed to keep in touch and inform each other if they spotted any good development opportunities.

The following year, when in California, Fiske met a young Aspenite, with a picture of his hometown. Thomas Flynn was telling tales of the riches beneath Aspen's picturesque mountains and hoping to sell some of his mining claims to Fiske. Fiske, however, had no interest it what was *in* the mountains, but rather what he saw *on* them. During a visit to Aspen, Fiske was able to convince Flynn and other locals that Aspen's future did not lie in silver, but in snow.

Fiske lost no time in making his move to develop a premier American ski resort. He took an option on the land near the old town site of Highland and contacted Ted Ryan to tell him he had

⁷ Sally Barlow-Perez, A History of Aspen (Aspen, Colorado: Who Press 1991), p. 33

found the spot. By the fall of 1936, they had formed the Highland-Bavarian Corporation, solicited several investors, purchased 300 acres of land, and started construction on a 16-room lodge to house the area's first tourists. Opening day was December 26th, 1936. The Highland-Bavarian Corporation then applied for special-use permits from the U.S. forest Service and began to survey for lifts and trails. Anxious to promote skiing in Colorado, the State Legislature approved a \$650,000 bond issue for the construction of the aerial tramway and a hotel. The resort was in its infancy, but its reputation was growing by leaps and bounds.

In July of 1937, the Aspen Ski Club, and Roosevelt's Works Projects Administration cleared Aspen's first ski run. It was three and a half miles long and dropped 2000 vertical feet. The first lift, the Boat Tow, was also constructed that summer. Powered by a Model A Ford engine, it consisted of two sleds which carried ten passengers each. By 1938, The Aspen Ski Club was ready to hold its first ski race and things escalated from there. In 1941, The National Alpine Championships brought the nation's best skiers. It seemed that Aspen was finally back on its way when news of the war in Europe began to make its way to Colorado. When Pearl Harbor was bombed and the United States declared war against the Axis, the Highland-Bavarian project was put on hold indefinitely.

The area lay essentially dormant for more than four years while recreation and all other activities took a back seat to the war. It was not until 1945 that any real progress took place in the development of Aspen. Walter Paepcke was brought to Aspen by his wife, Elizabeth, who had visited before the war. Walter had the vision to try to transform Aspen into a recreational and intellectual haven. He also had the where-with-all to do it from his success with the Container

Corporation of America, the nation's largest packing company. In addition to building a corporate empire, Paepcke had received a classical education and was particularly interested in the Greek concept of the complete life: a combination of work, play, and educational leisure. Paepcke saw the setting where his ideal life might become a reality.

The businessman in Walter Paepcke saw the need for an economic base in Aspen. When he met several ski area supporters, they decided to form the Aspen Skiing Corporation. Starting in 1946, several of those involved with the formation of the Aspen Skiing Company began surveying the mountain and formulating plans for new trails and lifts. A lift was built in two sections and trails were bulldozed in time for the grand opening of the resort on January 11th. 1947. The selection of Aspen as the site for the 1950 FIS (Federation Internationale de Ski) World Championships put Aspen on the map and gave it the international recognition many felt it deserved.

As Aspen grew as a resort destination, it also grew as a cultural center. The Music Festival in 1950 featured the Denver Symphony Orchestra and ran for eleven weeks. The first official lecture of the Aspen Institute for Humanistic Studies took place on July 2^{nd,} 1950. As Aspen grew in popularity it became clear there was a need for an airport; soon there was daily service to and from Denver. By 1954, Walter Paepcke could be credited with three major successes for this area: The Aspen Institute, The Aspen Summer Music Festival, and The Aspen Music School. Walter Paepcke molded the growth of Aspen for almost two decades. The Paepcke Era came to and end with his death in 1960, but he is responsible for much of the way Aspen is today.

After the 1950 FIS races, Aspen was among the premier ski resorts in the world, and the Aspen Skiing Corporation continued to grow. As Aspen grew, however, so did the competition. In 1957 Whipple Jones began work on a ski area he called Aspen Highlands. One year later Friedl Pfeifer sold his interest in the Ski Corp. to start Buttermilk -- a mountain geared for the beginner and intermediate skier. Buttermilk was later purchased by the Ski Corp. in 1963. In 1964, the Janss Investment Company joined forces with The Aspen Skiing Corporation. In 1967 they opened Snowmass-at-Aspen with five chairlifts, five lodges, two condominium complexes, and a central village mall. As skiing grew in popularity around the country, so did the Aspen Skiing Corp. In 1969/'70 the company reported 730,472 skier-days, and by 1989/'90 that number increased to 1,121,503.⁸ Aspen had been transformed from a viable natural resource into an expansive recreational complex.

2.3. Growth in the Modern Era

The growth that took place in Aspen between 1960 and 1990 was incredible. In those three decades the population quadrupled, going from 1,101 to 4,700.⁹ During the same period, the population of Pitkin County went from 2,381 to 14,474. In 1953 Aspen had no paved streets, stoplights, central heating, supermarkets, or traffic jams, and not until 1956 did it have any zoning. Getting the first zoning laws passed was a real challenge as many viewed the laws as simply restricting growth and prosperity. The few laws that were passed were in no way adequate for the building that began in 1960.

⁸ Sally Barlow-Perez, A History of Aspen (Aspen, Colorado: Who Press 1991), p. 65

⁹ Ibid, p. 75

In 1966, an Aspen Area Master Plan was adopted to try to guide the region's growth. In the six years between 1960 and 1966 Aspen's population doubled and the county's tripled. It was hoped that the new plan, which established planning and zoning boards, would help Aspen navigate between runaway growth and stifling restriction. The biggest problem that resulted from the implementation of the Aspen Area Master Plan was the definition of "reasonable" growth. The debates were heated and there were no real winners, but one new faction was born. Probably the most significant result of this period was the birth of *no-growth* politics. The first person to run on a *no-growth* platform was defeated in 1969, but that was the beginning of a slow and powerful movement.

The 1970's were a period in which the primary objective became planning for Aspen's future. Ground was broken on the Aspen Airport Business Center which housed 150 businesses and 125 apartments. Aspen turned down its bid for the 1972 Olympics fearing it would commercialize Aspen. In 1972, Aspen hired its first full time city planner and purchased a total of 230 acres to be used for parks. Soon after Aspen passed a Sixth Penny sales tax to be used for open space. This tax enabled the city to purchase the land for a golf course and several other properties. A Seventh Penny tax was passed for transportation and started what would become the Roaring Fork Transit Authority. The City Council also established a series of six view planes that could not be compromised. This served to limit new building height.

In 1973, *no-growth* politics became very visible. The election of a new mayor facilitated several actions that would drastically change the county's growth. All building permit applications were

put on hold pending a tightening of the city zoning regulations. A pedestrian mall plan was passed in an effort to alleviate traffic and preserve the atmosphere in downtown Aspen. The largest change, however, was the re-zoning of the entire county. In some cases land was changed from quarter-acre zoning to 35-acre zoning. Plans were laid for an extensive trail system and for the creation of more parks and green space. In 1977, a new hospital and airport were planned.

Many in the business community argued that all these changes would hurt them; however, business boomed despite their predictions. In fact, this downsizing helped to make Aspen even more attractive, although far more expensive. In 1977, a new county growth management plan was implemented limiting growth to 3.4% annually. This slowed growth, which solved one group's problem, but created another very serious problem. Rents rose and housing became scarce. Wealthy part-time residents could pay very high prices, and workers and wage earners were forced out of town and down the valley. This problem has only become worse with the passing of time.

3. HOUSING SUPPLY

3.1. Overview of the Pitkin County Housing Stock.

Pitkin County is located in the Rocky Mountains in an isolated section of central Colorado. The town of Aspen, which is the only city in the county, is located at the end of a horseshoe-shaped valley. The county's population is between 15,000 and 20,000, depending on how one measures it. There are just under 11,000 housing units. Much of the land in the county is unavailable for development, and 83% of the county is public land.¹⁰ The remaining 17% is distributed between residential, commercial, industrial, and agricultural properties. The majority of non-public land is residential, but the regional housing market is still severely supply-constrained.

The county can be broken into five distinct areas with the four largest in the main valley. The Roaring Fork Valley, named for the river which created it, has 10,054 housing units while the entire county has only 10,565 units.¹¹ This number has increased from 9,837 units in 1990. At that time, the U.S. Census of Housing determined that 40% of the supply was vacant. They were not vacant because nobody wanted to use them, but rather because they were second homes used only a small percentage of the time.

Aspen and Pitkin County have a full range of housing types with extremes on both ends. There are old mining cabins, multi-million dollar estates, and everything in between. It is an area where trailer homes can sell for \$200,000 and mansions a mile away can sell for more than

¹⁰ Hal Clifford et al, "The 10 Best Mountain Towns," Mountain Sports and Living, (January/February 1999) p. 65.

¹¹ Author's calculation using 1999 tax records

\$10,000,000. The supply constraints, which are both physical and governmental, combined with the reputation of Aspen, have made this area one of the most expensive housing markets in the country. The fact that this area is a destination for the "jet set", the outdoor enthusiast, and the "average Joe", makes it unlike any other place in the United States.

Additionally, the fact that this area appeals to wealthy individuals means that it attracts secondhome buyers. People purchase homes to use only a fraction of the year, yet those homes take up space all year round. The result: less land is available for full time residents, and this has the effect of chopping the market off at its knees. The competition for the bottom range of "affordable" properties has caused the selling prices to continually rise. The average selling price of an improved property in Pitkin County was over \$800,000 in 1998.¹²

The Rocky Mountains surround Pitkin County and make it very much like an island. They form a border which, much like a body of water, cannot be expanded into. There is a finite amount of land to be developed and everyone who lives and vacations in this area competes for this land. On an island those with more money can not simply buy the others out. An isolated economy requires a resident labor force. The wealthy need those of modest means and vice versa. The island economy around Aspen will not function without a diverse group of people, but in Aspen's case labor can be imported. Pitkin County has 10,054 housing units and the analysis that follows will shed some light on the dynamics that create a very diverse stock of housing in this area.

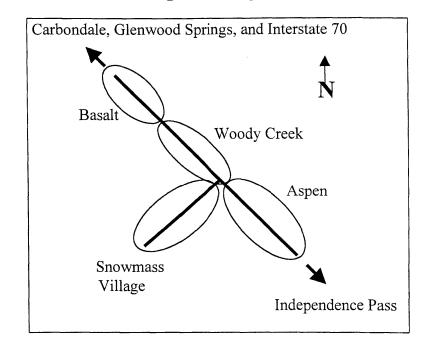
¹² Author's calculation using 1999 tax records

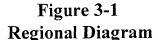
3.2. Geography and Distribution

Most of the inhabitable space in the Roaring Fork Valley is surrounded by 14,000 foot mountains and the housing stock being considered in Pitkin County is in a "dead end" valley with only one true access. Route 82 runs diagonally across the region so the area is accessible from the southeast, or end of the valley, but there is no commuter traffic from this direction. Route 82, which is the primary highway through the county, enters national forest just south of the city of Aspen and then traverses six treacherous miles of mountain side before cutting through Independence Pass. With an elevation of 12,095 feet, it is not uncommon for this road to see snow in the summer and, due to deep snow and avalanche danger, this road is closed in the winter. The result is that Aspen, and the surrounding area, is really only accessible from the north on Route 82. All imported goods and non-resident labor must come in from this direction. Aspen and Snowmass Village are the furthest up the valley and are the centers of business. Woody Creek is an agricultural and rural plain and Basalt is the port for this island.

The mountainous terrain in this area restricts building and, as a result, much of the stock of housing is located in the valleys near the rivers and creeks. The rivers have essentially constructed, or rather destructed, the topography, and thus created a natural linear form around which the buildings have been developed. The physical layout of the housing stock in this county is in the shape of the Greek symbol lambda (λ). It is composed of two lines which come together to create a nearly upside-down Y. The use of this symbol will explain the general location of the four primary regions or areas within the county. The right leg of this symbol is

Aspen, the left is Snowmass Village, the waist and torso is Woody Creek, and the neck and head are Basalt.





This diagram shows the relative location of the regions in this valley. These are the four areas which will be discussed later in the chapter in *3.5. The Current Situation*. Chapter 5 will look at housing alternatives outside of the county. First, it is important to understand the recent history of how the stock in the region has developed as a whole.

3.3. Historical Growth in Housing Stock

Pitkin County was first settled in 1887. Figure 3-2 depicts the number of housing units in Pitkin County since 1940 when the U.S. Census started keeping track of housing. The lack of data prior to 1940 does not negatively effect this study. There was inevitably a building boom at the turn of the century during Aspen's heyday as a mining town, but this housing stock was probably poorly built and demolished soon after Aspen's population shrunk. The key issue is that in 1960 there were approximately 1,000 housing units and just three decades later there were almost 10,000.

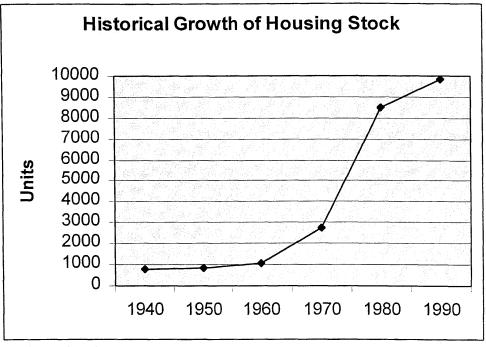


Figure 3-2

U.S. Census of Housing

3.4. Housing Stock During the Last Decade

According to the U.S. Census of Housing there were 9,837 housing units in Pitkin County in 1990. Of these homes 3,960 or 40% were considered vacant. They were second homes used only a small percentage of the year. Of the housing units 3,082 or 31% were owner occupied, and 2,795 or 28% of the units were inhabited by rental tenants. While these numbers are helpful, it is more meaningful to see the categories broken down by building type (table 3-1). It is surprising to see the small percentage of single family homes and the large percentage of condominiums relative to the typical housing market. It is also interesting that there are a large number of multiple unit buildings (Multiple Units plus Condominiums in table 3-1).

Table 3-1Occupancy by Unit Type

Building Type	Vacant	Owner Occ.	Renter Occ.	Total Units	Percentage
Single Family Detached	1247	1645	648	3540	36.0
Single Family Attached	248	321	215	784	8.0
Condominiums	2102	612	611	3325	33.8
Multiple Units	194	16	1134	1344	13.6
Mobile Home & Other	166	491	187	844	8.6
Totals	3957	3085	2795	9837	100.0
Percentage	40.2	31.4	28.4	100.0	

1990 U.S. Census of Housing

Table 3-2 outlines the size of the homes by number of rooms. Homes with less than four rooms are the most numerous. This is consistent with a large number of condominiums and apartments: condos and apartments comprise 47% of the stock and 5,370 or 55% of the homes are less than 4 rooms. Assuming that single family homes have at least five rooms the remaining small units must be mostly mobile homes.

Table 3-2Number of Homes With Given Number of Rooms

1 room	897
2 rooms	931
3 rooms	1404
4 rooms	2003
5 rooms	1539
6 rooms	1042
7 rooms	838
8 rooms	454
9 or more rooms	729
1990 U.S. Census of Housing	

The census data present a clear picture of what the housing stock looked like in 1990. The task is then to show the stock growth from that base year until today. This is done using construction permits issued by the building department. Both the city and the county keep records of new construction, additions/alterations, and demolitions on an annual basis. These data provide critical insight into how the housing stock has changed over the past eight years. The records classify buildings in four categories: 1) single family; 2) two family; 3) three & four family; and 4) five or more. Table 3-3 shown the net number of new units by class from 1990-1997.

Year	S.F.	TWO	3+4	5+	Total
1990	118	-2	15	10	141
1991	57	0	12	6	75
1992	69	0	14	10	93
1993	74	-4	29	11	110
1994	87	-4	22	6	111
1995	80	6	11	8	105
1996	70	-4	10	44	120
1997	70	70	34	6	180

Table 3-3Net Change in Housing Stock by Number of Units 1990-1997

City of Aspen and Pitkin County Construction Reports

This growth is the result of new construction (table 3-4) and demolition (table 3-5).

Table3-4New Home Construction by Number of Units 1990-1997

Year	S.F.	TWO	3+4	5+	Total
1990	133	0	15	22	170
1991	62	2	12	6	82
1992	77	0	14	22	113
1993	86	0	29	27	142
1994	91	0	22	6	119
1995	81	6	11	8	106
1996	85	0	14	50	149
1997	98	98	36	6	238

City of Aspen and Pitkin County Construction Reports

Table 3-5Housing Demolition by Number of Units 1990-1997

Year	S.F.	TWO	3+4	5+	Total
1990	15	2	0	12	29
1991	5	2	0	0	7
1992	8	0	0	12	20
1993	12	4	0	16	32
1994	4	4	0	Ō	8
1995	1	0	0	0	1
1996	15	4	4	6	29
1997	28	28	2	0	58

City of Aspen and Pitkin County Construction Reports

Graphs makes it easier to see how the trends in construction and demolition have affected the

housing stock during the last seven years (figure 3-3).

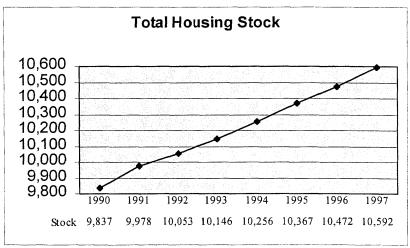
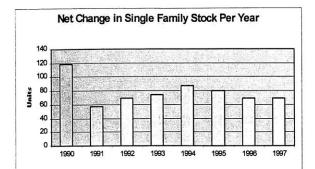


Figure 3-3

City of Aspen and Pitkin County Construction Reports

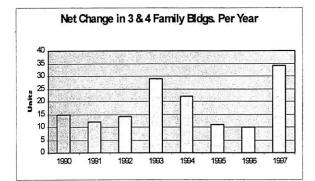
Breaking the total stock graph into its component parts enables one to see how the different types of housing have grown over the last several years (figures 3-4 through 3-7).

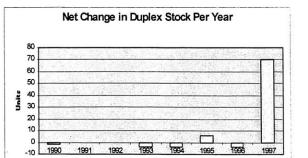
Figure 3-4



City of Aspen and Pitkin County Construction Reports

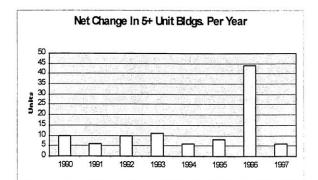
Figure 3-6





City of Aspen and Pitkin County Construction Reports

Figure 3-7



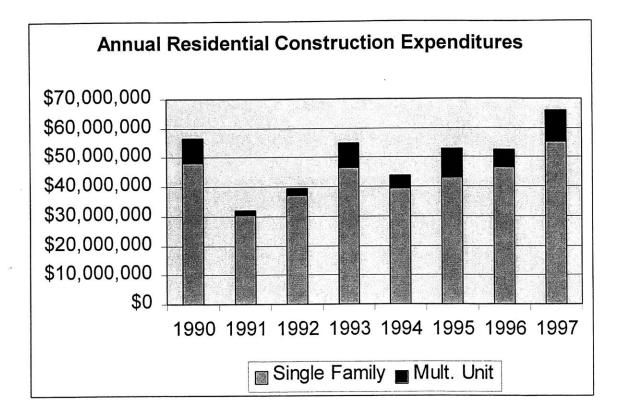
City of Aspen and Pitkin County Construction Reports

The last item to examine in the growth since the 1990 census data is how much money has been spent on residential construction in this area (figure 3-8). It is interesting to note that the vast majority of money is spent on single family housing. In 1991 \$30,000,000 out of \$32,000,000 was spent to build 62 single-family homes. This information suggests that very few new condominiums were built during this time. New condominiums may have been the result of converting older buildings. These data gives some important insight into how different types of housing have evolved over the last seven years and what has led to the creation of the current situation.

Figure 3-5

City of Aspen and Pitkin County Construction Reports

Figure 3-8



With this insight into the Aspen and Pitkin County housing market, there should be little question about what type of housing exists in this area. It is clear that this area is unique in several ways. There are a large number of "vacant" houses, a very high proportion of condominiums, and a lot of money spent to building relatively few homes. This is in line with what might have been expected for this county, but is not sufficient to explain the dynamics of this area. An analysis of the current situation will shed light on the distribution of different housing types.

3.5. The Current Situation

Pitkin County currently has 10,565 residential housing units according to the county tax records. These 10,565 units can be broken down into five locational markets or areas. These areas are Aspen, Snowmass Village, Woody Creek, Basalt and everything else or the remainder. The first four areas are depicted in figure 3-1, and the remaining properties are located primarily in Redstone. The remaining 511 property will be excluded from this analysis as they are all rural single family homes which, in terms of number, are less significant than those properties located closer to Aspen in larger towns north of Pitkin County on Route 82. As a result of these exclusions there are 10,054 housing units which will be considered in this analysis. Figure 3-9 shows the relative locations of the aforementioned areas.

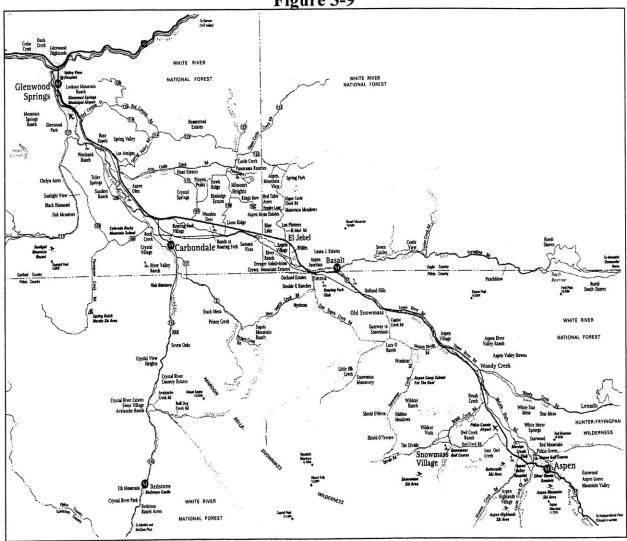


Figure 3-9

Mason & Morse Real Estate

Aspen is the biggest of the four areas considered, in terms of housing stock, as it is the focal point of the valley. It is the urban center and contains 59% of the housing stock in the county. Snowmass Village is second with 26%, Woody Creek third with 9%, and Basalt has 6%. These four regions serve to break Pitkin County down into pieces that provide insight into how the housing stock and available space are distributed in this narrow isolated valley. It is important to note that only a small portion of Basalt is in Pitkin County and as a result much of the stock of space in this town is not considered in this supply analysis. The remaining portion of Basalt and other areas will be given consideration when looking at the demand for housing in Chapter 5.

The six types of housing that will be distinguished between when looking at the four different areas are: 1) single family: 2) condominiums; 3) manufactured housing, mobile homes, and trailers; 4) two and three unit buildings; 5) four-to-eight-unit buildings; and 6) buildings with nine and more units. Looking at these six types across the four different geographical areas paints a detailed picture of what type of housing is where. The results are shown in table 3-6

Table 3-6
Distribution of Housing Units by Type

Building Type	Aspen	Snowmass	Basalt	W. C.	Total	Percent
Single Family Homes	1950	852	463	477	3742	37.2
Condominium	3129	1753	215	10	5107	50.8
Manufactured Housing	42	0	140	88	270	2.7
Two and Three Family Homes	224	18	6	9	257	2.6
Four thru Eight Unit Buildings	89	0	12	0	101	1.0
Nine and Larger Unit Buildings	530	12	16	19	577	5.7
Total	5964	2635	852	603	10054	100.0
Percent	59.3	26.2	8.5	6.0	100.0	

1999 Tax Records

Several other factors still need to be considered. This requires further categorizing the housing stock into seven different functional groups. These groups are: 1) owner occupied market rate units; 2) non-resident units valued above \$1M; 3) non-resident units valued between \$500k and \$11M; 4) non-resident units valued between \$300k and \$500K; 5) deed-restricted owner-occupied units, 6) deed-restricted rental units; and 7) all other units. The term deed-restricted is fully explain in Chapter 4, but it is important to have a basic understanding here. A deed-restricted unit is one that is considered to be "affordable housing." Owner occupied deed-restricted rental properties can only be owned by working residents and have a price cap. Deer-restricted rental properties can only be rented by working residents and can not command rents higher than those determined by the housing authority. The results of this categorization are shown in table 3-7.

Table 3-7	
Distribution of Housing Units by Tenure	

Property	Aspen	Snowmass	Basalt	W.C.	Total	Percent
Owner Occupied Market Rate	1894	582	216	377	3069	30.5
Non-resident Units Above \$1M	815	351	20	79	1265	12.6
Non-resident Units \$500k-\$1M	531	443	51	44	1069	10.6
Non-resident Units \$300k-\$500k	660	415	80	22	1177	11.7
Deed Restricted Owner Occupied	585	221	149	42	997	10.0
Deed Restricted Rented	567	143	0	0	710	7.1
Remainder of Properties	912	480	336	39	1767	17.6
Total	5964	2635	852	603	10054	100.0
Percent	59.3	26.2	8.5	6.0	100.0	

1999 Tax Records

Out-of-town residents own 35% of the property in this county and each property is valued above \$300,000. These are typically second homes owned by an individual with an out of town mailing address. Many of the second-home buyers are quite wealthy and purchase their property with cash. This means that the owner has no debt-service liability. Most of these owners are willing to bare the opportunity cost of renting the property because they do not need to support debt-

service payments. It is likely that these second-home owners do not want to be bothered with short-term rentals, and want the flexibility to use their property when they choose. As a result, a very large portion of the housing stock is vacant for most of the year.

A second important factor to consider is that wealthy retirees, or otherwise independently wealthy individuals, own many of the owner-occupied units. Thirty-one percent of the housing market consists of owner-occupied units which are similar in price to the non-resident units described above. These are expensive properties that only an extremely well off local professional could afford. The final analysis of this chapter, which looks at recent sales prices, will shed some light on who can afford this market-rate, owner-occupied housing.

There are two other important things to consider when looking at this analysis. The first is the number of deed-restricted properties. Fourteen percent of the property in the county is deed-restricted, "affordable housing." The second important factor to note is that tourist accommodations are not included in this study. It is assumed that tourist accommodations are hotels or lodges and thus commercial property. Condominiums available for short term rental are second homes owned by someone willing to employ a management company or who has the time to manage the property themself. These condos are generally not year-round market-rate rental properties as the owners can command much higher prices for weekly tourist rentals. Therefore, this type of property is considered as vacant, non-resident property rather than tourist accommodations or long-term rents.

3.6. Average Sales Prices

The final crucial insight required to understand the supply-side of the housing market in Pitkin County is to determine what is available for sale and its cost. The data available from the Pitkin County Assessor's Office will be used here because this office records all transactions. Table 3-8 shows the high price of real estate in this county. It is important to consider that these averages include the sales of "affordable" properties as well as all types of manufactured housing. This is indeed a very expensive region and the average cost of housing is far above \$138,100 which was the national median price that a homeowner could afford in 1993.¹³

Table 3-8Average Sales Price of All Improved Property in Pitkin County

Year	Average Price	Transactions	Time Period
1998	\$896,447.84	692	Jan-Dec
1999	\$1,016,771.46	251	Jan-May
999 Tax Records			<u> </u>

3.7. Summary

Aspen is experiencing the growing pains of a maturing resort economy. It is a desirable place to live and vacation, therefore there is a large demand for homes in this area. The limited stock of housing units causes several phenomena to occur. The average price of a housing unit in Pitkin County was almost six and a half times the national average: \$896,447 per unit in 1998. Fifty percent of the housing units in this region are condominiums and another thirty-eight percent are single family homes. This leaves only 12% of the housing stock in the form of single-owner, multiple-unit buildings. As these are generally rental properties, this area has a very small

¹³ Howard Savage, "Who Can Afford to Buy a House in 1993," (U.S. Bureau of the Census, 1993) p. 3.

number of units available for rent. Finally, 35% of the housing stock is owned by out-of-town residents who use the property only a fraction of the year.

These factors combine to create a very high cost of housing. Options available on the supplyside of the equation are very limited. Aspen is a supply-constrained housing market, and that is probably never going to change. Clearly the "secret is out", and thousands of people want a piece of Pitkin County. Today, there are housing units of all shapes, sizes, and prices in Aspen, but the trend is pushing the mean towards larger, more expensive properties. For better or worse, Aspen attracts the type of people who want the biggest and the best.

4. Governmental Regulations and Their Effects on the Housing Stock

4.1. Introduction

In the past three decades Aspen has undergone major changes. The population has more than doubled, but at the same time the resident labor force has decreased as a percentage of that population. In 1993 the city planning department made an effort to try to define Aspen's goals as a community. The prevailing feeling of polled local residents from Aspen and Pitkin County, was that growth should be limited to ensure the prosperous future of a beautiful region. The majority of residents also felt that the community should avoid creating an environment that was too structured or organized, but instead promote the "messy vitality that originally created Aspen's renowned cultural and sociological diversity."¹⁴ Residents reported that the biggest threat to diversity at that time was their inability to find affordable housing in the Aspen area.

In order to avoid creating an environment that was too structured or organized, the Aspen City Council and The Pitkin County Board of Commissioners adopted a very detailed and structured plan. On February 2nd, 1993, they implemented the Growth and Housing Action Plans which together constitute the Aspen Area Community Plan (AACP). The AACP documents are unique to this area. They determine the maximum number of new units that can be built each year and the required percentages of affordable housing. Basically, it is another tool to control land use.

The AACP suggests that if economics alone are allowed to control the housing market, then the qualities that make this area unique will be lost. Supporters of the plan are afraid that Aspen will

¹⁴ Aspen/Pitkin County Housing Office, "City of Aspen/Pitkin County Housing Programs," 1998 p. I-5

lose its characteristic vitality if the majority of the labor force is not housed in the city. The AACPs Community Vision Statement says that Aspen's most valuable resource is its people, and that tourism is the economic force of the community. It goes on to say that the "vitality brought to Aspen by its full time residents is being seriously diluted by the inability of working people to live in their town."¹⁵ Residents who backed the plan suggested Aspen's unique spirit was in danger of eroding and the key to reversing the trend is in the community's ability to attract people from all walks of life.

The Aspen Area Community Plan was developed and reported to be a "character based" plan to preserve "the citizen's vision for the Aspen area community." This plan, when combined with the City and County Zoning Regulations, completely controls land use in the county. It helps to ensure that the elected and appointed officials in the city and county government have complete control over what is built and where. The plan may prevent uncontrolled development, but its primary function is to ensure that residents of Aspen who want to live in the metropolitan area have "affordable housing" for themselves and their families.

4.2. Affordable Housing Guidelines

The connotation of "affordable housing" is generally not a very positive one. People tend to think of "projects" or other large-scale housing developments that accommodate the unemployed and impoverished. This is not the case in Pitkin County. The average home price is over \$1,000,000, and the intentions of the affordable housing program is to ensure that the working

¹⁵ Aspen/Pitkin County Housing Office, "City of Aspen/Pitkin County Housing Programs," 1998 p. I-5

people (average family income of \$76,036 in 1990)¹⁶ who choose to live in this area have a chance to purchase a home or rent an apartment.

Housing prices and rental rates are based on regular surveys of Aspen's working residents. They are set to ensure that no household pays more that 30% of their income for housing. The affordable housing guidelines of 1998 set maximum unit sales prices and rents based on four categories of income. These categories are changed annually to adjust for inflation. The 1998 figures are shown in table 4-1. Table 4-2 and 4-3 shown deed-restricted properties maximum sale and rental prices respectively.

Table 4-1Maximum Incomes for Affordable Housing

Dependants	Category 1	Category 2	Category 3	Category 4
0	\$25,000	\$39,765	\$64,877	\$104,540
1	\$32,500	\$47,265	\$72,377	\$112,040
2	\$40,000	\$54,765	\$79,877	\$119,540
3+	\$47,500	\$62,265	\$87,377	\$127,040

1998 Aspen/Pitkin County Housing guidelines

Table 4-2

Maximum Sales Prices for Newly-Deed-Restricted Affordable Housing

Unit Type	Category 1	Category 2	Category 3	Category 4
Studio	\$29,000	\$66,000	\$109,600	\$185,400
1 Bedroom	\$36,400	\$78,300	\$120,800	\$196,000
2 Bedroom	\$43,800	\$89,700	\$132,200	\$208,200
3 Bedroom	\$51,000	\$100,300	\$143,000	\$219,500
S.F. Detached	\$62,400	\$115,800	\$158,300	\$226,900

1998 Aspen/Pitkin County Housing guidelines

¹⁶ U.S. Bureau of Census, "County Subdivision," 1990.

Table 4-3
Maximum Monthly Rent for Affordable Housing

Unit Type	Category 1	Category 2	Category 3	Category 4
Studio	\$349	\$620	\$625	\$1,457
1 Bedroom	\$429	\$728	\$1,033	\$1,576
2 Bedroom	\$510	\$836	\$1,142	\$1,684
3 Bedroom	\$592	\$946	\$1,252	\$1,794
S.F. Detached	\$673	\$1,055	\$1,359	\$1,848

1998 Aspen/Pitkin County Housing guidelines

It quickly becomes clear from looking at these tables that Pitkin County does not have a typical definition of affordable housing. Families earning \$127,040 annually qualify for "affordable" housing. This system is not the norm for housing programs around the country; however, it is necessary if working citizens are to live in Aspen. The prices of homes in the open market are extremely high. It is not uncommon for a three-bedroom house to cost more than \$1,000,000. In fact, in the period from May 1 to November 1, 1998 of the 44 single family homes that were sold, only five sold for under \$1,000,000.¹⁷ The cost of housing makes it difficult for people to settle in this region. Without Pitkin County's housing programs the people who work in this area could not afford to live there.

4.3. The Aspen Area Community Plan

There is a large working middle class in Pitkin County. Over 47% of the population in the county have a college degree and an additional 10% hold an advanced degree.¹⁸ These people are not performing menial tasks. They hold good jobs and live in this area because they enjoy the

¹⁷ Snowmass Real Estate Company, "Mountain Places," Winter 1999

¹⁸ U.S. Bureau of Census, "County Business Patterns," 1996.

lifestyle. There is only a very small percentage of transient labor living in this area. This region does not attract a lot of ski bums that come for a year and then go and get a "real" job. The high cost of living here prevents people from living near the ski slopes. As a result, the minimal transient labor tends to be Mexicans who live in group quarters in the lower valley and are attracted by the high wages paid in the upper valley.

"Aspen's affordable housing program is a comprehensive series of regulations and incentives to preserve, create, and encourage affordable housing in scale with the community."¹⁹ The primary goal of the plan is to ensure that at least 60% of Aspen's employees can live in the Aspen area. In 1994 only 45% of the workforce lived in the area, and some recent estimates put that figure as low as 27%. To achieve the goal of housing 60% of the workforce, the AACP has laid out a series of policies and programs.

One of these policies is the backbone of the AACP: The Growth Action Plan limits growth to 2% per year, by total number of housing units, and forces developers to compete for limited development rights. The competition for residential building permits gives extra credit to those proposals containing "desirable" allocations of affordable housing. In order to get subdivision approved, one must keep in mind that at least 60% of the total number of new units approved in any given year must be deed-restricted as affordable units. The commercial and large development programs require developers to build units for employees or purchase existing units

¹⁹ Amy Margerum and David Tolen, "Aspen's Affordable Housing Program Helps Create Community," Colorado Municipalities, (November/December 1994) p. 11.

and place them in the deed-restricted program. As a result of this program, employers mitigate the housing needs of 60% of their potential employees.

These programs are effective in promoting affordable housing; however, as always when motivated by money, people manage to find loopholes. As real estate prices continued to rise after the implementation of the AACP, people began to demolish some of the existing stock. Older rental properties were the first to go, and they were replaced with second homes and expensive condos. This displaced local renters and served to decrease the stock of affordable housing. As a result a referendum was passed requiring 50% of demolished units to be replaced by affordable housing. Additionally, construction of new single-family housing requires either payment of a fee of \$14.75 per square foot or the construction of an accessory dwelling unit (ADU). An ADU is a unit that is available for rent to a local working resident. These units are exempt from growth management controls and all fees are waived in order to encourage their construction.

Another important part of the Housing Action Plan is a major initiative to encourage private sector construction of affordable housing in the City's Affordable Housing Zone District. Within this zoning district, if 70% of the units are deed-restricted affordable housing then the 30% market rate units are exempt from the growth management process. The intention is that developers will choose this method of development because they can build without competing for allocations through the Growth Management Plan. The cost of unimproved land and labor makes it difficult for developers to profit under the above-mentioned program; however, three such projects have been built.

A second program designed to promote reasonably priced homes is the Resident Occupied Home Program. This program is intended to target the housing demand of local professionals whose household income is above \$130,000 per year. A resident occupied unit (ROU) must be owned and occupied by a local working resident, but it may be priced by the developer based on the demand for such units. The appreciation is capped on ROUs to prevent a resident from buying and then selling the property only to make a large profit. As a trade off the project is exempt from the time-consuming growth-management approval process. The permitting of affordable housing units, resident occupied units, and accessory dwelling units for the past 4 years is shown in table 4-4.

Table 4-4Permitting of Affordable Housing under the GMQS Since 1995

	1995	1996	1997	1998
Affordable Housing Units	3	32	197	34
Resident Occupied Units	0	73	0	4
Accessory Dwelling Units	0	24	18	8

Existing Conditions Report - 1998 AACP Update

Finally, the largest aspect of the affordable housing program is the Public Sector Production Program. The city and county, through the Housing Office, have an aggressive program to build new affordable housing units. Aspen raises more than \$1,000,000 per year from a real estate transfer tax and another \$1,400,000 from a 0.45% sales tax.²⁰ These funds are used to purchase land and build affordable housing to be sold or rented to working residents.

²⁰ Amy Margerum and David Tolen, "Aspen's Affordable Housing Program Helps Create Community," *Colorado Municipalities*, (November/December 1994) p. 11.

The housing authority in Pitkin County has been responsible for establishing 1,612 affordable housing units to date. Additionally, the town of Snowmass Village has 346 deed-restricted units under its control. As a result of these two efforts, there are 1,958 deed-restricted units in the Upper Roaring Fork Valley. Of these units, approximately 40% are available for rent and are managed by one of the two authorities. The remaining 60% are owned by the residents themselves. With almost 20% of the housing in the county in the deed-restricted program, the Housing Department estimates that they house more than 4,500 residents. These 1,958 deed-restricted units are helping to achieve the goal of housing much of Aspen's labor force, but they are still not meeting the demand for "reasonably priced" housing.

4.4. Zoning

The final set of governmental regulations which controls the supply of available housing consists of the City and County Zoning Regulations. The "by-right" zoning in Colorado is 35 acres. This means that any owner of 35 acres can build a home, by right, with no approval process. They must obtain a permit and build according to building regulations; however, they do not fall under the control of the formal Growth Management Quota System. Similarly, previously approved subdivisions are grandfathered and do not need special approval. The Growth Management Quota System essentially affects all future land development in Pitkin County. The city of Aspen and other subdivided areas are under the control of zoning overlay districts. These zoning districts allow for varying degrees of density, and essentially promote denser projects in the city and less dense rural projects. Together the Aspen Area Community Plan and the zoning

regulations control 100% of the property in Pitkin County. Unimproved residential lots are spread throughout the county; their distribution is tabulated in table 4-5.

	Aspen	Snowmass	Basalt	W.C.	Total
Single Family Lot	309	232	128	62	731
< 1 Acre	15	1	7	1	24
1-5 Acres	18	2	2	36	58
5-10 Acres	5	1	5	21	32
10-35 Acres	8	6	5	7	26
35-100 Acres	4	15	31	19	69
100+ Acres	1	5	3	0	9

Table 4-5 Unimproved Residential Property in Pitkin County

1999 Tax Records

The distinction of a single-family lot is that it has been permitted for construction of one house while other properties, regardless of size, are zoned residential, but may be located in any zoning district. From the table above (Table 4-5), one can see that there is land available to be developed. The first and the last two rows together represent properties over which the GMQS has no control. The first row consists of already subdivided lots, and the last two are large enough for "by-right" zoning. As a result, there are 809 properties that could be developed as single-family homes without additional growth management approvals. Some of the larger properties could be split up into subdivisions and properties can be re-zoned or developed as mixed-use developments on commercially zoned property. There is room for development, but for any new construction beyond the currently approved 809 single-family homes, a developer has to receive an allocation from the GMQS.

4.5. The Future of the Housing Stock in Pitkin County

The Growth Management Quota System was implemented to "manage growth to ensure a continued high quality of life and community balance." With that in mind, a maximum annual increase restriction was placed on all development. That increase was set at 2% per year as stated earlier in the chapter, but, additionally, all growth is capped in 2015. As the plan is written now, no development can occur after 2015. The annual and total allowable build-out is depicted in table 4-6.

Category	Annual Allotment	Total Allotment (2015)
Free Market Residential	4	92
Free Market- Affordable		
Housing Associated	8	184
Resident Occupied	8	184
Affordable Housing	43	989
Total	63	1449

Table 4-6Annual and Total Allowable Development Under GMQS

Existing Conditions Report - 1998 AACP Update

The Housing Action Plan, the Growth Action Plan, and the City and County Zoning regulations, dictate exactly what can be built and where. They work to ensure that there is "affordable housing" in the upper Roaring Fork Valley. However, they also limit the amount of real estate that is available in the open market, contributing to escalating land costs. They have effectively limited the maximum number of new free market homes to 1,085. That means the housing stock can increase by a total of 10% in the next 23 years. At the same time, the GMQS increases affordable housing by more than 50%. There is no doubt that these three programs will dictate the future of the housing stock in this area. The question that cannot be answered at this time is

whether the GMQS will be effective in controlling growth to perpetuate a lifestyle that grew out of an admittedly "messy vitality".

5. Demand for Residential Property

5.1. Introduction

Aspen has grown in both size and popularity in recent years. As was indicated in the history of Aspen in Chapter 2, Aspen has long been considered an exciting destination resort. It has a reputation as a great place to vacation and also as a wonderful place to live. It is located in a climate that allows for several feet of snow in the winter as well as beautiful, sunny, warm, summer weather. Aspen and the surrounding county are enjoyable twelve months of the year and as a result it is not only a winter skiing destination, but a true year round resort. When the residents and visitors of Aspen are not working or on the ski slopes, they can be found golfing, fishing, kayaking, mountain biking, hiking, or enjoying an almost unlimited number of other activities.

In 1996 the U.S. Census determined that there were 14,929 residents in Pitkin County. In 1998 the County estimated that there were approximately 19,000 people in the City of Aspen on an average day. At the same time there were less than 11,000 housing units in the entire county. There are numerous hotels and accommodations for tourists and clearly not all of these people want to live in Aspen. Much of the workforce may choose to live outside of the City, but if there are this many people who work, shop, and play in Aspen, then it is logical to conclude that there must be a substantial demand for housing.

Between 1990 and 1996, the population of Pitkin County grew by 17.1%. Over that same period of time, the number of jobs increased by 13.6%, yet the resident labor force only increased by

8.6%. The increase in the demand for housing should at least match the increase in the number of jobs in the region. If the supply of housing is not sufficient to meet the demand, then the size of the resident labor force cannot keep up with job growth. The increase in resident labor in this region is not in line with job growth, and the constraints on the supply of housing stock in Pitkin County allow it to grow by only 2% per year. As a result, the demand for housing is growing at a much faster rate than the supply, and there is a housing shortage at realistic rent and price levels. The people who can afford to pay up for housing do; the rest are forced to go elsewhere.

5.2. Forces Behind the Demand for Housing

Aspen as a city is a tremendously active place. This can be seen not only through the active outdoor lifestyles of many of its residents, but also through the plethora of other interesting activities. There are numerous festivals though out the summer months as well as many cultural and intellectual gatherings throughout the year. The Aspen Institute hosts a wide range of seminars and conferences, and the Aspen Music Festival draws more than 100,000 people annually. Aspen is not just a ski town, but a vibrant and cultured metropolitan destination.

The wide range of activities and sporting events which take place in this area draw a culturally diverse audience. Aspen has become a desirable place to live and visit. The beautiful setting and cultural and intellectual stimulation have combined to dramatically increase the demand for housing in this region. Some people have chosen to settle, and while many others only visit, there are an ever-increasing number of vacationers who have purchased a second home. These homes tend to be very large and very expensive. Often they fit into the "trophy" home category, cost several million dollars, and are in the neighborhood of 10,000 square feet. One extreme

example is that of a 13,000 square foot home that was listed for \$12,800,000 in June of 1999. This is at top end of the spectrum, but the increased demand for large and elaborate properties in this area has driven up prices in the entire market. Mansions tend to use a lot of land and increase the supply constraints. Less property is available for modest homes and the competition for "affordable" properties becomes that much more intense.

As was shown in Chapter 3, the average selling price of a home was over \$1,000,000 from January to May of 1999. This includes all of the deed-restricted properties and mobile homes in the entire county. Most property is priced out of the range of the vast majority of the population. A loan for \$1,000,000 requires a household income of approximately \$280,000 annually so that 30% of that income can be spent on mortgage payments for a loan with a 7.5% interest rate. The demand for housing in this area is great, and while the wage earner, the local professional, and the out of town CEO are demanding very different types of housing, they are still competing for the same limited space.

5.3. Working Residents' Demand for Housing

The growing popularity of Aspen as a resort destination has increased the demand for labor in this area. The resort industry is labor intensive and much of that labor is focused in service industries (see table 5-2). Aspen has an abundance of restaurants and hotels as well as all kinds of specialty services. An area such as Aspen, which attracts visitors with substantial income also, attracts entrepreneurs looking to capitalize on a new opportunity. Most of these owner-operated businesses require additional labor. If you have got to work to make a living, there are certainly worse places to do it than in Aspen.

In 1990 there were 12,748 residents in Pitkin County, according to the U.S. Census, and 8,121 of them worked in the county in a job in which their employer was subject to Colorado's Employment Security Regulations. The Colorado Department of Labor classifies these as ES202 jobs. By 1996 the number of residents had jumped to 14,929 and the number of residents in ES202 jobs had increased to 8,822. That is a 17.1% increase in population, but only an 8.6% increase in resident labor. During that same period of time, the number of jobs in Pitkin County increased from 14,696 to 16,696 or 13.6%. The economy was growing and the population was increasing, but the resident labor force was decreasing as a percentage of total labor. This suggests that there is a strong demand for labor and, therefore, a strong demand for housing, but the labor force is currently living outside of Aspen and commuting to work. The number of establishments employing individuals are listed in table 5-1 and the kind of jobs those individuals are commuting for are listed in table 5-2.

498	34.6%
401	27.8%
218	15.1%
153	10.6%
66	4.6%
36	2.5%
34	2.4%
27	1.9%
5	0.3%
2	0.1%
	401 218 153 66 36 34 27 5

Table 5-11996 Employment by Number of Establishments

U.S. Census Bureau 1996 County Business Pattern

Eating and Drinking	3193	18.0%
Recreational & Amusement	2601	14.7%
Hotel & lodging	2484	14.0%
Government	1484	8.4%
Finance, Ins., & R.E.	1484	8.4%
Construction	1122	6.3%
Misc. Retail	803	4.5%
Apparel & Accessories	680	3.8%
Business Services	614	3.5%
Trans. Comm., Utilities	497	2.8%
Food Stores	390	2.2%
Engineering	379	2.1%
Manufacturing	253	1.4%
Private Household	245	1.4%
Health	224	1.3%
Membership Organizations	141	0.8%
Educational Services	133	0.7%
Wholesale	133	0.7%
Legal	127	0.7%
Furniture	92	0.5%
Social	89	0.5%
Auto Dealers	89	0.5%
Personal Services	79	0.4%
Auto Repair	68	0.4%
Other	332	1.9%
1000 II . D. Hable Discussion		

Table 5-21997 Breakdown of ES202 Jobs in Pitkin County

1998 Housing Roundtable Discussion

In 1990 6,575 non-residents commuted to ES202 jobs in Pitkin County. In 1996 that number increased to 7,874; a jump of 19.8%.²⁰ Additionally, the majority of those individuals who lived and worked in Pitkin County did not reside in Aspen. Table 5-3 shows the population and number of jobs by area. Figures 5-1 and 5-2 are charts of these data which help to represent the discrepancy between job location and place of residence.

²⁰ Aspen/Pitkin Community Development Staff, "Existing Conditions Report – 1998 AACP Update," 1998. p.34

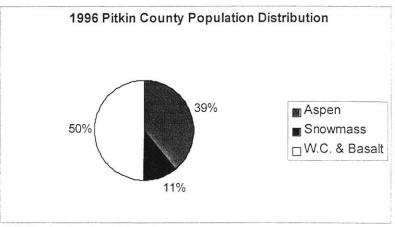
Table 5-3

1996 Distribution of Population and ES202 Jobs in Pitkin County

	Aspen	Snowmass	W.C. & Basalt
Population	5,524	1,561	7,034
Jobs	12,234	3,369	1,093

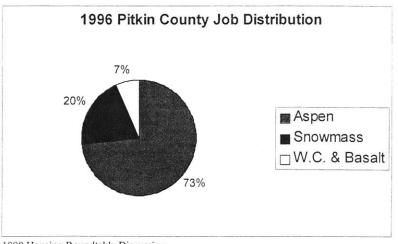
1998 Housing Roundtable Discussion

Figure 5-1



1998 Housing Roundtable Discussion

Figure	5-2
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1998 Housing Roundtable Discussion

While 73% of the jobs in this county are located in Aspen only 39% of the population lives there. Additionally, only 53% of the people who live in Pitkin County work in ES202 jobs. If this percentage holds for the city of Aspen, then there are 2,918 working residents in Aspen while there are 16,696 jobs. By these calculations, 17% of Aspen's labor force lives in Aspen. It is important to consider that most of the affordable housing in Pitkin County is in Aspen so the numbers may be higher. With only 1,987 affordable housing units in total, however, they may not.

It is clear that there is a high demand for housing in Pitkin County. Not all of the 73% of the workforce can want to commute to and from work every day. If people live far from where they work it is generally for a reason. Perhaps a spouse or significant other works elsewhere. Some may want to live in the country and work in the city. People may choose to commute if it means living in a house rather than a trailer or an apartment. Many people may prefer living outside of Aspen, but if there were a larger supply of affordable housing in Aspen, more working residents would live there.

5.4. The shift in Demand for Reasonably Priced Housing

Pitkin County has more jobs than people. It is an area where wealthy individuals vacation and spend money. It is clearly a desirable place to work but it is too expensive for most to live. There are not enough homes that fit into the budgets of working residents. The obvious solution to this problem is that people live elsewhere and commute to work. Until now this paper has discussed only Pitkin County, but, to illustrate what is occurring with the demand-side of the housing economy, it is important to look outside the county's borders. The area north of Pitkin County on Route 82 is actually divided between two other counties. This is shown in figure 5-3, but may be difficult to see. Eagle County is in the upper right hand corner of the map and Garfield County is in the upper left. Eagle County represents only a small fraction of the populated area north of Aspen so the focus will be placed on Garfield County.

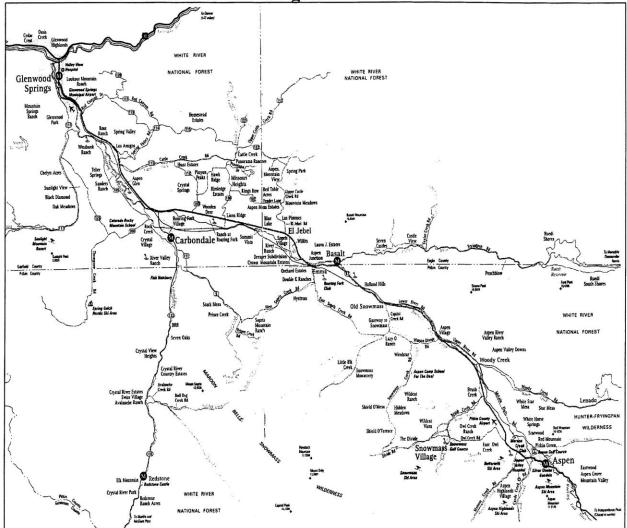


Figure 5-3

Mason & Morse Real Estate

The labor force and number of ES202 jobs in Garfield County over the last six years is depicted in figure 5-4.

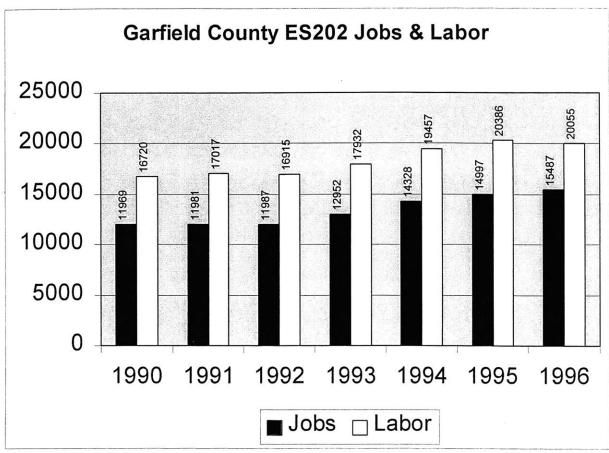


Figure 5-4

It is clear that Garfield County is exporting labor. Perhaps some of the labor is going to areas other than Pitkin County, but since this is the only really viable location for the non-resident labor of Pitkin County to live (excluding Eagle County), those in need of housing must be moving to Garfield County. The prices of housing in Garfield County are considerably above the national average of \$138,100. Garfield County's property values have become inflated due to the higher income overflow from the Aspen area, but they are still much lower than those in

¹⁹⁹⁸ Housing Roundtable Discussion

Pitkin County. People have chosen to move out of Aspen and commute to work because of the exorbitant housing costs in the Aspen metro area.

5.5. Another Perspective on the Population of Pitkin County

The Colorado Department of Labor measures jobs by those in the ES202 category. There are undoubtedly other people working in Aspen whom this survey does not cover, but it is difficult to determine exactly how many people there are in the City and why they are there. Many are tourists and vacationers, but the analysis above probably understates the actual demand for housing. A look at the peak populations in this area will help to paint a more realistic picture of what is taking place.

One of the most reliable means of assessing the size of a population in an area is to look at the flows into the wastewater treatment plant. These flows can be compared to the average per capita wastewater flows and determine peak population in an area. The Aspen Consolidated Sanitation District (ASCD) tracked influent flows for a period of one year. A unit flow of 112 gallons/person/day was applied to these flows and the peak results are tabulated in table 5-4.

Month/Year	Est. Population
October-97	15,181
November-97	14,637
December-97	18,325
January-98	19,473
February-98	19,359
March-98	19,844
April-98	15,158
May-98	13,767
June-98	19,269
July-98	23,050
August-98	22,293
September-98	18,777

Table 5-4Monthly Population Estimates in the Aspen Area

Aspen Consolidated Sanitation District

These flows are calculated for the Aspen Metro Area. The ACSD services the City of Aspen and the Aspen Metro Area. It does not service Snowmass, Woody Creek, or Basalt as outlined in Chapter 3. These numbers are clearly much higher than those published by the U.S. Census. This is not to say that these numbers are absolutely correct, but they are based on sound logic and are probably the most realistic numbers that can be applied to determine the number of people visiting a developing resort. If the high and low numbers are thrown out as extremes, since they represent the peak tourist season and the end of the ski season respectively, the next two lowest numbers occur in October and April. These are not very popular vacation months and are probably the most indicative of the number of non-visitors who are in Aspen each day. Clearly not all of these people are working, but the fact that the population is larger than that reported by other sources would suggest that the number of workers is greater as well.

The focus of this section is not to dispute the census or to try to determine exactly how many people are in this area at any given time. Instead, it simply suggests that the previously reported employment numbers are probably a low estimate of the number of people who work in this area. At the same time, the Colorado Department of Labor is probably fairly accurate at determining the number of resident laborers from income and property tax records. Therefore, in all likelihood, there are more people who would like to live in Pitkin County were they able to.

5.6 Corporate Demand

Generally, when thinking of corporate demand for real estate, one thinks of commercial space. Perhaps the idea of a corporate headquarters comes to mind, or maybe a manufacturing facility. Both of these types of properties exist in Pitkin County; however, neither will be considered here. The corporate demand for real estate in this case refers to the demand for large second homes. These may be "trophy" homes or more modest condos, but neither property is by any means modest. Luxurious second homes are very common in this region and their prices range from several hundred thousand dollars, for a small condominium, to tens of millions for very large estates. Purchasing these estates require the income that top corporate executives make.

As indicated in Chapter 3, of the forty-four properties that sold, in Aspen, from May 1 to November 1, 1998, only five sold for less than \$1,000,000. Specifically, six sold for more than \$5,000,000, and an additional eighteen sold for over \$2,000,000. Elsewhere in the county during that same time period, sixteen other properties sold for over \$2,000,000.²¹ This should give some

²¹ Snowmass Real Estate Company, "Mountain Places," Winter 1999.

indication of the types of properties that there are and the number of people who are not only capable, but also interested in buying them.

An interesting factor in the demand for large second homes is that with the demand for the second homes themselves comes further demand for smaller primary residences. These types of large second homes require the services of many people to keep them functioning. They require building maintenance, landscaping, housekeeping, decorating, catering, childcare, security, snow removal, property management, transportation, and goods delivery services just to name a few. Some of these properties require minimal service, but many have elaborate pools, Jacuzzis, fountains, alarm systems, and climate control systems that require routine maintenance. These homes require a small army of people to maintain them and they have created the need for a whole series of additional jobs in this area. Many of these individuals may be self-employed; however, they still need a place to live.

5.7. Summary

Aspen appeals to a wide range of people from many walks of life. The wealthy have chosen this area as a vacation spot and/or a place to retire. Thousands of people have chosen it as a place to live because of its beauty and the availability of interesting things to do. Aspen has numerous unique qualities that make it desirable for myriad reasons. There are a large number of people who want to live here. The fact that there is a high demand coupled with a constrained supply makes this area expensive and exclusive. This situation builds upon itself and makes Aspen more desirable to highly affluent people. Those same factors make it less desirable for the people who came to Aspen to get away from the hustle and bustle of the city. The first group

seems to be in the majority. Aspen is a supply-constrained market with a very high demand for the full spectrum of housing types.

6. Results and Conclusions

6.1. Comparisons to Other "Island Economies"

The purpose of this study was to examine an isolated resort economy in the United States to see what unique factors affect it. One reason that this is of particular interest is that there are several international resort economies which are experiencing problems due to a limited supply of housing. One commonly known supply constrained housing market is that on the island of Bermuda. Bermuda was established as a British Colony and is presently not only a beautiful resort island, but also home to a thriving international business community. For many years corporations have established "front offices" on the island of Bermuda to achieve a favorable tax status. In recent years, however, the growth of the insurance industry has led to greater employment of professionals. These employees tend to be non-Bermudian, white collar, salaried workers who occupy above average housing on the island.

Until 1996 Bermuda's primary industry was tourism. The island is like a big country club for wealthy New Englanders and other affluent East Coast residents. It is also frequented by honeymooners. While Bermuda is an attractive vacation destination, its recent economic growth has occurred for other reasons. Critics suggest that rising prices and a lack of excitement have caused a decline in the tourist industry, but tourism continues to be a driving force in Bermuda's economy. Insurance has stolen the economic limelight from tourism. In 1999 insurance pumped \$757.6 million into Bermuda's economy while tourism lagged behind with \$472.3 million in revenue.²² Tourism is down only slightly from a high of just over \$500 million in 1995, but the large discrepancy between the industries' revenues is due to insurance's dramatic growth from

²² Joseph Treasster, "Bermuda Takes the Risk: From Tourist Paradise to Haven for Insurance Business," *The New York Times*, April 28, 1999, pp. C-6.

under \$400 million in 1994. Tourism's annual revenue has leveled off while the annual revenue in the insurance industry has doubled since 1993.

This change is problematic for Bermuda because far more local residents are employed in the tourist industry than in insurance. It was estimated that in 1999 6,000 people worked in hotels, restaurants, and other tourist related industries. At the same time only 2,400 people worked in insurance.²³ Additionally many of the higher paying insurance positions are not held by Bermudians, but rather by fairly young expatriates.

Hamilton, the Capitol City of Bermuda, is becoming an increasingly important economic center. It is the center of commerce for the island and the 1991 census reported that 40% of the working population was employed in Hamilton. The total built floor space in Hamilton increased by more than 40% from 1979 to 1996. In 1996 there was a total of 5.5 million square feet of space in the city, and that number continues to grow.

The number of international businesses registered in Bermuda grew from 5,629 in 1980 to 9,246 in 1996.²⁴ This represents an increase of 64%. While business is booming, the resident population of the small city of Hamilton is decreasing. The number of people living in the city of Hamilton dropped by 32% between 1980 and 1991. This occurred at the same time as an 8%

²³ Joseph Treasster, "Bermuda Takes the Risk: From Tourist Paradise to Haven for Insurance Business," *The New York Times*, April 28, 1999, pp. C-6.

²⁴ Department of Planning and Corporation of Bermuda. "The New City of Hamilton Plan, Background and Issues Towards a shared vision." August 1997 p. 9

increase in population for Bermuda as a whole.²⁵ These changes may appear similar to those in the City of Aspen, but they are occurring for very different reasons. Residents of Aspen are leaving to make room for wealthy second-home owners while Hamilton is a growing city. The current economic boom in Bermuda is increasing the urbanization of Hamilton. Property is being converted to its highest and best use. The residential population has been moving to other not-to-distant locations.

Until 1980 single family houses were the predominant housing type. In 1980 there were 8,043 single-family homes and only 5,960 duplexes. Just ten years later there were 7,952 duplexes and only 5,960 single-family homes.²⁶ This would suggest that many people were converting part of their home into an apartment to rent. Many Bermudians may have been using the income from a rental unit as a means to purchase property. Homeownership is easier to finance with the income from an apartment; this trend thus may have helped many first time homebuyers. In the same ten year period there were significant increases in the number of three family and four-to-six family dwellings. In any case, those who could not get into the ownership market have been left to compete for housing in the rental market. For quite some time this was not cause for concern, but it is a problem today.

Bermuda has a law requiring individuals to be Bermudian citizens to own property. The exception to the law is that foreigners are allowed to purchase property above approximately \$1.5 million. These are generally "trophy homes" that very wealthy individuals own and use

²⁵Department of Planning and Corporation of Bermuda. "The New City of Hamilton Plan, Background and Issues Towards a shared vision." August 1997, p. 6.

²⁶ Census Office of Bermuda. "The 1991 Census of Population and Housing." 1991, p. 9.

only occasionally. This price cutoff is such that people working on the island cannot afford to purchase a home. Due to the fact that most of the non-Bermudian labor on the island cannot purchase property, they enter the rental market. In the 1980's most of the non-resident laborers on the island were employed in blue-collar positions. They preformed tasks in the service industry and with the decline in the global economy in the early 1990's more than 4,000 workers left Bermuda. These people had been renting apartments and when they left there was a surplus of housing.

Bermuda is currently experiencing a housing crunch because more affluent employees are coming to the island. The new laborer being imported to Bermuda is typically white collar and has different housing requirements than the last wave of hired help. Insurance professionals frequently receive housing subsidies, and with more than 8,000 non-Bermudian workers currently on the island the supply of available rental property is becoming increasingly scarce. The price of property, rental and otherwise, continues to increase with increased demand. This results in many Bermudians renting their homes to foreign workers and then renting "down market" themselves. As a result, housing prices have been driven up because of the high rents that can be charged to many non-Bermudians.

The limited supply of rental property has negatively affected Bermudian renters. The intention of the price cutoff was to ensure that Bermudians would have housing that they could afford. The fact that many non-residents have bid up the rents means that the supply of lower rent housing has become more limited. Bermuda is much like Aspen in that housing which local working residents can afford is becoming increasingly scarce. Bermuda is different in that

employers cannot rely on a commuting labor force from the neighboring county. By preventing foreigners from purchasing all but "estate" properties, the vast majority of the housing stock is kept in the hands Bermudians. The cutoff does not mean that all Bermudians can afford to buy homes, but it does help to keep a large supply of rental property in the market. If Bermuda were to remove or lower this price limit its housing market would be much more similar to Aspen's. They are both naturally beautiful destination resorts, which attract very wealthy second-home owners who tie up large pieces of real estate.

Since Bermuda cannot rely on a commuting labor force, all workers must be housed. This is quite different then Aspen's goal of 60% resident labor. In today's market, employers are willing to pay high prices to house the people they want. The real problem then comes if Bermudians cannot find affordable housing. Bermuda must weigh the costs and benefits of the growing insurance industry.

The most important lesson that Bermuda can learn from Aspen is that Bermuda can make choices to control its future housing situation. Bermuda has an indigenous population which is going to stay on the island, and as a result there cannot be exclusionary housing policies such as those in Aspen. Bermuda cannot exclude people of modest means because many of those people are descendants of the colonists and slaves who first settled the island. They are Bermudians and the island is there home. Bermuda can, however, be exclusionary, by preventing foreigners from purchasing much of the island. This is an excellent policy. The rental situation, however, needs to be addressed.

6.2. Summary of the Pitkin County Housing Situation

Pitkin County, Colorado has a unique housing market. The Average home price was over \$800,000 in 1998 and prices continue to escalate at a rate well above the national average. Aspen is a place that attracts the rich and famous, but also everybody else. There are \$10,000,000 estates with every amenity one can imagine, mobile homes that are decades old, and everything in between. There is no "typical" housing in Aspen and that is just another testimony to the uniqueness of this area.

The reasons why this area is supply constrained are not as easy to see as one might initially think. Clearly the fact that 83% of the county is public land has an effect on the amount of property which is available for development. In this area, however, that effect is not significant. The public land is for the most part unbuildable anyway. This county is located in the Rocky Mountains and the Roaring Fork Valley has been carved out between 14,000-foot peaks. The buildable area in the valley floor is hindered very little by public ownership.

The Growth Management Quota System has been instrumental in restricting growth since its implementation in 1993, but the most significant restrictions were implemented long before then. The single biggest factor limiting the amount of land available for building is the zoning. The City and County Zoning Regulations divide the county into very large lots and subsequently ensure that only a limited number of people are able to own property. The beginning of *no-growth* politics in the '70s had a dramatic and permanent affect on this region. There is almost no chance that this will ever change. The effects of rezoning land from ¹/₄ acre per home to 35

acres per home are extraordinary. If only one parcel was rezoned it cut out the possibility of building 139 homes.

The house that might be built on less than 11,000 square feet of land is very different than what would probably be built on 35 acres. One can easily put a large estate on 35 acres of land while the vision of a house on 10,890 square feet is much less dramatic. This change in the zoning in Pitkin County in the 1970s had a profound impact on this region. The influences that induced this change may have been well intended, but are exclusionary and prevent certain groups of people from living in thus area. An entire type of housing was eliminated.

The rezoning of property to prevent dense development has compounded the effects that the strong demand for property has had on this supply-constrained region. While it served to increase the value of the all of the existing residential property in the valley, it decreased the probability of developers producing market rate housing that local working residents might be able to afford. This area is supply constrained due to local governmental regulation as much as by any geographic restriction. The county's residential zoning regulations promote the development of single family housing located outside of the city of Aspen and Snowmass village on large pieces of land. This is in direct conflict with production of affordable housing.

The City of Aspen and Pitkin County zoning laws do allow the development of condominiums. In fact 50% of the housing units in the county are condominiums. That is certainly not typical for housing markets across the country, and may be thought to contradict what is suggested above, but the location of these condos is critical. Many people come to this area to ski, and they

want to be close to the slopes. As a result there are numerous mountainside condominium developments. Although Pitkin County is a supply constrained market, that is not the reason for most of the construction of densely developed projects. Location is the single most significant factor in the value of a property, and developers want to capitalize on the locational value as best they can. Building condominiums next to the ski slopes maximizes the number of housing units with prime locations. This type of dense development does not serve to relieve the shortage of housing stock for working residents. Slope side condominiums do not house these residents, but instead accommodate tourists and non-resident owners.

Approximately 31% of the housing units in the county are owner occupied. That would normally suggest that there are a large number of units for rent. That is not the case here, however, and in fact Pitkin County has a limited supply of market rate rental property. More than 35% of the property is owned by non-residents and valued above \$300,000. The rental income that would be required for someone to own this property as an investment (rental income greater than debt service plus expenses) would be in the neighborhood of \$2,500 per month. The working residents of Aspen cannot afford this type of rent so these properties are only used as second-homes. Therefore 35% of the housing units in Pitkin County are vacant for much of the year. This fact alone removes from the stock more than 3,500 housing units that might otherwise be available for owners occupants or renters. Additionally, many of the properties are in the "estate" category and occupy pieces of land which could accommodate numerous more modest homes.

6.3. Intentions and Reality of Governmental Intervention

Aspen grew up as a ski town and a beautiful isolated resort. People were attracted to Aspen because it was "funky" and enjoyable. There are many stories told of the days when movie stars and public figures went to Aspen because it was a place they could let their hair down and blend in. People were there to enjoy life, and local parties were attended by all. John Denver and Bob the lift operator were there to hang out, that was that. While this is probably an exaggeration, it is the vision that was Aspen. As Aspen matured, however, it began to feel some growing pains and publicty changed it forever.

Aspen grew in popularity in the '60s and '70s at an exponential rate. It was "the place to be," and all types of people were coming to visit and to live. Most of the tourist and second-home owners were wealthy individuals taking some time out from there otherwise busy lives, while those who settled in Aspen tended to be the people who traded the city salary for the Colorado lifestyle. The second-home owners came to town and drove up land prices, making it difficult for the "locals" to afford a place to live. Those people who lived in Aspen and owned property before it became "chic" made out like bandits as they watched the value of their properties go through the roof. Those who rented property were priced out of the market.

The escalating cost of living drove many people away because they could find a similar lifestyle in another western ski town. The mass exodus of resident labor from the upper Roaring Fork Valley raised a red flag to the remaining residents of the Aspen area, and efforts were made to accommodate the needs of working residents. The Pitkin County Housing Office estimates that they house more than 4,500 residents in "affordable" housing, but that even this is not enough to

meet the demand for affordable prices or rents. The Growth Management Quota System has allocated for the construction of 989 more affordable housing units until the region is built out in 2015, but it is not clear that this goal is at all feasible.

It is becoming more and more difficult for developers of affordable housing to make a profit in this environment. If developers do not undertake large project who is going to build this affordable housing. The Pitkin County Housing Office has undertaken construction projects in the past, but critics argue they should not be in the development business. Starting a construction project before the price is set will only ensure that the project is more costly then it would have been if it had a budget from the beginning.

Aspen has been proactive in controlling the manner in which it has developed. Its property owners have been successful in maintaining a beautiful natural environment, but this has not come without cost. Aspen has limited the supply of housing for second-home owners and residents alike and created an exclusionary housing market. The transient and menial labor force has been removed from the county, with this labor being brought in as needed. Affordable housing serves the needs of long term residents with incomes above the national average.

There are only 31 category one housing units (see table 4-4) in the entire county and the vast majority of the units are in Category three and four. This means that the affordable housing is for people with incomes between \$64,877 and \$127,040 (table 4-4).

Pitkin County, Colorado, is a beautiful place to live. The weather is gorgeous and the skiing is amazing. It is an area that attracts the very wealthy, but truly caters to the needs of its full time residents. It has a large tax base and some spectacular public facilities which add to the beautiful natural environment. Aspen is in control of its destiny: While the housing market is supply constrained, This is 100% intentional and in principle changeable. The zoning laws and Growth Management Quota System are far more restrictive than Pitkin County's Physical constraints.

6.4. Postscript: Qualifications and Potential Further Studies

This study was conducted during the summer of 1999. It took place over a period of approximately two months. Therefore time constraints played a serious factor in the way in which it was conducted. Pitkin County is a beautiful and dynamic area, and for that reason it is constantly changing. Some of the information presented here was from sources that compiled information in the early '90s and some was from the summer of '99. This in and of it self caused discrepancies. Additionally the information presented here was gathered from the bureaucratic or governmental side of the fence, and not enough attention was paid to residents' individual perspectives. Essentially there was not enough diversity of sources of information.

The numerical analysis for the 1999 housing situation was conducted using the most recently available tax records and should therefore be quite accurate. The largest possible discrepancies are likely to be in the distinctions between single family and two family homes. There appeared to be a number of two family homes that were being used as single family homes and vice versa. In addition, the production of Accessory Dwelling Units (ADUs) has caused considerable confusion in this area. Many large single-family homes, or "estates", have ADUs and are thus

labeled as two family homes. In many cases the ADUs are not used or may be used by maids and nannies who travel with visiting families. Thus their classification is not clear. An effort was made to categorize them as single-family homes. Similarly, many single-family homes had more than one building on a property. These may be ADUs that were occupied by a local caretaker. In this case they were actually residences for local persons and could thus be considered as two family homes. The distinctions were not clear, and some properties may have been improperly categorized.

Pitkin County has a wealth of information available regarding housing and land use. There are several studies which would be fairly easy to conduct given less stringent time requirements. It would be interesting to take a closer look at the zoning changes that were made in this area in the 1970's to determine exactly how extensive they were. Another important question that remains unanswered is exactly how people purchase homes with cash in this area. What percentage of homeowners are cash buyers and why? With interest rates at a 30 year low and the stock market doing as well as it has been why purchase a home with cash? Probably the most interesting questions in terms of the available housing stock, however, concern the rental market. It would be helpful to know what percentage of homes are available for rent, along with the distribution of these renters by income, occupation, and household type.

The largest oversight of this study is the exclusion of the neighboring counties. Many of the people who work in Aspen must live in Pitkin, Eagle, or Garfield Counties. Eagle and Garfield Counties have a significantly lower cost of housing, with many working people thus living "down valley" and commuting to work. This importation of labor causes wage rates in Aspen to

be as much as 25% higher than "down valley" where workers do not have to commute. A study of the workforce commuting patterns and the price of residential land in relation to its distance from Aspen would provide some insight into the economics of land use in this region.

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