# PROJECT OBJECTIVE:

Quantify the relationship between the operation of homes in Town as short-term rentals and the cost and availability of workforce housing.

## Approach

- **Descriptive Statistics –** overview of housing and labor market trends and current STR landscape
- **Impact Model -** Econometric model based on *The Effect of Home-Sharing on House Prices and Rents: Evidence from Airbnb* to identify housing market impacts directly caused by STR activity.
- **Fee Option –** Converts supply impact into a per unit annual fee that could be assessed if the Town desires to mitigate impacts identified in the study.

# WHAT MARKET IMPACTS ARE ACTUALLY CAUSED BY VACATION RENTAL (STR) ACTIVITY?

**The impact analysis uses an econometric model to isolate and quantify the causal relationship between STRs and market trends. The model:**

- Controls for local demographic trends including changes in population, income, employment and education—over time and across geographies.
- Uses a fixed effects specification that controls for shocks to housing market conditions that are common across geographies, as well as controlling for the average differences across geographies in any unobservable amenities; and
- Uses an instrumental variable (IV) approach that measures **causal impacts** of growth in STR's on different measures of housing supply.

***National model, state-level model, and sub-state model focused on above-average tourism communities.***

# DIRECT IMPACT OF ESTES PARK STRS ON WORKFORCE HOUSING SUPPLY

- Estes Park market data applied to model coefficients
- Impact measured as % rental and owner stock lost due to % change in STRs
- % impact applied to actual housing and STR stock to calculate units lost per 100 STRs (below).

| | Colorado Model (IV) | Colorado Tourist Model (IV) |
|---|---|---|
| **Units Lost from Rental stock per 100 STRs** | 6.2 units | 9.0 units |
| **Units Lost from Owner stock per 100 STRs** | 8.6 units | n/a |

Data Source: Root Policy Research

# SUPPORTABLE FEE CALCULATION

**The "affordability gap" methodology for fee calculation:**

- Is the standard method for fee calculation in affordable housing linkage fee studies. The same principle applies here though the impact was derived from a supply-impact methodology as opposed to a demand-impact methodology.
- Measures the difference in market-rate housing and housing affordable to existing permanent residents by area median income (AMI).
- That differential is applied to the supply impacts outlined the previous slide and then annualized to quantify a potential annual fee per short-term rental unit.

This analysis supports a fee of up to **$1,390 per unit per year** to mitigate the quantifiable impact of STRs on local workforce housing.

# Affordability Gap:

**Difference in market rate housing and what is affordable to workforce, weighted by the income distribution of existing residents.**

**Avg Sale Price: $677,316**
**Avg Rent: $1,845**

AFFORDABILITY GAP CALCULATION:
DIFFERENCE IN AFFORDABLE TO WORKFORCE AND MARKET RATE

| Owner Households by Income Range | % of owners | 2021 Income Limit | Max Affordable Home Price | Affordability Gap | Annualized Affordability Gap |
|---|---|---|---|---|---|
| 0-30% AMI | 6% | $23,000 | $93,623 | $583,693 | $19,456 |
| 30-60% AMI | 11% | $46,080 | $187,572 | $489,744 | $16,325 |
| 60-80% AMI | 10% | $61,400 | $249,933 | $427,383 | $14,246 |
| 80-100% AMI | 12% | $76,800 | $312,620 | $364,696 | $12,157 |
| 100-120% AMI | 10% | $92,160 | $375,144 | $302,172 | $10,072 |
| 120-175% AMI | 23% | $134,400 | $547,085 | $130,231 | $4,341 |
| 175% AMI or more | 29% | n/a | n/a | n/a | n/a |
| | | | | ***Weighted Annual Gap per Owner Household*** | ***$7,696*** |

| Renter Households by Income Range | % of renters | 2021 Income Limit | Max Affordable Rent | Monthly Affordability Gap | Annualized Affordability Gap |
|---|---|---|---|---|---|
| 0-30% AMI | 23% | $23,000 | $575 | $1,270 | $15,240 |
| 30-60% AMI | 47% | $46,080 | $1,152 | $693 | $8,316 |
| 60-80% AMI | 10% | $61,400 | $1,535 | $310 | $3,720 |
| 80-100% AMI | 5% | $76,800 | $1,920 | $0 | $0 |
| 100-120% AMI | 2% | $92,160 | $2,304 | $0 | $0 |
| 120-175% AMI | 5% | $134,400 | $3,360 | $0 | $0 |
| 175% AMI or more | 8% | n/a | n/a | n/a | n/a |
| | | | | ***Weighted Annual Gap per Renter Household*** | ***$7,744*** |

# Supportable STR Fee Calculation

| AFFORDABILITY GAP CALCULATION: DIFFERENCE IN AFFORDABLE TO WORKFORCE AND MARKET RATE | |
|---|---|
| **Weighted Annual Gap per Owner Household** | **$7,696** |
| **Weighted Annual Gap per Renter Household** | **$7,744** |

| AFFORDABILITY GAP APPLIED TO STR IMPACTS | | |
|---|---|---|
| **STR Impacts** *(see Section III for details)* | **CO Model** | **CO Tourist Model** |
| Units Lost from Rental stock per 100 STRs | 6 | 9 |
| Units Lost from Owner stock per 100 STRs | 9 | 9 |
| **Fee Application** | | |
| Annual Rental Affordability Gap created by 100 STRs | $ 46,461 | $ 69,692 |
| Annual Owner Affordability Gap created by 100 STRs | $ 69,261 | $ 69,261 |
| Agregate Annual Affordability Gap per 100 STRs | $ 115,722 | $ 138,953 |
| **Supportable Annual Fee per STR** | **$ 1,157** | **$ 1,390** |

*It is important to note that the methodology described above reflects a conservative approach to fee calculation as the fee only captures the marginal difference between market-rate home costs and workforce affordable home costs (as opposed to capturing the full cost to construct "replacement" units) and because it assumes displaced households have the same income representation as current residents.*

# SUPPORTABLE FEES IN CONTEXT

***Typical EP STR:***
*2 BR / 2 bath; ADR of $328, rents 167 days per year, and generates $53,684 annually.*

| | Colorado Model | CO Tourist Model |
|---|---|---|
| **Supportable Annual Fee per STR** | **$1,157** | **$1,390** |
| As a % of average annual revenue for typical Estes Park STR ($53,684) | 2.2% | 2.6% |
| **Supportable Nightly Fee** (based on average of 167 rented nights/yr) | **$6.93** | **$8.32** |
| % increase to average daily rate for typical Estes Park STR ($328) | 2.1% | 2.5% |

# SUPPORTABLE FEES IN CONTEXT

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| % increase to average daily rate for typical Estes Park STR ($328) | 2.1% | 2.5% |
| **Annual Revenue potential (493 registered STRs)** | **$570,509** | **$685,036** |