

Final Report

STR Conditions and Regulatory Fee Study

The Economics of Land Use



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Town of Granby, Colorado

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1. Introduction

This report evaluates a potential regulatory fee program to be applied to short-term accommodation unit (short-term rental or "STR") licenses in the Town of Granby. Economic & Planning Systems (EPS) was retained by the Town of Granby to determine a reasonable fee for this program. The analysis demonstrates a reasonable relationship between guest spending from STRs in the town and the demand for housing affordable at incomes of 180 percent of Area Median Income (AMI) or less. The study uses economic impact techniques to quantify the relationships between guest spending when staying in STRs and the number of jobs and employee-households supported in the local economy by that spending.

Guests staying in STRs spend money in the local economy, mainly in the retail, food and beverage, and recreation industries that support jobs that do not pay enough for employees to afford market rate housing in the town. The basis of the fee is therefore the gap between the housing that employee households can afford and the cost of purchasing a home in the Town of Granby.

The fee also accounts for the possibility that a home used as an STR could be occupied by a local resident. To account for this, the fee is adjusted for the difference between the impact of guest spending in the local economy and the baseline impact of local resident spending.

Rationale

This regulatory fee is needed to support the local labor force and Town housing programs that sustain the tourism economy in Granby. Without an adequate supply of housing and housing support programs, the Town risks losing some of its workforce that is essential to the businesses that drive the local economy and to the quality of life for residents. Tourism is the Town's economic base. If businesses do not have an adequate labor force and if workers do not have adequate housing, the guest experience and quality of life for residents are likely to degrade.

STR owners or hosts will pay an annual license fee under this program. The benefits that the fee payers are likely to receive will be investment in housing by the Town to house the workforce needed to sustain the visitor economy. STR owners and operators are likely to benefit from the supply of labor and from investments the Town will make using the fee revenue on housing for the local workforce. Having more housing options for the local workforce is also likely to benefit the fee payers in better customer service through increased employee retention and reduced employee turnover.

The rationale for a regulatory fee program for STRs can be summarized as follows:

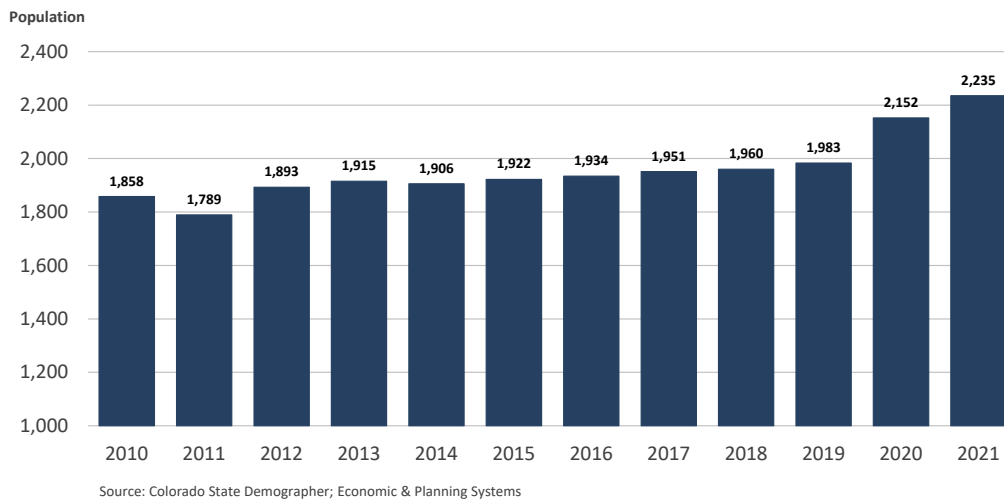
- STRs bring additional tourism and visitors, especially as they have become a central component of the lodging market.
- In mountain towns where tourism is an economic driver, visitor spending generates jobs, especially jobs in the service sector.
- STRs rely on a strong local workforce to provide a good visitor experience.
- These jobs drive the demand for local housing units.
- The wages at these jobs are often not sufficient to afford local housing costs.
- STRs have an impact on the housing market and housing availability for the local workforce.

2. Existing Conditions

Housing and Demographic Snapshot

As of 2021, Granby had a population of 2,235, which represents approximately 15 percent of the population of Grand County. Between 2010 and 2021, the population of Granby grew by 377 residents or 20 percent, capturing 36 percent of all population growth in Grand County over this period.

Figure 1. Population, 2010-2021



Granby has approximately 1,880 housing units, 51 percent of which are classified as vacant units in demographic data sources. The vast majority of vacant units are second homes. The remaining 49 percent are occupied by full-time residents. As shown in **Table 1**, the housing stock in Granby expanded by 440 units between 2011 and 2021, growing by 2.7 percent annually. Grand County housing stock increased by 1,147 units or 0.7 percent annually. Granby accounted for 38 percent of the housing stock growth in the county.

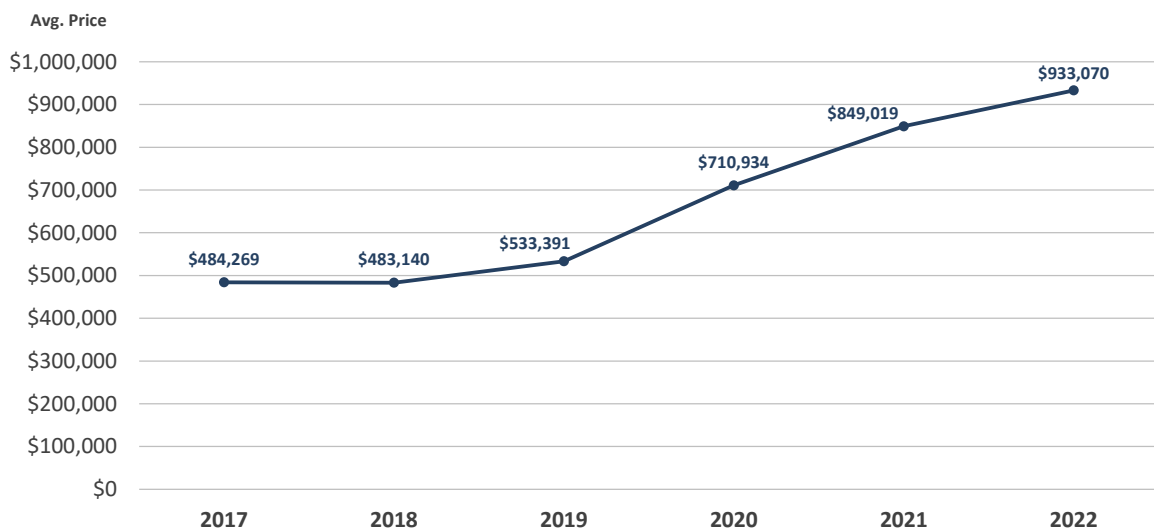
Table 1. Housing Stock, Granby and Grand County, 2011-2021

Housing Occupancy Trends	2011		2016		2021		2011-2021		
	Count	Percent	Count	Percent	Count	Percent	Total	Ann. #	Ann. %
Grand County									
Occupied Housing Units	6,478	42%	6,643	42%	7,055	42%	577	58	0.9%
Second Homes	9,004	58%	9,246	58%	9,574	58%	570	57	0.6%
Total Housing Units	15,482	100%	15,889	100%	16,629	100%	1,147	115	0.7%
Granby									
Occupied Housing Units	745	52%	805	50%	930	49%	185	19	2.2%
Second Homes	699	48%	805	50%	954	51%	255	26	3.2%
Total Housing Units	1,444	100%	1,610	100%	1,884	100%	440	44	2.7%

Source: DOLA; Economic & Planning Systems

Housing prices in Granby have risen significantly over the past five years. Between 2017 and 2022, the average home price nearly doubled. As shown in **Figure 2**, the average home sale price increased from \$484,269 in 2017 to \$933,070 in 2022, which represents an average annual increase of 14 percent. The most substantial increases in home sale price occurred between 2019 and 2020, when it rose by 33 percent, and 2020 and 2021, when it rose by 19 percent.

Figure 2. Average Home Sale Price, 2017-2022



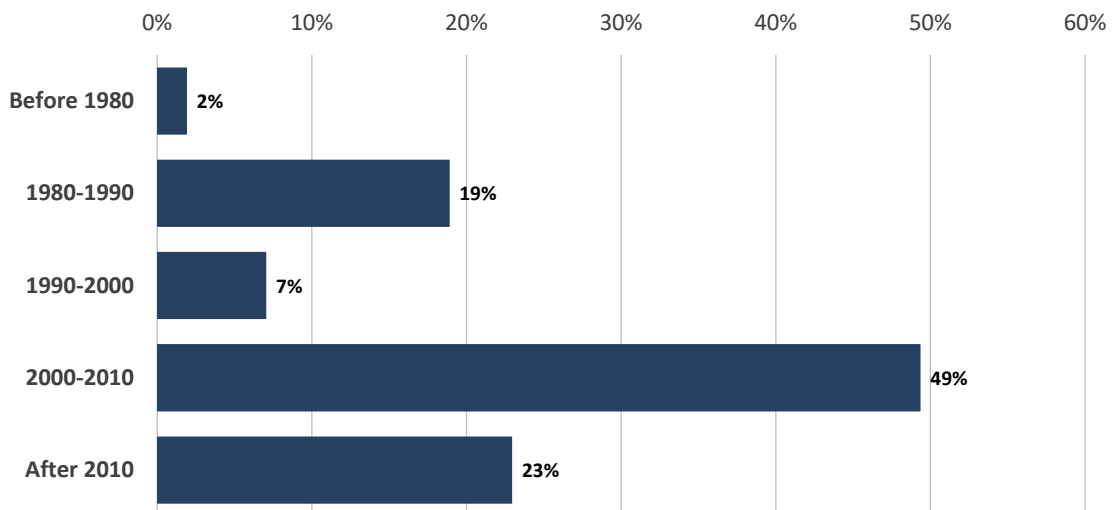
Source: MLS; Economic & Planning Systems

STR Inventory and Characteristics

Currently, there are 395 active short-term rentals licensed by the Town of Granby – 58 percent are condominium units and 42 percent are single family homes. Short-term rentals have an average of 2.6 bedrooms, with 95 percent having between 1 and 4 bedrooms. Condo STRs have an average size of 984 square feet, while single family STRs homes have an average size of 2,180 square feet.

The short-term rental inventory is comprised of relatively newer and higher-value housing stock. As shown in **Figure 3**, over 70 percent of STRs were built after 2000, with nearly half of the inventory built between 2000 and 2010. By comparison, 2 percent of short-term rentals were built before 1980, compared to 53 percent of the housing stock in Granby as a whole. STR units built after 2000 are also relatively higher value (7% higher), with an average value of \$298 per square foot compared to an average value of \$277 per square foot for residential property in Granby overall.

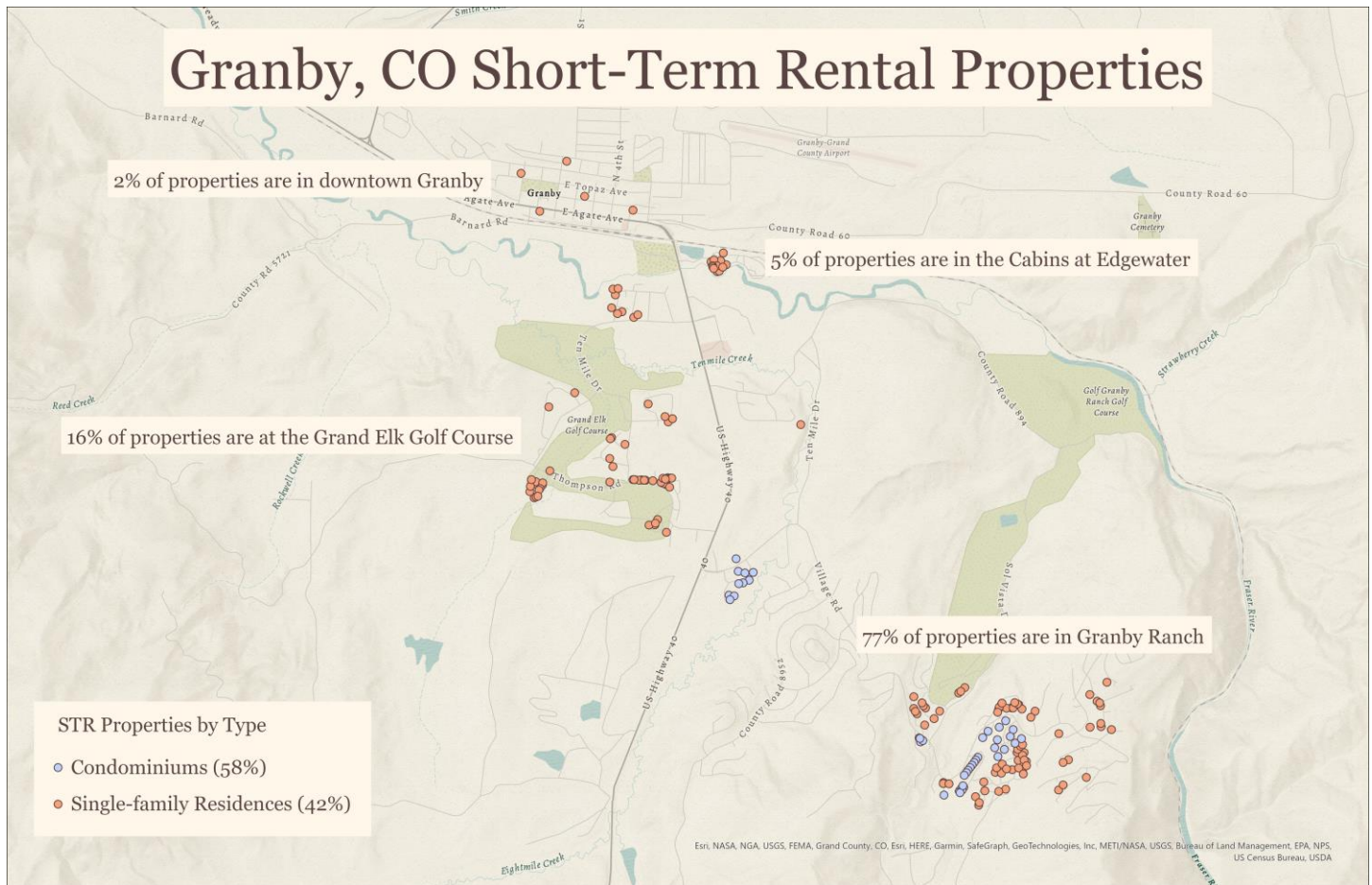
Figure 3. Short-Term Rentals by Year Built, 2023



Source: Economic & Planning Systems

In Granby, the vast majority (77%) of short-term rental properties are located in Granby Ranch, as shown in **Figure 4**. Among the remaining stock, 16 percent are located in the Grand Elk area, 5 percent are located in the Edgewater area, and 2 percent are located in the downtown area.

Figure 4. Location of Short-Term Rentals

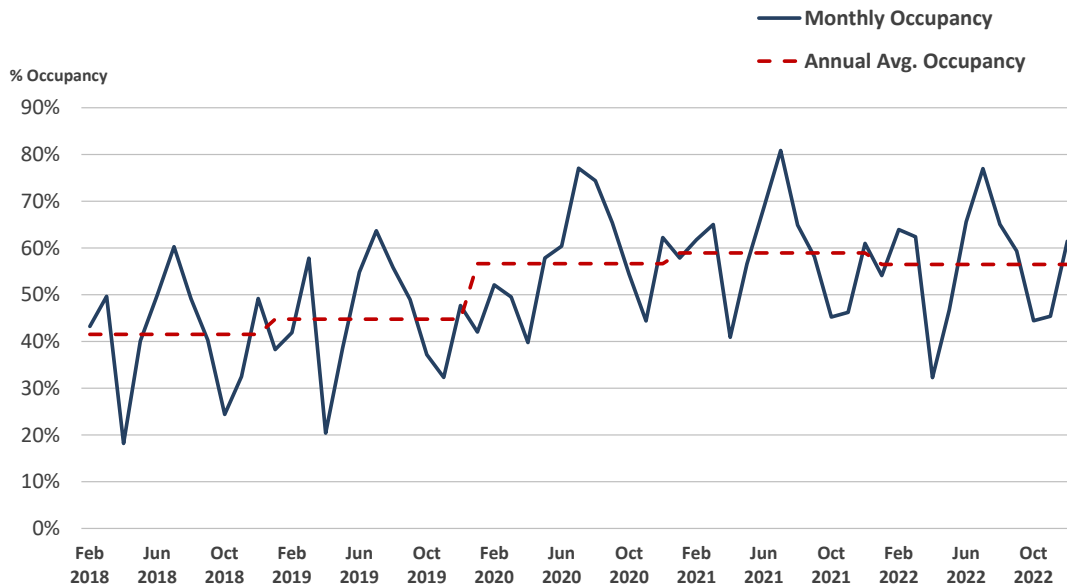


STR Performance Metrics

Over the past five years, the short-term rental market in Granby has been strong, experiencing increases in both inventory and demand. A key performance metric for STRs is the annual occupancy rate, which measures the percentage of nights that are booked out of all nights available. In 2022, the average annual occupancy rate for STRs in Granby was 56 percent, which is up significantly from an average annual occupancy rate of 42 percent in 2018, as shown in **Figure 5**.

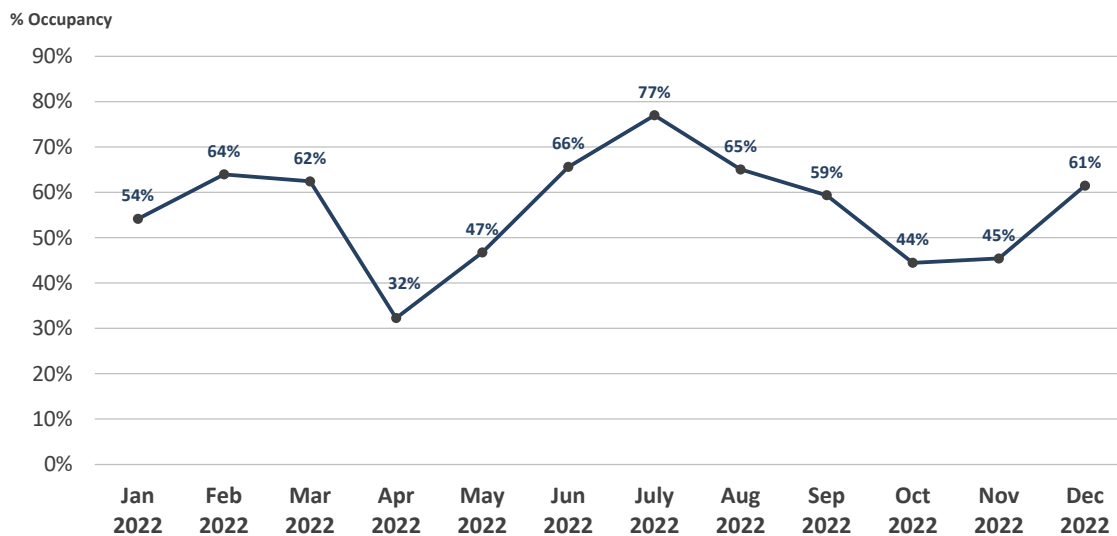
The occupancy rate for STRs in Granby fluctuates between seasons. The summer and winter months are typically the strongest, with the highest occupancy rates in June, July, August, February, and March, and the lowest occupancy rates in April, May, September, and October, as shown in **Figure 6**. In 2022, the average occupancy rate for short-term rentals peaked at 77 percent in July and was its lowest at 32 percent in April.

Figure 5. Monthly Short-Term Rental Occupancy Rate, 2018-2022



Source: Airdna; Economic & Planning Systems

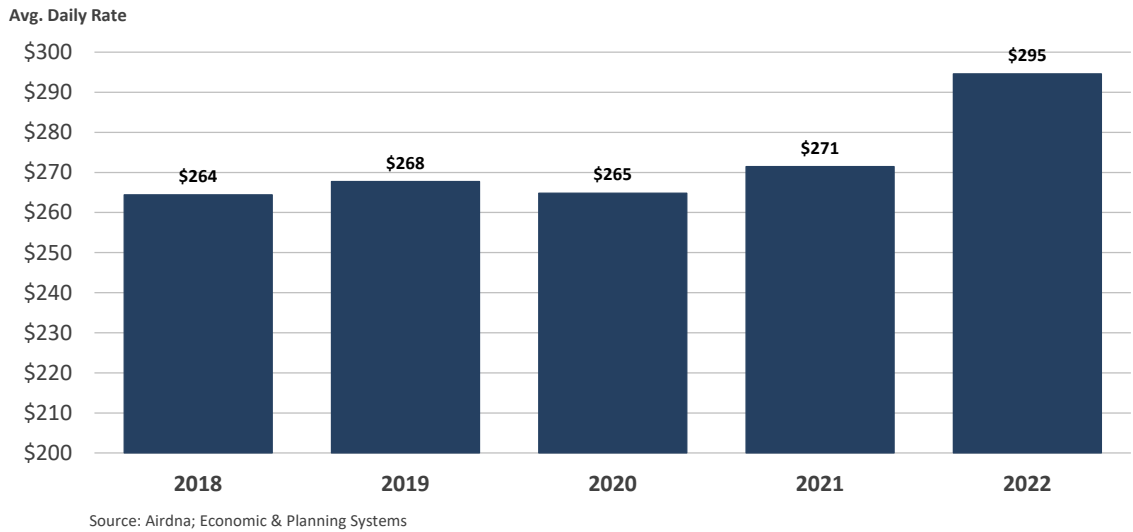
Figure 6. Short-Term Rental Occupancy Rate, 2022



Source: Airdna; Economic & Planning Systems

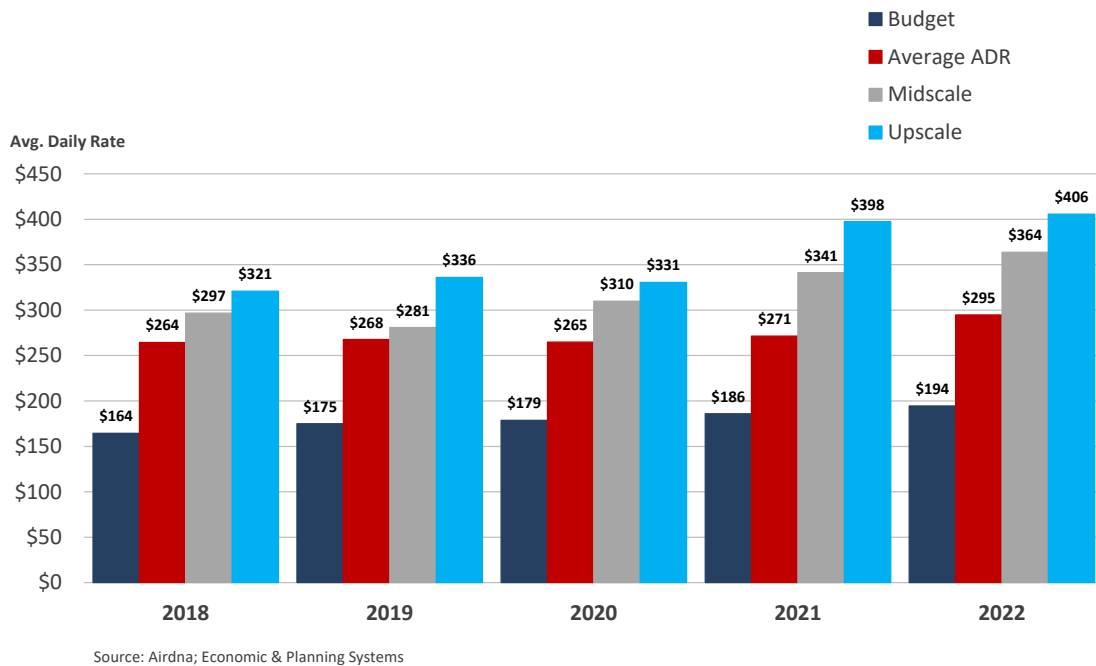
Another key metric for short-term rental performance is average daily rate (ADR), which is the average price paid by guests for each night of accommodation. In 2022, the ADR for STRs in Granby was \$295, which is up from \$264 in 2018, as shown in **Figure 7**. From 2021 to 2022, the ADR increased by 8.5 percent from \$271 to \$295, indicating strong demand.

Figure 7. Short-Term Rental Average Daily Rate, 2018-2022



The average daily rate for short-term rentals varies by type, with budget STRs having an ADR of \$194 while upscale STRs having an ADR of \$406, as shown in **Figure 8**.

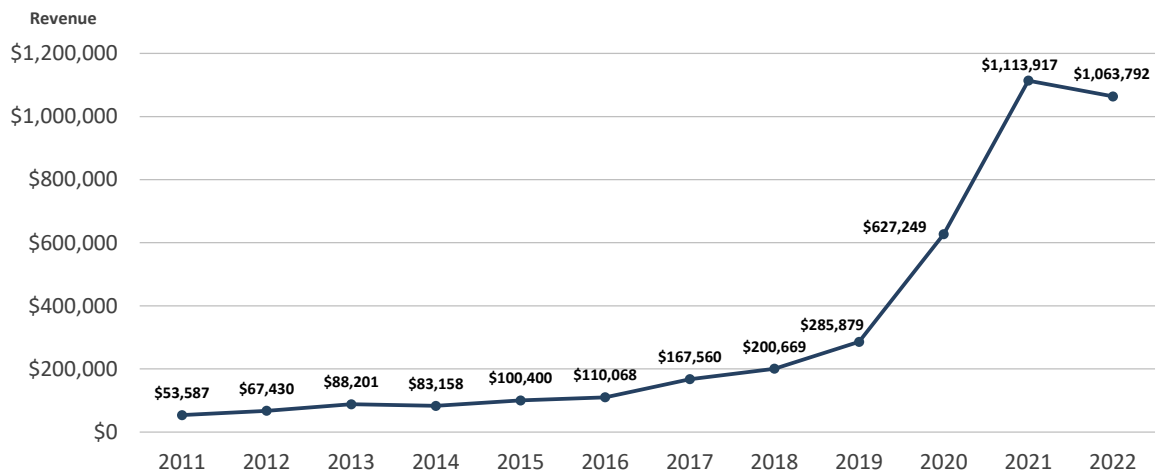
Figure 8. Short-Term Rental Average Daily Rate by Type, 2018-2022



The strong market for tourism and accommodation in Granby is also demonstrated by the major increase in lodging tax revenue that the Town has experienced over the past decade. Between 2011 to 2022, lodging tax revenue increased by almost 20 times from \$53,587 to \$1,063,792, as shown in **Figure 9**. The biggest year-over-year increases occurred between 2019 and 2020 (119%) and between 2020 and 2021 (78%), reflecting an uptick in visitation in recent years.

A combination of factors have affected the growth of STRs and lodging tax revenues. A major factor may be the limiting of access permits for Rocky Mountain National Park’s east gateway in Estes Park, while access permits have not been limited on the Grand Lake side. Second, the pandemic increased market demand for lower density mountain rentals rather than condohotel-type properties in more densely developed resort settings. Lastly, the growth of the Front Range continues to generate in-state tourism visits to mountain areas of Colorado.

Figure 9. Lodging Tax Revenue, 2011-2022



Source: Town of Granby; Economic & Planning Systems

3. STR Economic Impacts

Methodology

This analysis uses a jobs-housing economic impact model to quantify the jobs and employee-households supported by guest spending in STRs. The analysis begins by quantifying the jobs supported by guest spending. The next step is to translate the supported jobs to employees and employee-households, where a household is a group of people (related or unrelated) living in one occupied dwelling unit.

The IMPLAN model (Impact Analysis for Planning) was used to estimate the relationships between spending and jobs supported. IMPLAN was developed by the Bureau of Land Management, U.S. Forest Service, and the University of Minnesota and is widely used by state and federal agencies, academic researchers, and local economic development organizations to evaluate the economic impacts of proposed policies, new industries, and land use changes.

The conversion of jobs (from IMPLAN) to employee households uses analytical techniques commonly used in housing economics and affordable housing studies.

Data Sources

Analysis inputs come from the following sources:

- Accommodation inventory: Town of Granby (number of units, number of bedrooms, average number of bedrooms per unit)
- STR occupancy rates: AirDNA
- Guest spending: Colorado Tourism Office visitor surveys, and Breckenridge lodging guest surveys
- Home prices: Multiple Listing Service (MLS)
- Wages by occupation: Bureau of Labor Statistics (BLS)
- Median household income: US Census (ACS 5-year estimates, Town of Granby), Colorado Housing Finance Authority (CHFA)
- Jobs per employee, employees per household: Fraser River Valley Housing Needs Assessment (2022)

Guest Spending Analysis

The first step in this analysis is estimating the spending by guests in Granby. Data from the Breckenridge lodging guest surveys, averaged over 2016 to 2021 and weighted by season, shows that on average a visitor to Breckenridge spends \$162.51 per day. This includes \$77.40 on food and beverage, \$51.47 on retail and shopping, and \$33.64 on entertainment and recreational activities. Average daily rate in Granby is 75 percent of that in Breckenridge. Spending was adjusted based on this ADR difference. This spending was converted into per-unit expenditures (based on average guests per unit from the same survey) for an average guest spending level of \$439 per unit per day.

Jobs supported by industry

Guest spending is applied to the IMPLAN model as an “industry output” event for the three affected industries (NAICS¹ 72 – Accommodation and Food Services, NAICS 44-45 – Retail Trade, and NAICS 71 – Arts, Entertainment, and Recreation). IMPLAN applies industry expenditure flows through its input-output model and estimates the spending and jobs supported in the 20 major industries in the North American Industrial Classification System (NAICS).

Jobs to employees (multiple job holder adjustment)

An adjustment is made to acknowledge that many employees have more than one job, such as two part time jobs or a full time and a part time job. So as not to overestimate the number of *employees* supported, the number of jobs is reduced using a factor of 1.13 jobs per employee. This factor is specific to the Fraser Valley, as reported in the survey conducted as part of the *2022 Fraser River Valley Housing Needs Assessment*.

Employees by industry to occupations and wages

An NAICS industry contains a wide range of job types and wages. For example, a worker in the retail NAICS sector could be an accountant (for the retailer) or retail showroom employee. The range of wages and occupations supported is better represented by the 22 Standard Occupational Classifications defined by the Bureau of Labor Statistics (BLS). The National Industry by Occupation Matrix published by the BLS provides the estimated distribution of occupations and wages for each NAICS category. The results from the IMPLAN analysis are applied to the Industry by Occupation Matrix to estimate the number of jobs by wage level supported.

¹ North American Classification Industrial System

Household formation

A final adjustment is made to account for the fact that many households have more than one earner. This adjustment has the effect of raising the collective income of the employees within a household, thus increasing the amount the employee-household can pay for housing and reducing the gap between their ability to pay and the cost of housing. In the Fraser Valley, there are an average of 2.00 earners per household (2022 *Housing Needs Assessment*). In this analysis, the first earner earns the wage derived from the economic impact analysis and allocation to occupations. The "second" 1.00 earner is assumed to earn 1.00 multiplied by average wage in the industry of the primary earner.

Tabulation of households by income range

The last step involves counting the number of households supported by income range, expressed as a percentage of Area Median Income (AMI). For this analysis, all households earning up to 180% of AMI are included. The AMI definitions are based on the Colorado Housing and Finance Authority (CHFA) 2022 income limits for Grand County for a 2.5-person household.

Local Resident Household Analysis

The last component of the analysis involves isolating the difference between guest spending and local resident household spending. To do this, the same steps outlined above are undertaken for a resident household earning the same median income of \$65,000 (as reported in the U.S. Census ACS 2021 data for Granby) to document the jobs supported from household spending in the economy.

This household income is input to the IMPLAN model, which applies an expenditure profile (including savings) specific to the household income range. The model then estimates the spending and jobs supported in the 20 major NAICS industries. The same steps to determine need by AMI range are completed, and this housing need is then subtracted from that of guest spending, resulting in the needs associated with guest spending above those of a local resident household.

Guest Impact

Guest spending was estimated on the average expenditure across all accommodation types, weighted by season (winter and summer) to determine an overall average. Data inputs on spending come from the Breckenridge lodging guest survey averaged over the 2016 to 2021 time period (RRC Associates). Per person expenditures were converted to per unit figures at 3.6 people per party or unit on average. Within the IMPLAN model the current 395 accommodation units were modeled in order to establish an appropriate scale of analysis. Per unit and per bedroom adjustments are made later in the model to calibrate the fee.

As shown in **Table 2**, with an average daily spending rate of \$439 per unit per day, 395 units results in total annual spending of \$63.26 million. Note that this assumes 100 percent occupancy (365 days of spending). The average annual occupancy rate adjustment is applied in a later analysis step.

Table 2. Guest Spending

Description	Total
People per Unit	
Avg. People per Unit	3.60
Short-term Rentals	<u>395</u>
Visitor Capacity	1,422
Spending per Person per Day	
Food & beverage	\$58.05
Retail/shopping	\$38.60
Entertainment/recreational activities	<u>\$25.23</u>
Total	\$121.88
Spending per Unit per Day	
Food & beverage	\$208.98
Retail/shopping	\$138.97
Entertainment/recreational activities	<u>\$90.83</u>
Total	\$438.78
Spending per Year (100% Occupancy)	
Food & beverage	\$30,129,692
Retail/shopping	\$20,035,856
Entertainment/recreational activities	<u>\$13,095,127</u>
Total	\$63,260,674

Source: Economic & Planning Systems

Jobs, Employees, and Households

Guest spending in Granby supports local jobs. As shown in **Table 3**, the spending associated with 395 accommodation units supports 787 jobs. The industries with the most jobs are those with direct spending impacts – specifically, accommodation and food services, arts entertainment and recreation, and retail.

Following total jobs, the next step is to translate jobs to employees. In today's economy it is common for people to hold more than one job. To convert from jobs to employees, jobs are divided by a factor of 1.13 jobs per employee. As shown in **Table 3**, the 787 jobs supported by 395 accommodation units results in 696 employees after the adjustment for multiple job holders.

The total employee impact needs to be further adjusted to account for the annual occupancy rate, as the impacts of guest spending were determined assuming 100 percent occupancy (i.e., 365 days per year). This ensures that the total employee impact from guest spending reflects actual levels of visitor activity. An occupancy rate of 56 percent is applied to the total employees supported by guest spending.

The 56 percent average occupancy rate for all short-term rentals was derived from EPS’s analysis of data from AirDNA, which provides data on the STR market in Granby. This adjustment for occupancy results in a total impact of 390 employees.

Table 3. Jobs and Employees Supported by Guest Spending

Description	Total Impact (IMPLAN Results)	Multiple Jobs Factor	Total Employees	Occupancy Factor	Adjusted Impact
Guest Spending					
Accommodation and Food Services	329	1.13	291	56%	163
Retail Trade	189	1.13	168	56%	94
Arts, Entertainment, and Recreation	154	1.13	136	56%	76
Administrative and Remediation Services	18	1.13	16	56%	9
Professional and Technical Services	17	1.13	15	56%	8
Real Estate and Rental and Leasing	23	1.13	21	56%	12
Other Services (except Public Administration)	14	1.13	13	56%	7
Transportation and Warehousing	7	1.13	6	56%	3
Management of Companies and Enterprises	5	1.13	5	56%	3
Finance and Insurance	8	1.13	7	56%	4
Construction	4	1.13	4	56%	2
Public Administration	3	1.13	3	56%	2
Wholesale Trade	3	1.13	3	56%	2
Information	2	1.13	1	56%	1
Educational Services	2	1.13	2	56%	1
Utilities	1	1.13	1	56%	0
Agriculture, Forestry, Fishing and Hunting	0	1.13	0	56%	0
Manufacturing	0	1.13	0	56%	0
Mining	0	1.13	0	56%	0
Health Care and Social Assistance	6	1.13	5	56%	3
Total	787		696		390

Source: Economic & Planning Systems

Employee to Household Conversion

The next step is to translate employees supported by guest spending to households and their related income levels. The steps of this analysis are as follows:

- Employees by Occupation** – The jobs by NAICS classification are converted to more specific occupation categories to obtain a more detailed distribution of wage levels for the new jobs, since using the average wage for an industry masks the upper and lower wage levels. The BLS National Industry by Occupation Matrix provides the estimated distribution of occupations for each NAICS category. The wages for each occupation in Grand County are estimated by indexing the wages by occupation and industry in Colorado to the average wage for that industry for Grand County.
- Employees to Households** – The next adjustment for estimating housing demand is to account for multiple earners per household. On average, there are 2.0 earners per household in the Fraser Valley. This adjustment reduces the 390 employees supported from guest spending in 395 short-term rental units to 195 employee-households at all income levels.

- Wages and Household Income** – The next step in the employee and household analysis is to estimate household incomes accounting for the wages from the primary and secondary earners in the household. The primary earner – the jobs estimate from the IMPLAN analysis – is assigned the average wage for their industry and occupation. The second 1.00 earner (totaling 2.00 earners per household) is assumed to make the average wage for the industry in which the primary earner is employed.

Households and Target Income Ranges

The last step in the guest spending analysis is to tabulate the employee-households at income levels of 180% of AMI or less. For guest spending in 395 short-term rental units, there are 183 employee households supported below 180% of AMI, as shown in **Table 4**. A majority of these households are between 100 and 120% of AMI. Of the 195 total employee-households supported, 92 percent are at incomes of 180% of AMI or less. The remaining 8 percent of households earn more than 180% of AMI.

Table 4. Households by AMI Supported by Guest Spending

Description	Employment Supported	Earners per HH	Housing Needed
Guest Spending			
Under 30% AMI	0	2.00	0
30% to 60% AMI	0	2.00	0
60% to 80% AMI	0	2.00	0
80% to 100% AMI	7	2.00	3
100% to 120% AMI	299	2.00	149
120% to 140% AMI	26	2.00	13
140% to 180% AMI	35	2.00	17
Total	366		183

Source: Economic & Planning Systems

Employee-Household Housing Gap

To determine affordability needs, the gap for households earning up to 180% of AMI is calculated based on the difference between a household's affordable purchase price and the cost to purchase a home in Granby. The housing cost is based on the overall median home sale price in Granby for 2022. This calculation assumes an income for a 2.5-person household (which aligns with the average household size in Granby) and uses CHFA income levels for Grand County, as those are the income definitions used in most housing qualification processes.

As shown in **Table 5**, affordable prices at these AMI levels range from \$55,500 at 30% of AMI to \$568,700 at 180% of AMI. With a median home price of \$610,000, the gap per unit ranges from \$554,500 at 30% of AMI to \$41,300 at 180% of AMI.

Table 5. Affordability Gaps by Income Range

Description	Factor	AMI						
		30%	60%	80%	100%	120%	140%	180%
HH Income and Housing Expense								
HH Income	2.5 people/HH	\$22,525	\$45,050	\$59,925	\$74,900	\$90,100	\$104,860	\$134,820
Affordable Monthly Housing Cost	30%	\$563	\$1,126	\$1,498	\$1,873	\$2,253	\$2,622	\$3,371
Supportable Monthly Payment								
Less: Insurance	\$1,200/year	-\$100	-\$100	-\$100	-\$100	-\$100	-\$100	-\$100
Less: Property Taxes	7.15% ass't rate 65,000	-\$30	-\$70	-\$90	-\$120	-\$140	-\$170	-\$220
Less: Miscellaneous (e.g. HOA Dues)	\$1,800/year	-\$150	-\$150	-\$150	-\$150	-\$150	-\$150	-\$150
Net Supportable Mortgage Payment (Monthly)		\$283	\$806	\$1,158	\$1,503	\$1,863	\$2,202	\$2,901
Valuation Assumptions								
Loan Amount		\$52,700	\$150,200	\$215,700	\$279,900	\$346,900	\$410,100	\$540,300
Mortgage Interest Rate		5.0% int.	5.0% int.	5.0% int.	5.0% int.	5.0% int.	5.0% int.	5.0% int.
Loan Term		30-year term	30-year term	30-year term	30-year term	30-year term	30-year term	30-year term
Downpayment as % of Purchase Price		5.0% down pmt	5.0% down pmt	5.0% down pmt	5.0% down pmt	5.0% down pmt	5.0% down pmt	5.0% down pmt
Maximum Supportable Purchase Price		\$55,500	\$158,100	\$227,100	\$294,600	\$365,200	\$431,700	\$568,700
Cost per Unit (Median sale price)		\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000	\$610,000
Gap per Unit		\$554,500	\$451,900	\$382,900	\$315,400	\$244,800	\$178,300	\$41,300

Source: Economic & Planning Systems

Local Resident Spending

To isolate the effect of guest spending on housing need, a similar methodology was followed to determine the relationship between a local resident household and housing need. This impact was then subtracted from the impact generated by guest spending as estimated above. In effect, this shows the difference in impact on housing demand between guests occupying existing short-term rental units and local residents occupying the same units.

Local resident spending was modeled based on the median household income in Granby of \$65,000, as reported in the U.S. Census 2021 American Community Survey. In this scenario, 1,000 households were modeled in IMPLAN and a per household adjustment is made to calculate the final fee. As shown in **Table 6**, a household income of \$65,000 results in a disposable income of \$47,408 after accounting for payroll tax. Based on these figures, the total disposable income for 1,000 households is \$47.41 million. This number was then further adjusted to account for how many households would occupy the current short-term rental inventory of 395 and their associated disposable income (multiply \$47.41 million by 395/1000). This results in a total disposable income of \$18.73 million.

Table 6. Local Resident Household Income

Description	Factor	Total
Program		
Households		1,000
HH Income	Granby ACS 5-yr 2021	\$65,000
Minus Payroll Tax		
Federal		\$9,912
FICA (Social Security)		\$4,032
Medicare		\$936
State		<u>\$2,712</u>
Total		\$17,592
Net Pay		\$47,408
Total Spending		
Total Ann. HH Income	100%	\$65,000,000
Total Annual Payroll Tax	27%	<u>\$17,592,000</u>
Disposable Income	73%	\$47,408,000
Inventory Adjustment		395 STRs
Disposable Income - Adjusted		\$18,726,160

Source: Economic & Planning Systems

The disposable income was input to IMPLAN, which then calculates the jobs supported by household spending. As shown in **Table 7**, 395 local households earning the median income support 74 jobs. Applying the multiple jobholder factor of 1.13 jobs per employee, this spending results in 65 employees.

Table 7. Jobs and Employees by Industry Supported from Local Spending

Description	Total Impact (IMPLAN Results)	Multiple Jobs Factor	Total Employees
Local Spending			
Retail Trade	14	1.13	13
Accommodation and Food Services	12	1.13	10
Real Estate and Rental and Leasing	11	1.13	9
Other Services (except Public Administration)	8	1.13	7
Health Care and Social Assistance	6	1.13	5
Finance and Insurance	4	1.13	4
Administrative and Support and Waste Mgmt	4	1.13	3
Arts, Entertainment, and Recreation	4	1.13	3
Professional, Scientific, and Technical Service	3	1.13	2
Transportation and Warehousing	2	1.13	2
Wholesale Trade	2	1.13	1
Construction	1	1.13	1
Educational Services	1	1.13	1
Public Administration	1	1.13	1
Information	1	1.13	1
Management of Companies and Enterprises	0	1.13	0
Utilities	0	1.13	0
Manufacturing	0	1.13	0
Agriculture, Forestry, Fishing and Hunting	0	1.13	0
Mining, Quarrying, and Oil and Gas Extraction	0	1.13	0
Total	74		65

Source: Economic & Planning Systems

These employees were then categorized by occupation and wage and converted into employee households following the same methodology for guest spending. As shown in **Table 8**, local resident household spending supports a total of 28 employee-households below 180% of AMI. Affordability needs of these households are determined using the same methodology outlined for guest spending.

Table 8. Households by AMI Supported by Local Spending

Description	Employment Supported	Earners per HH	Housing Needed
Local Spending			
Under 30% AMI	0	2.00	0
30% to 60% AMI	0	2.00	0
60% to 80% AMI	0	2.00	0
80% to 100% AMI	3	2.00	2
100% to 120% AMI	26	2.00	13
120% to 140% AMI	10	2.00	5
140% to 180% AMI	<u>17</u>	2.00	<u>9</u>
Total	56		28

Source: Economic & Planning Systems

Fee Calculation

This section outlines the calculation of the short-term rental regulatory fee. There are four key components to the fee calculation:

- **Households Supported** – The number of households at or below 180% of AMI supported by guest spending form the basis of the fee, as these represent employees needed in the community who cannot otherwise afford housing.
- **Affordability Gap** – The affordability gap per household and AMI range described earlier ranges from \$41,300 at 180% of AMI to \$554,500 at 30% of AMI. The number of households in each AMI category are multiplied by the gap per household to calculate the total affordability gap. This gap is calculated for both guest spending and local spending. Based on this calculation, the gap per short-term rental unit is \$102,997 and the gap per local household/housing unit is \$10,613.
- **Adjustment for Local Households** – To isolate the impact of guest spending above the impact of a local household, the gap associated with local household spending (\$10,613) is subtracted from the gap associated with guest spending (\$102,997). This results in a net gap per accommodation unit of \$92,383.

This fee is then adjusted to reflect a per bedroom figure. EPS’s analysis of the Town’s STR license database indicates that STRs have an average of 2.75 bedrooms per unit. This is then annualized over 30 years (divided by 30), which is a typical financing period for a long-term housing investment, and a typical long term planning timeframe for local governments. Thirty years is also the required affordability period in the federal low-income housing tax credit development program. Based on this analysis, the maximum fee per bedroom is \$1,120, as shown in **Table 9**. This maximum fee amount is the annualized cost of providing housing to the local workforce that is supported by short-term rental guest spending.

Table 9. Fee Calculation

Description	Factor	Guest Spending	Local Spending
Households Generated			
30% of Median		0.0	0.0
60% of Median		0.0	0.0
80% of Median		0.01	0.0
100% of Median		3.4	1.5
120% of Median		149.5	12.9
140% of median		12.9	5.0
180% of Median		17.4	8.6
Total		183	28
Gap per Household by AMI Range			
30% of Median		\$554,500	\$554,500
60% of Median		\$451,900	\$451,900
80% of Median		\$382,900	\$382,900
100% of Median		\$315,400	\$315,400
120% of Median		\$244,800	\$244,800
140% of median		\$178,300	\$41,300
180% of Median		\$41,300	\$41,300
Total Gap			
30% of Median		\$0	\$0
60% of Median		\$0	\$0
80% of Median		\$4,790	\$4,972
100% of Median		\$1,065,911	\$473,502
120% of Median		\$36,587,958	\$3,153,928
140% of median		\$2,306,816	\$205,090
180% of Median		\$718,253	\$354,778
Total		\$40,683,728	\$4,192,270
Gap (Fee) per Unit		-\$102,997	-\$10,613
Net Gap (Fee) per Unit Minus Local Spend		-\$92,383	
Avg. Number of Bedrooms		2.75	
Net STR Gap (Fee) per Bedroom		-\$33,594	
Annualized Fee per Bedroom	30 years	\$1,120	

Source: Economic & Planning Systems

The Town of Granby can implement an STR regulatory fee at any level at or below the maximum justifiable level of \$1,120 per bedroom per year. One way to determine an appropriate fee level is to apply a mitigation rate, which multiplies the maximum justifiable fee by a certain percentage. The mitigation rate is a policy goal set by the Town. A table of different mitigation rates, and their corresponding fee levels and annual revenue estimates is shown below in **Table 10**. For example, if the Town were to apply a 65 percent mitigation rate (shown in blue), then the annual STR regulatory fee would be \$728 per bedroom. Given an average of 2.75 bedrooms per STR and a current total of 395 STRs in Granby, this would generate an estimated \$791,000 in revenue annually.

Table 10. Fee Levels at Various Mitigation Rates

Mitigation Rate	Fee per Bedroom	Avg. Fee per Unit	Annual Fee Revenue
100%	\$1,120	\$3,079	\$1,216,000
90%	\$1,008	\$2,772	\$1,095,000
80%	\$896	\$2,464	\$973,000
70%	\$784	\$2,156	\$851,000
65%	\$728	\$2,002	\$791,000
60%	\$672	\$1,848	\$730,000
50%	\$560	\$1,540	\$608,000
40%	\$448	\$1,232	\$487,000
30%	\$336	\$924	\$365,000
20%	\$224	\$616	\$243,000

Source: Economic & Planning Systems