



ECONOMIC AND MARKET STUDY

IMPACT ANALYSIS OF “THREE UNRELATED
PERSONS” ORDINANCE ENFORCEMENT IN
THE CITY OF FORT COLLINS

EXECUTIVE SUMMARY

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INTRODUCTION

In January of 2005, Corona Research was retained by the City of Fort Collins to examine the impacts of a strong enforcement of the City’s “Three Unrelated Persons” ordinance. This ordinance states that no more than three unrelated adults may share one housing unit. The ordinance is currently in place, but has historically been enforced at a very low level, if at all. As a result, a large number of households are currently in violation.

This executive summary offers an overview of the key findings and conclusions of the study. The full report provides much more information and detail to support these findings and conclusions.

THE ORDINANCE

The following language was provided for this report by the City of Fort Collins.

The City of Fort Collins Land Use Code stipulates that any dwelling unit, renter- and owner-occupied alike, cannot be occupied by more than one family. There are three distinct types of “families” that are defined in the Code that are legally permitted to live in one dwelling as a single housekeeping unit. These are:

- Any number of persons related biologically or through marriage, adoption, guardianship, legal custody, etc.
- Any unrelated group of not more than two adults and their (biological or otherwise related as noted above) children.
- Any unrelated group of not more than three persons.

This means that in most cases, if more than three persons occupy a rental dwelling unit, they MUST ALL be related to each other. Conversely, if they were not all related to each other, then such occupancy would be considered to be a zoning violation. The exception to this rule applies ONLY to owner-occupied dwelling units. City Code allows an owner-occupant who is a member of either of the three types of “legal families” defined above to rent rooms to two additional people, provided the owner obtains a Fort Collins “Home Occupation License” from the City Building & Zoning Department. Such licenses cost \$10 and are valid for two years. Additionally, to qualify for the license, one off-street parking space must be provided for each additional person and any bedroom for that use must have an approved emergency escape window.

As a nomenclature note, households currently in violation of the ordinance are referred to as “violation households” in this executive summary and in the full report.

PART 1. DEFINING THE SITUATION

As an initial step, the research team developed estimates of the number of households currently in violation of the “Three Unrelated People” ordinance. The research team also documented the relationship between the presence of violating households and other neighborhood nuisances.

THE NUMBER OF VIOLATING HOUSEHOLDS

There are an estimated 1,070 violator households in Fort Collins. Overall, 5,003 renters will be affected by the enforcement of the ordinance, either by moving or by downsizing their household.

As an initial step in examining the impacts of the ordinance, it is first necessary to know the number of households that are currently in violation of the ordinance. The research team used three methods to estimate this figure: an analysis of individual Year 2000 Census records (updated to 2004); an analysis of summary Census data from the Year 2000 (updated to 2004); and analysis of a public telephone survey conducted for this project.

The three methods of estimation produced somewhat similar estimates, ranging from 905 households to 1,266 households. Because none of the estimates is judged to be a flawless estimator, none takes precedence over the others. As a figure for continuing the impact analysis, the research team chose to average these three estimates, yielding a final estimate of 1,070 violator households.

At an average of 4.46 people per household, the 1,070 violator households contain approximately 4,773 people. Additionally, another estimated 168 owner-occupied units would need to shed a total of 230 renters to satisfy the ordinance. When this figure is added to the figure for renters currently living in rental violator households, the total impact of the ordinance will be changes in households among an estimated 5,003 renters.

IMPACTS ON NEIGHBORHOODS

Residents living in close proximity to violator households are significantly more likely to identify problems with their neighbors in numerous areas, such as disruptive parties, noise, parking issues and other neighbor-to-neighbor problems. Residents living in close proximity to violator households are also more likely to have negative perceptions of their neighborhood on specific issues.

During the public survey, households were asked whether any of the four houses nearest to their own home contain more than three unrelated people. They were also asked independently whether any of the four nearby houses experience other types of neighborhood problems. While the findings do not necessarily prove causation or link negative behaviors directly to violator households, there is a strong correlation between residents’ proximity to violator households and their reporting of problems such as disruptive parties, loud noise, inappropriate parking of vehicles, unkempt lawns, trash or junk in yards, poorly maintained houses, and criminal activity. Actual figures from the survey are reported in the full report.

SUPPORT FOR ORDINANCE ENFORCEMENT

A majority of public survey respondents would support stronger enforcement of the ordinance.

More than half of respondents (56 percent) would support stronger enforcement of an existing city ordinance that limits the number of unrelated adults who can share a house to three people. The figure rises to 69 percent among households that have two or more violator households among the four houses nearest to them. It should be noted that this is an un-weighted survey of residents and does not differentiate between registered voters and non-voters.

PART 2. A PROFILE OF THE VIOLATOR POPULATION

The following are selected key attributes of the violator population, both in terms of households and the people who live in those households. Additional information is provided in the full report.

1. Approximately two-thirds of violator households occupy single-family homes.

One striking difference between violator households and other rental households is their choice of housing units. Single-family homes are the housing of choice for two-thirds of violator households, compared to only 22 percent of non-violator households.

2. Most violator households (64 percent) are only slightly over the three-person ordinance limit, with four people sharing a housing unit.

Only nine percent of violator households have six or more people, and another 27 percent have five people.

3. The majority of violators (86 percent) live in three-bedroom units or larger.

Violator households make up 29 percent of the market for four-bedroom units, and 51 percent of the market for five-bedroom units. They make up 4 percent of the market for three-bedroom units, and less than one percent of the market for smaller units.

4. The average household incomes of violator household are generally higher than those of other renters, despite the fact that individual tenants' incomes are lower and individual tenants in violator households are more likely to be below the poverty line.

Violator households tend to have higher incomes than other rental households, in large part because they have more people generating income. A total of 62 percent have household incomes above \$34,000, in comparison to only 40 percent of other rental households. However, taken individually, 52 percent of the people living in these households would be below the poverty line.

5. Household rent levels tend to be high among violator households.

When examining rent levels, violator households tend to pay higher rent levels. Nearly half (49 percent) of violator households pay rents of \$1,102 per month or more, compared to only 10 percent of non-violator rental households.

Interestingly, a significant subset of violator households pay low rent levels as well. Violator households are more likely than other households to pay rents of less than \$550, and also far more likely to pay rents of more than \$1,102.

6. The rent per person in violator households is nearly 50 percent less than that paid by other renters, on a per-adult basis.

While violator households may pay more total rent, they have more adults who are contributing to that rental payment. While nearly half of other renters have payment obligations of \$400 per month or more (in the Year 2000), nearly half of violator households paid less than \$200 per month. On the whole, the median rent obligation of a tenant in a violator household is almost exactly half that of a person living in a non-violator household.

7. Overall, 71 percent of violator household tenants are college students.

Among tenants in violator households, 63 percent are undergraduate students, 8 percent are graduate students, and 29 percent are non-students.

8. Seventy percent of the tenants in violator households are males and 82 percent of the tenants are under the age of 25.

Regardless of their student status, tenants in violator households are young. Only five percent of these tenants are over the age of 27, and 82 percent are between the ages of 19 and 24, inclusive. Tenants in violating households are also disproportionately male, with more than twice as many males as females in this population. This skewing is not true for other renters, who are evenly divided between males and females.

PART 3. IMMEDIATE IMPACTS OF ORDINANCE ENFORCEMENT

Corona developed an extensive impact analysis to identify the impacts of ordinance enforcement, including impacts on rental vacancy rates, rental prices, and home values. The analysis was conducted via seven distinct steps.

1. Corona developed a profile of the rental market, as it existed during the 2000 Census.
2. Corona developed an updated estimate of the rental market, as it exists today, using a variety of sources and techniques.
3. Corona used the profiles of violator households to identify the market presence of violator households within the rental market.
4. Corona developed estimates for how violator households will reform if broken up by the ordinance, and what the housing preferences will be for the newly formed (and smaller) households that will result.
5. Corona altered the existing profile of the rental market to reflect the loss of violator households and the addition of newly formed non-violator households.
6. Corona assessed the rental market's reaction to these shifts in demand.
7. Corona examined the impacts of these shifts on rental vacancy rates, pricing, and property values.

A SUMMARY OF RENTAL MARKET IMPACTS

After taking into account the number of violator households, their demographics, the supply of rental housing, and the rental preferences of households at various income levels, the research team determined that a strong enforcement of the “three unrelated people” ordinance will have the following impact on the rental market.

- A total of 1,070 rental units are in violation of the ordinance and would be forced to downsize or dissolve.
- These households contain a total of 4,773 renters. In addition, another 230 tenants would be forced to vacate owner-occupied housing so that those homes would satisfy the ordinance. A total of 5,003 renters would need to change their living arrangements.
- These 5,003 renters would reform into 1, 2, or 3-person households. The research team estimates that the ratio will be as follows:
 - 260 of these people will form new one-person households, for a total of 260 new one-person households.
 - 2,518 of these people will form new two-person households, for a total of 1,259 new two-person households
 - 2,225 of these people will form new three-person households, for a total of 742 new households.

In essence, 1,070 large households will disappear from the Fort Collins housing market, and 2,261 new smaller households will appear, for a net gain of 1,191 households (with no change in total population).

- When examined by income, strong ordinance enforcement will result in the net loss of nearly 250 households with incomes over approximately \$60,000 per year, and the net creation of approximately 190 new households with incomes from \$30,000 to \$60,000 per year. The number of households with incomes below \$30,000 will increase by over 1,250.

As a means of comparison, the total city’s number of households with incomes below approximately \$22,000 per year will increase by approximately 10 percent. The city’s total number of households with incomes between \$22,00 and \$33,000 will increase by approximately 5 percent. The change in the number of households with incomes over \$33,000 will decrease by approximately 1 percent. However, the change on the rental market will be much larger.

- When translated to rental demand, these changes in households will produce a significant increase in demand for units in the \$550 to \$775 price range, and a decrease in demand among units priced above \$1,100.

**Exhibit ES-1
Change in Rental Demand by Price Level**

Rental Price	Rental Unit Demand of New Households	Lost Rental Unit Demand of Violator Households	Net Change in Demand
Under \$222	68	0	68
\$222 to \$332	103	101	2
\$333 to \$387	115	54	61
\$388 to \$442	130	136	-6
\$443 to \$498	117	0	117
\$499 to \$553	120	16	104
\$554 to \$609	252	31	221
\$610 to \$664	187	0	187
\$665 to \$720	270	19	251
\$721 to \$775	202	35	167
\$776 to \$831	165	23	142
\$832 to \$886	103	74	29
\$887 to \$997	135	25	110
\$998 to \$1,108	105	35	70
\$1,109 to \$1,385	124	299	-175
\$1,386 to \$1,662	19	140	-121
\$1,663 to \$2,217	36	82	-46
\$2,218 and Up	10	0	10
	2,261	1,070	1,191

When these changes in rental demand are entered into the current Fort Collins rental market, the impacts will be quite significant. The overall rental vacancy rate will drop by five percentage points, and the initial impact will produce negative vacancy rates in several market segments, which of course are not possible. The various market scenarios to deal with this situation are discussed later in the analysis of affected parties.

**Exhibit ES-2
Impact of Ordinance on Rental Market**

Baseline Scenario		Scenario with Ordinance					
Rental Rate	Vacancy Rates	2004 Baseline Supply	2004 Baseline Occupied Units	Change in Demand (Units)	Change in Demand (Percent)	2004 Occupied Units with Ordinance	2004 Renter-Preferred Vacancy Rate with Ordinance
Under \$222	11.0%	636	566	68	12%	634	0.3%
\$222 to \$332	10.2%	794	713	2	0%	715	9.9%
\$333 to \$387	6.9%	1,061	988	61	6%	1,049	1.1%
\$388 to \$442	6.4%	814	762	-6	-1%	756	7.1%
\$443 to \$498	9.6%	959	867	117	13%	984	-2.6%
\$499 to \$553	4.3%	1,270	1,216	104	9%	1,320	-3.9%
\$554 to \$609	4.5%	1,840	1,756	221	13%	1,977	-7.4%
\$610 to \$664	9.2%	1,943	1,764	187	11%	1,951	-0.4%
\$665 to \$720	10.3%	2,499	2,242	251	11%	2,493	0.2%
\$721 to \$775	4.8%	2,630	2,504	167	7%	2,671	-1.6%
\$776 to \$831	5.3%	1,452	1,375	142	10%	1,517	-4.5%
\$832 to \$886	12.0%	1,244	1,095	29	3%	1,124	9.6%
\$887 to \$997	17.3%	1,613	1,333	110	8%	1,443	10.5%
\$998 to \$1,108	13.4%	1,456	1,261	70	6%	1,331	8.6%
\$1,109 to \$1,385	11.7%	1,966	1,735	-175	-10%	1,560	20.7%
\$1,386 to \$1,662	7.0%	377	351	-121	-34%	230	39.0%
\$1,663 to \$2,217	7.6%	401	370	-36	-10%	334	16.7%
\$2,218 and Up	0.0%	66	66	0	0%	66	0.0%
Total Rental Market	8.9%	23,021	20,964	1,191	5.7%	22,155	3.8%

IMPACTS ON AFFECTED POPULATIONS

The impacts of this market shift will now be discussed for each of nine affected parties.

KEY MARKET 1: RENTERS AND LANDLORDS IN THE LOW-RANGE MARKET (UNDER \$440)

Default Market Size: 3,300 housing units, 3,150 rental households (before market shifting)

Landlords in the low-rent market will gain immensely in the short-term from ordinance enforcement. On the other hand, renters in this price range will suffer from extreme competition for housing and higher prices even to stay in their current units.

These units typically have a high vacancy rate as they are generally less desirable units, and most rental households can afford to pay a higher price for a nicer or larger unit.

In a post-ordinance environment, three strong factors will change this market:

- First, the large increase in demand will create a net increase in demand at this price level, reducing natural vacancy rates for the group from over 8 percent to the 4 to 5 percent range even before a secondary market reaction (below).
- Second, the price levels above this market range will face huge supply shortages. As a result, the best units in this price range will be able to increase into the price range above \$440, with a subsequent shift upward in price through the entire supply of low-market rentals. The research team predicts that approximately 15 percent of this low-cost housing supply will move up to the medium-range market and the supply will be lost to low-range renters, and pricing levels for these units will increase by a minimum of 5 to 20 percent.
- Third, the pricing movement of housing supply out of this market will cause even greater shortages at the lowest end of the low-range market. This change in supply will essentially lower the vacancy rate to zero, with more demand than supply. It is likely that approximately 150 to 250 households at this extreme low end of the market will be unable to compete for housing, requiring either public assistance or creating a market for “non-standard” housing or illegal overcrowding. Another option, albeit unlikely for this income group, is that the lowest-income households will simply leave the city.

In the long run, increased construction in the mid-range market will almost certainly push back the units that priced themselves out of this market. However, with the increased demand and the likelihood that few new units will be built in this price range, the long-term return of these units will merely return vacancy rates to a healthy level in the 4 to 5 percent range. This segment will most likely not be directly served by new market-level construction, but will benefit only indirectly by increases in supply in the mid-market range.

KEY MARKET 2: RENTERS AND LANDLORDS IN THE MID-RANGE MARKET (\$440 TO \$830)

Default Market Size: 12,600 housing units, 12,900 rental households (before market shifting)

Landlords in the mid-range rental market will gain somewhat in the short-term from ordinance enforcement, though to a lesser extent than landlords of low-rent properties. Once again, the situation will be detrimental to renters, due to extreme competition for housing. However, pricing for these units may not increase dramatically due to downward price pressure from upper-end rentals.

In this price range, pre-ordinance vacancy levels were somewhat high in some price segments and were moderately healthy in others. However, the addition of over 1,100 new households into this market range alone will completely swamp the housing supply, with demand for units outstripping supply throughout the range.

Aside from competing fiercely to find units, renters in this price range will have four options:

- Pay more money to rent larger units, an option that is only available to those at the top end of this price range. This will happen to some extent, since the vacancy rate for units in the \$830 to \$1,100 range will be higher than a healthy rate. However, vacancy rates at those levels are not high enough to provoke a full-scale downsizing, so price cutting of upper-middle units into the mid-range market will be limited. Similarly, relatively few renters will venture out of the competitive mid-range market into the somewhat stagnant upper-middle market.
- Another option is to move down and rent cheaper units that are less desirable, and which typically have high vacancy rates for that reason. However, the competition for those units will be even more fierce, and a significant part of that supply will have already risen to mid-range prices. As a result, this will not happen.
- Move out of the area, either permanently or on a commuting basis. This may actually be an attractive option for some of these households, particularly if there is an oversupply of mid-range rentals in other nearby communities. Depending on other factors such as the availability of rental housing in the unincorporated county and/or nearby communities, one to two percent of the market could relocate out of the city, equating to 100 to 300 mid-range renters. We caution that this is merely a rough estimate.
- One- and two-person households can double up and obtain roommates, while staying under the limit set by the ordinance. This is a probable scenario as well, and has the potential to create overcrowding to some extent in one- and two-bedroom rental units where two or three renters share a unit.

On the positive side, price pressure from upper mid-range units may dampen the price increases that will be prevalent in the low-range market. Units in the \$800 range cannot significantly increase prices without running into competition from the upper mid-range market, which will still have a relatively high vacancy rate. Therefore, landlords will benefit from extremely low vacancy rates (on the order of 0 to 1 percent), but will not be able to use that to price units up significantly. Even so, some price increases are likely, perhaps in the five to ten percent range, as the entire market shifts upward in response to competition.

In the long term, the housing construction market will almost certainly correct for this intense shortage of housing by increasing new construction. In the short term, some additional low-end owner-occupied units could be converted to rentals as well.

KEY MARKET 3: RENTERS AND LANDLORDS IN THE UPPER MIDDLE MARKET (\$830 TO \$1,100)

Default Market Size: 4,300 housing units, 3,900 rental households (before market shifting)

Landlords and tenants in this price range will exist somewhat on the tipping point of the market, between the high vacancies and lost demand at the upper end of the market and the saturated market and increased demand in the mid-range market. As a result, the impact on this market segment will be relatively small.

Vacancy rates at this price range are currently high, estimated in the 14 to 15 percent range. With the breakup of larger households formerly renting upper-end housing, this market segment will benefit as some of those households downsize and move down into the upper middle market. Even so, most of the demand will bypass them and move further down the price scale, so rental rates will remain somewhat high, in the 8 to 10 percent range.

This market will be impacted by two key factors that cannot be predicted with great confidence:

1. Landlords' willingness to discount pricing at the lower end of the scale will be an important factor. A move down into the \$800 price range will produce large demand and low vacancies. However, history shows that landlords in this price range are hesitant to discount prices, while renters in the \$800 range are hesitant to move up. The research team predicts some crossover, but history indicates that landlords in this price range are willing to tolerate vacancies in the ten percent range in exchange for keeping their rental rates high.
2. A threat to this market exists from above. Upper-end rentals will be facing extraordinarily high vacancy rates, and landlords will be facing decisions about whether to sell their units, wait until demand increases again, or lower their prices. If they lower their prices, they then transfer that market stress to the upper middle market. However, the upper middle market is approximately 50 percent larger than the upper end market (4,300 units versus 2,800 units), and the upper end landlords may have little interest in dropping their prices to compete in a market that already has high vacancy rates.
3. A third potential factor is that the research team assumed that roughly 5 percent of the tenants in the dissolved households will reform as one-person households, 50 percent as two-person households, and 45 percent as three-person households, based on existing patterns among other renters (with adjustments to denote this population's propensity for having roommates). It is possible that some of those one- and two-person households will merge to escape the competition at the mid-market and low-rent levels, and will, in combination, have enough household income to afford upper middle range housing. This would be a positive in many respects, as it would ease the demand pressures at the lower and middle price levels. However, it may lead to overcrowding to some degree as three renters move into two-bedroom units.

Overall, this market will probably not be impacted significantly by the ordinance. Demand will increase, which will aid landlords, but vacancy rates will remain high enough that renters who can afford this price range will have an ample opportunity to rent at stable prices.

KEY MARKET 4: RENTERS AND LANDLORDS IN THE UPPER-END MARKET (\$1,100 AND UP)

Default Market Size: 2,800 housing units, 2,200 rental households (before market shifting)

This market will essentially see exactly the opposite effect of the low-end market. The breakup of violator households will disproportionately impact the upper end rental market, and most of the reformed smaller households will not be able to afford these larger, more expensive properties. Enforcement of the ordinance would be expected to more than double vacancy rates in this market segment, from a current level in the 10 percent range to an expected 22 percent level. Housing in the \$1,400 to \$1,700 range would be particularly hard-hit, with vacancies approaching 40 percent.

Landlords in this market segment will have three primary choices:

1. *They can hold on to their properties and attempt to “wait out” the housing glut created by the ordinance enforcement.* In order to consider this option, it is important to estimate how long it will take for the vacancy rate in that sector to fall back to a reasonable level. For this analysis, a reasonable level is assumed to be 10 percent. Assuming constant growth in the city that is proportionate by owner/renter households and price demand, and assuming that the number of rental units in the higher end of the market remains the same (i.e., no new construction or conversion takes place), it will take approximately 7.4 years to reach a 10 percent vacancy rate.
2. *They can lower their rental price.* This may not be an option to some landlords who have to cover mortgage costs. However, for others who have held their properties for some time, it may be feasible. In considering the mechanics of price dynamics at this end of the market, one can consider the various property levels and their “natural” vacancy rate if the ordinance is passed.

For landlords at the low end of the upper end market, there is significant potential for lowering their rental prices, because that would move them into the \$998 to \$1,108 category, which has an acceptable (if slightly high) vacancy rate. Since their unit was previously priced higher, it is presumably a larger or higher quality unit and could compete well in that range. On median, though, this would represent a 16 percent price discount.

At higher rent levels, the same mechanism holds true: a discounted unit of higher quality should be more desirable than a non-discounted unit of lower quality. However, the dynamics are made difficult by the high vacancy rates at higher levels. For example, discounting a \$1,900 per month rental down to \$1,525 will certainly make it desirable, but at the same time it is difficult even to lease desirable units in an atmosphere with a 39 percent vacancy rate. In summary, lowering prices is an option, particularly to landlords on the lower end of the market, but it may not be feasible from a business perspective.

3. *They can sell their property.* Obviously, this is not a preferred approach for a person who has invested in a rental property, but it remains a feasible option. As a rental property, these large units will lose value as a result of the ordinance, because their market size will drop significantly. Decreases of 15 to 25 percent may be necessary to lease an upper-end unit, with a proportional decrease in property value.

However, this does not reflect the true picture. Most rental units at this price range are single-family homes, and were originally built to be owner-occupied units. In most cases, a

conversion back from rental to single-family home would be painless, and the ownership market is much larger than the rental market for houses in this value range. Additionally, the impacts of ordinance enforcement on the owner-occupied housing market will be negligible, so it is likely that the home could be sold for its pre-ordinance value as an owner-occupied home. (Of course, this depends on some property-specific attributes such as location, condition, and home layout.)

Another bonus for sellers would be the potential impact of the sale of multiple single-family rentals in a neighborhood. According to the research team's analysis (described later in this section), it appears that a neighborhood's median home value declines by \$391 for every percent of the single-family home inventory that is a rental property. In other words, a house in a neighborhood where all single-family homes are rentals can be estimated to be valued at \$39,100 less than a house in a neighborhood where no single-family homes are rentals.¹ If multiple landlords opt to sell their properties, those who sell later may reap the benefits of the neighborhood's return to single-family occupant status.

The above impacts all relate to landlords. As a closing note, it should be observed that renters in this price category would benefit from ordinance enforcement, as they will have many more homes to choose from, and potentially lower pricing.

KEY MARKET 5: DISPLACED TENANTS FROM VIOLATOR HOUSEHOLDS

Market Size: 5,003 individuals

This market consists of the 5,003 individuals who will have to change their housing situations as a result of the ordinance. While they are included in the rental markets that have already been discussed in Key Markets 1 through 4, they warrant additional analysis because of their nature as the focal point of the ordinance.

From a game theory perspective, these individuals are by definition losers in the ordinance enforcement, because they will be banned from pursuing a housing arrangement that they have already decided to be in their best interest. They have already decided that living in a household with three or more other people is their best housing option, and will be forced to abandon that option if the ordinance is enforced.

Not only is this true in theory, but it is also true in practice. The tenants in violator households currently average approximately \$211 per person in rental costs. In their new living situations after ordinance enforcement, it is estimated that their rental costs will increase by over \$100 per month as they relocate to smaller households. These figures do not include any "new market" rent changes as described in Key Markets 1 through 4, which could further increase rents and will affect low-income individuals more than high-income individuals. Keeping in mind that a significant portion of current tenants in violator households has incomes that would place them below the poverty line, the ordinance will have a strong negative impact on housing for some portions of this population.

¹ Note that the model used to develop the figure of \$391 explains only 58 percent of the variation in median home values across neighborhoods. This figure should be considered a "ballpark estimate" rather than a firm figure.

In addition to ongoing rental costs, these households will face increased costs in other ways as well. For example, some fixed household expenses such as cable television, Internet access, and telephone service will be split among a smaller number of people. Further, the individual will have to absorb the cost of moving their household.

In summary, enforcement of the ordinance would produce strong negative outcomes for the tenants currently residing in violator households.

KEY MARKET 6: OWNERS IN OWNER-OCCUPIED VIOLATOR HOUSEHOLDS

Market Size: 168 individuals

Less than 200 housing units are owner-occupied, but take on renters in a number that is in violation of the ordinance. It is unlikely that these households would dissolve, but they would have to shed one or more tenants to satisfy the ordinance.

Because this is such a small population, little data is available through which to draw conclusions about the impact of the ordinance. Certainly, the ejection of one or more renters will reduce cash flow to the owner, but it is not clear whether that loss of income will also result in the owner not being able to maintain the mortgage. The impact of the ordinance on this population is therefore limited to stating that the owner will generally lose at a minimum 25 percent of his or her rental income.

In the limited data that is available, it should be pointed out that the stated owners of these properties might be predominantly college students themselves. In the few data records that are available, the majority of property owners were undergraduate college students.

KEY MARKET 7: NON-VIOLATOR HOUSEHOLDS

Market Size: City households

This market consists of all city households other than violator households.

Aside from the impacts on rental markets discussed earlier, this group will receive two primary benefits from ordinance enforcement, at the cost of one potential risk.

The first benefit is that there may be an increase in “peace and quiet” in neighborhoods that currently host violator households, and a decrease in negative activities that cause problems for neighbors, such as inappropriate parking, loud noise, disruptive parties, and poor lawn and home maintenance. While the data from the public survey in Section 1 of this report cannot definitively identify violator households as the cause of neighborhood problems, there is a strong correlation between neighborhood problems and proximity to violator households.

The second benefit is in property values. As noted earlier, the research team has identified a potential relationship between median home values in a neighborhood and the presence of single-family rental units. For each percentage point of single-family housing that is rented out, the median value of homes in the neighborhood drops by \$391. If the number of single-family rentals declines, the value of homes in the neighborhood will increase by a like amount. Citywide, it is estimated that about two-thirds of violator households live in single-family homes, which means that about 800 such homes exist. This represents less than three percent of all single-family homes. While impacts

would vary greatly by neighborhood, the model suggests that, on a citywide average, home values are diminished by about \$1,200 per home due to the presence of single-family rental units.

The potential risk involves the transition of violator households to new households. The individuals in violator households will reform new households of three people or less, and will move to different housing units in many cases. With the expected increase in their costs, they may be more likely to overcrowd small housing units as long as the overcrowding involves only two or three people. With the increase in demand for those smaller units, a neighborhood could conceivably end up with more overcrowded units than were present before the ordinance enforcement took place. Those units will merely be smaller and hold fewer people.

KEY MARKET 8: LOCAL COMPANIES

The local economy will be impacted by the ordinance as well. While a quantification of the impact is beyond the scope of this study, it can easily be noted that companies that sell household products will benefit from the spontaneous creation of over 1,100 new households. Companies that provide services such as Internet connections, telephone service, and television services will benefit as more households come into being to purchase their services.

On the other hand, many tenants from violator households will face increasing demands for their limited funds. This will cut their discretionary spending, which will impact firms that provide discretionary goods and services.

KEY MARKET 9: HOUSING CONSTRUCTION INDUSTRY

The enforcement of this ordinance will be a boon to the local housing construction industry. The creation of nearly 1,200 new households in a short period of time will have profound implications on vacancy rates, as noted earlier, with strong housing shortages in all price ranges below \$830 where no such shortage existed before. In order to bring the housing supply in those price ranges back up to a healthy level, new construction of over 970 rental units would be needed. This equates to nearly two years of multi-family unit construction above and beyond the normal construction growth. If the multi-family construction industry ramps up 50 percent above current capacity, it would then take four years to bring vacancy rates in the low-end and mid-range price levels back to healthy levels.

Of course, this new construction would generate significant additional economic benefits to the community in terms of jobs, spending, and taxes.

PART 4. LONG-TERM IMPACTS

As seen above, a strong enforcement of the ordinance would have a significant and immediate impact on the housing market. The next key question was whether this change would permanently alter the housing market in the city. The study examined case studies of other communities that have experienced similar types of household change, and described changes in those markets' rental vacancy rates, rental costs, and home values.

Fort Collins' population growth was calculated using census data for 1990 and 2000 and county population projections. Two special issues were also addressed:

- The growth in households due to the implementation of the ordinance (without a corresponding increase in population); and
- An estimated growth of the Colorado State University population by 4,000 students between 2005 and 2015.

The goal of this analysis is to find cities that experienced a growth profile from 1990 to 2000 that was similar to the projected future growth profile for Fort Collins, and then examine changes in vacancy rates, housing costs, and housing stock in those cities during that time period.

CASE STUDIES – COMMUNITIES WITH SIMILAR PAST GROWTH

The growth pattern predicted for Fort Collins is not unique. Sixteen cities of similar size experienced similar growth patterns between 1990 and 2000, and can be studied to learn best practices. (One of these sixteen cities was Fort Collins itself.)

A total of 16 cities were identified to have exhibited highly similar household growth patterns to those projected for Fort Collins, based on total household growth, household growth among traditional college-age students, and a higher growth rate among the second group than the first. Interestingly, one of these similar cities was Fort Collins itself.

**Exhibit ES-3
Cities with Similar Past Growth Patterns**

	Annual Household Growth	Annual Household Growth, Ages 15-24	Ratio of Young/Total Household Growth
Fort Collins, 2005-2015	2.43%	3.32%	1.38
Communities with Similar Growth, 1990-2000			
Greensboro, North Carolina	2.12%	3.34%	1.58
Provo, Utah	2.13%	3.06%	1.44
Sioux Falls, South Dakota	2.22%	2.93%	1.32
Salem, Oregon	2.09%	3.39%	1.63
Winston-Salem, North Carolina	2.49%	2.94%	1.18
Eugene, Oregon	2.26%	3.68%	1.63
Durham, North Carolina	2.95%	3.33%	1.13
Fort Wayne, Indiana	1.86%	3.20%	1.72
Fort Collins, Colorado	3.07%	3.34%	1.08
Joliet, Illinois	3.06%	3.10%	1.01
Lincoln, Nebraska	1.83%	2.73%	1.49
Raleigh, North Carolina	2.77%	2.69%	0.97
Lexington-Fayette, Kentucky	1.93%	3.73%	1.93
Mesquite, Texas	2.03%	2.52%	1.24
Columbia, South Carolina	2.19%	4.14%	1.89
Lakewood, Colorado	1.59%	2.74%	1.73

Housing attributes of these cities were compared to those of 141 other cities to examine differences and similarities in their housing markets.

CHANGES IN VACANCY RATES

In cities that have experienced similar growth patterns in the past, new housing construction has risen to meet demand. In fact, cities with this growth pattern are almost as likely to see increases in vacancy rates over the long term as decreases.

When changes in rental vacancy rates were compared over the 10-year time period from 1990 to 2000, a majority of cities in both groups saw declines in vacancies. However, the median change in the cities with similar growth patterns was -0.5 percent (a 0.5 percentage point decrease in vacancies), while the decrease in other cities was -2.9 percent. More than 75 percent of dissimilar cities saw declines, and the median decline was higher in those cities.

CHANGES IN RENTAL PRICES

Rental prices in cities with similar past growth patterns have risen at a rate about one-third faster than in cities with different growth patterns.

While cities with differing growth patterns saw rental increases of 33 percent over their ten-year period of growth, cities with growth patterns similar to those predicted for Fort Collins saw higher increases on average. Half of the cities with similar growth patterns saw rental increases of 42 percent or more, and half of the cities saw increases within a narrow band of 37 to 49 percent.

CHANGES IN HOUSING STOCK

Over a ten-year period of experiencing the growth pattern predicted for the city, one would expect to see an increase in the housing inventory of 20 to 28 percent.

Cities that have experienced growth patterns similar to the pattern forecast for Fort Collins have seen significant housing growth. On average, these cities saw increases in their entire housing inventory of 25 percent or more, on average, over the course of the ten-year growth period. This is more than three times higher than the typical growth (8 percent) of other cities.