

# Income Assessment of Orchard Grove



Report to the City Council of Boulder, Colorado

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by the Residents of Orchard Grove Mobile Home Park

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*and the 450 residents of Orchard Grove,  
without whose inspiration and support  
this would not have been possible*

Photographs on pages 6, 9, and 10 taken at Orchard Grove  
by Susan S. Peirce / [canyonlights.com](http://canyonlights.com)

Other photographs taken at Orchard Grove by residents

# Table of Contents

Synopsis .....	1
Introduction .....	1
Method.....	3
Results.....	4
Question 1.....	4
Question 2.....	5
Question 3.....	6
Question 4.....	7
Question 5.....	7
Question 6.....	10
Question 7.....	11
Question 8.....	12
Discussion .....	14
Orchard Grove Resident Finances .....	14
Mobile Homes as Affordable Housing.....	14
Cooperative Ownership.....	15
Acknowledgements.....	17
Appendix A - Surveys .....	18
Appendix B - Is Household Size Related to Income?.....	20
Appendix C - Is Ethnicity Related to Income?.....	22
Appendix D - Orchard Grove & Boulder AMI, and National Poverty Thresholds .....	24

# Table of Figures

Table 1:	Orchard Grove Households by Percent AMI.....	4
Figure 1:	Orchard Grove Households by Percent AMI.....	5
Figure 2:	Percent of Households by AMI Percentile - Orchard Grove vs. Boulder .....	6
Figure 3:	Percent of Households within Affordable Housing Income Limits.....	8
Table 2:	Data for Figure 3 .....	9
Figure 4:	Percent of Households Paying More Than 29% of Income for Lot Rent @ \$425/Month .....	10
Figure 5:	Percent of Households Paying More Than 29% of Income for Lot Rent @ \$525/Month .....	11
Table 3:	Crosstabulation of Size of Household and Percentile Ranking .....	20
Table 4:	Test of Statistical Significance of the Hypothesized Relationship Between Household Size and Income .....	21
Figure 6:	Size of Household and Percentile Ranking - Least Squares Means.....	21
Table 5:	Crosstabulation of Ethnicity and Percentile Ranking .....	22
Table 6:	Test of Statistical Significance of the Hypothesized Relationship Between Ethnicity and Income.....	23
Figure 7:	Ethnicity and Percentile Ranking - Least Squares Means.....	23
Table 7:	2007 National Poverty Thresholds .....	24
Table 8:	2007 Boulder AMI .....	24

To work for the common good is the greatest creed.

– WOODROW WILSON

# Income Assessment of Orchard Grove

## *Synopsis*

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***This Income Assessment*** of the residents of Orchard Grove Mobile Home Park in Boulder, Colorado, is designed to give a clear socio-economic picture of the community. Based on 75% returns of the community survey, this data analysis reveals Orchard Grove to be a very low income community within Boulder, with 26% of its population officially impoverished. The data demonstrates that most of

the residents, 94%, qualify for low income housing in Boulder, but that 68% could not afford to pay for that low income housing. Facing rising lot rents, this community is requesting active consideration and protection within the City of Boulder. Cooperative ownership with a creative approach to working with low income residents is the solution called for in this report.

## *Introduction*

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***The results of this*** Income Assessment clearly establish that the Orchard Grove neighborhood qualifies for low-interest loans and other assistance from non-profit low-income housing organizations. The results also indicate that Orchard Grove Mobile Home Park is a refuge for a disappearing demographic in Boulder – that is, low-income households earning from 0-40% of Area Median Income (AMI).

The data from the income survey is analyzed from several points of view. The analyses show the income distributions of Orchard Grove residents and how this relates to housing costs – in our case, lot rents. We find the results surprising, and they make the case for helping us compelling.

In this report, we look at the data with an eye toward answering the following questions.

1. Does Orchard Grove meet the AMI (Area Median Income) requirements of Boulder Housing Partners in order to qualify for low interest loans and other assistance?
2. What percentage of the homes at Orchard Grove are owned by low-income and very low-income households?
3. How do Orchard Grove AMI percentiles compare to those of the general population of Boulder?
4. How many Orchard Grove households qualify for the City of Boulder's affordable housing program?
5. Of those Orchard Grove households who do qualify for Boulder's affordable housing program, how many could afford the monthly payments (based on the FHA/HUD guideline that housing costs comprise no more than 29% of income)?
6. Based on the FHA/HUD guideline that housing costs comprise no more than 29% of income, how many Orchard Grove households currently pay more than 29% of their income for lot rent?
7. Based on the FHA/HUD guideline that housing costs comprise no more than 29% of income, how many Orchard Grove households will pay more than 29% of their income for lot rent, when lot rents rise to market levels?
8. If the residents are unable to purchase Orchard Grove and run it cooperatively, and it is owned by a private/corporate investor who increases lot rents to market rates, how will this affect the most vulnerable homeowners?

Later in this report you will find a discussion of Orchard Grove resident finances, mobile homes as affordable housing and our vision of a cooperatively owned mobile home park. We find ultimately that lot rent stabilization is our top imperative. If we do not accomplish this, the data suggests that many Orchard Grove residents may soon find themselves without a home.

## Method

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**Between September and December 2008**, surveys in English and Spanish (see Appendix A) were given to 213 households of Orchard Grove Mobile Home Park. Surveys were given out in person either at a community meeting or door-to-door. The survey requested name, lot number, ethnicity, total number of people living in the household, and gross annual income of household. Orchard Grove resident Dr. Richard Williams, retired professor of socio-economics at Regis University and author of *The Cooperative Movement: Globalization from Below*, helped design the survey.

Fourteen Orchard Grove residents volunteered to conduct the survey, and for consistency all were trained by Dr. Williams. A primary goal of the training was to ensure that Orchard Grove residents felt safe and respected by the survey process. To that end, all Hispanic households were surveyed by Spanish-speaking surveyors, and all other households were surveyed by English-speaking surveyors.

In order to obtain the most accurate information, respondents were told that their income information would need to be verified in the near future by providing a copy of tax return or social security benefit award statement.

In order to ensure confidentiality of the information shared, each household was asked to fill the survey out and put it in a sealed envelope to be mailed directly to Boulder Housing Partners (BHP); in some cases, the surveys were given to surveyors to be hand-delivered to Boulder Housing Partners. Cindy Brown of Boulder Housing Partners received the surveys and separated the data from identifying information, to maintain confidentiality. BHP kept track of the house numbers of respondents, and non-responding households were contacted a second and third time. In the end, we received responses from 75% of all Orchard Grove households.

Dr. Williams performed the statistical analysis of the data. Given our 75% rate of return, the error of estimate for this study is 3%, which is well under the error rate recommended by statisticians for reliability of the data. Saying this another way, it would require 50 more households in the upper percentile ranks to significantly change the results presented below.

# Results



## Question 1.

Does Orchard Grove meet the AMI (Area Median Income) requirements of Boulder Housing Partners in order to qualify for low interest loans and other assistance?

*Orchard Grove far exceeds BHP's requirement that 20% of the population be below 20% AMI, or 40% of the population be below 40% AMI.*

*In fact, in Orchard Grove, 31% are below 20% AMI, and 66% are below 40% AMI.*

**TABLE 1: ORCHARD GROVE HOUSEHOLDS BY PERCENT AMI**

Percent AMI	Number HH*	% HH	Cumulative % HH	Q**
0 - 10%	23	14.375	14.375	
11 - 20%	26	16.250	30.625	✓
21 - 30%	25	15.625	46.250	
31 - 40%	31	19.375	65.625	✓
41 - 50%	20	12.500	78.125	
51 - 60%	13	8.125	86.250	
61 - 70%	4	2.500	88.750	
71 - 80%	7	4.375	93.125	
81 - 90%	5	3.125	96.250	
91 +	6	3.750	100.000	

\*HH = Households      \*\*Q = Qualifying Levels

AMI, Area Median Income, is the median household income, adjusted for family size, determined annually by the U.S. Department of Housing and Urban Development. It is the most widely used benchmark for evaluating relative income levels.



**Question 2.**

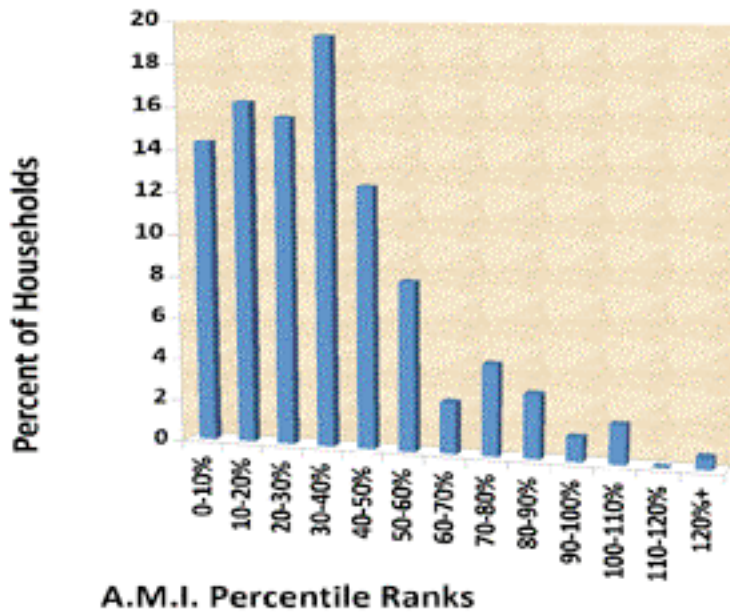
What percentage of the homes in Orchard Grove are owned by low income and very low income households?

*26% of Orchard Grove households live below the poverty line (US Census Bureau, see Appendix D).*

*77% of Orchard Grove households live on less than 50% AMI (City of Boulder AMI, see Appendix D).*

*92% of Orchard Grove households fall below 80% AMI.*

**FIGURE 1: ORCHARD GROVE HOUSEHOLDS BY PERCENT AMI**



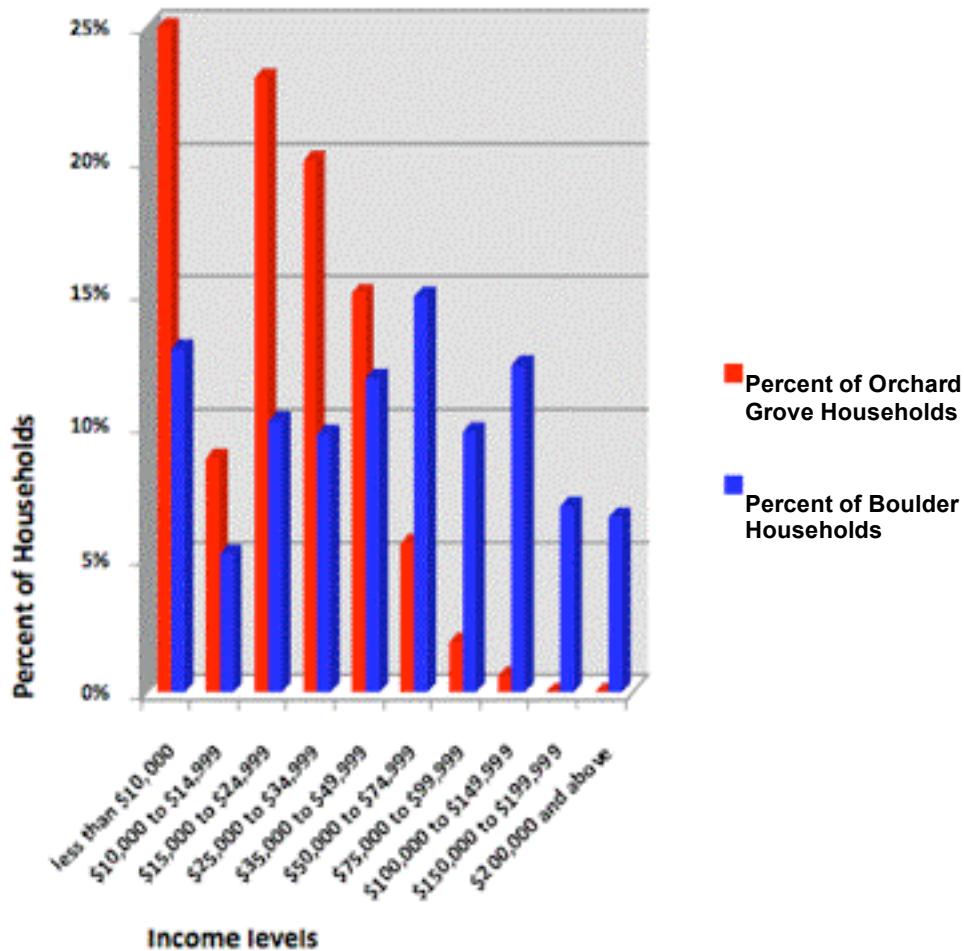


**Question 3.**

How do Orchard Grove AMI percentiles compare to those of the general population of Boulder?

*Orchard Grove AMI percentiles are significantly lower than those of the general population of Boulder.*

**FIGURE 2: PERCENT OF HOUSEHOLDS BY AMI PERCENTILE:  
ORCHARD GROVE VS. BOULDER\***



\*Housing Briefing Paper Prepared for Consideration in the Transit Village Area Plan Process, DRAFT: January 25, 2006, at [http://www.bouldercolorado.gov/files/PDS/Transit%20Village/housing\\_paper.pdf](http://www.bouldercolorado.gov/files/PDS/Transit%20Village/housing_paper.pdf)



**Question 4.**

How many Orchard Grove households qualify for the City of Boulder's affordable housing program?

*94% of Orchard Grove households qualify for Boulder's affordable housing program. 6% have incomes too high to qualify.*

*and*

**Question 5.**

Of Orchard Grove households who do qualify for Boulder's affordable housing program, how many could afford the monthly payments (based on the FHA/HUD requirement that housing costs comprise no more than 29% of income)?

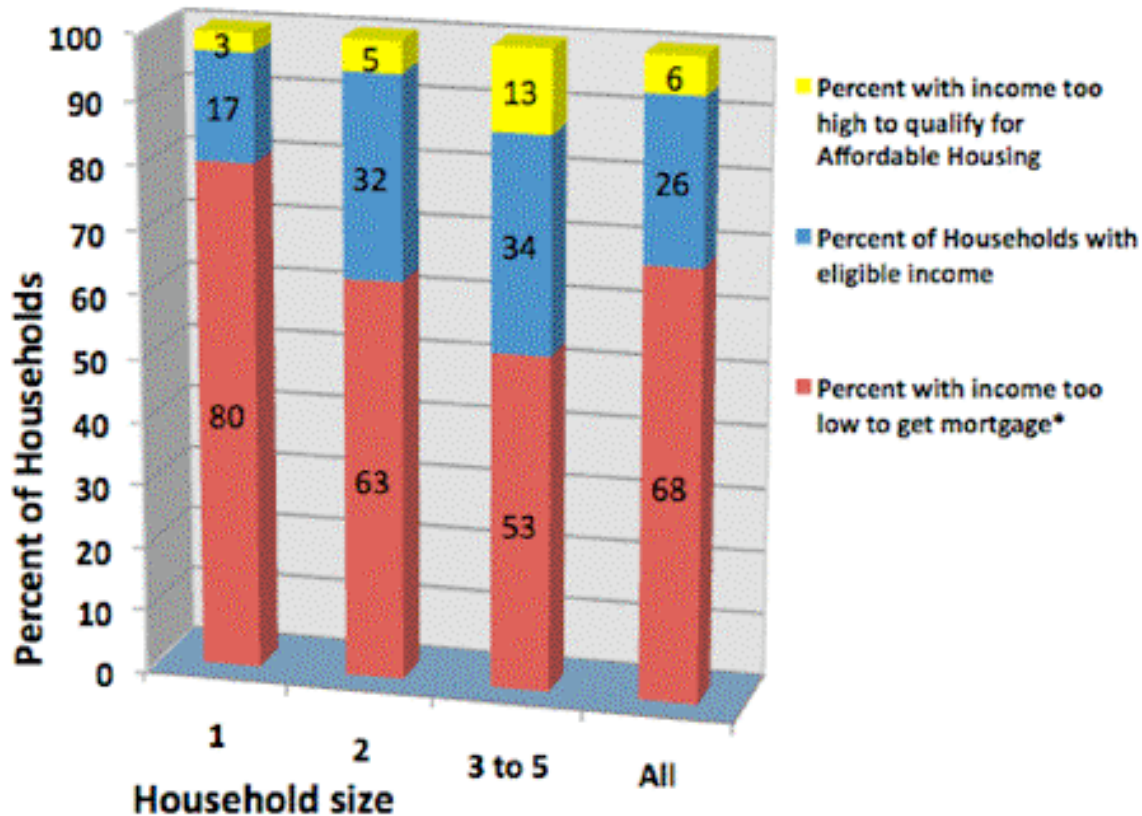
*Even though they qualify, 68% of Orchard Grove households could not afford the lowest price affordable home currently listed in the City of Boulder database (as of 12/29/2008†).*

*Therefore only 26% of Orchard Grove households can participate in Boulder's affordable housing program.*

*Two-thirds of Orchard Grove households comprise a demographic that Boulder's excellent and pioneering affordable housing programs do **not** reach.*

continued

FIGURE 3: PERCENT OF ORCHARD GROVE HOUSEHOLDS WITHIN AFFORDABLE HOUSING INCOME LIMITS



*The answers to Questions 4 & 5 are worth repeating:*

*Even though they qualify, 68% of Orchard Grove households could not afford the lowest price affordable home currently listed in the City of Boulder database (as of 12/29/2008†).*

*Therefore only 26% of Orchard Grove households can participate in Boulder's affordable housing program.*

*Two-thirds of Orchard Grove households comprise a demographic that Boulder's excellent and pioneering affordable housing programs do **not** reach.*

*continued*

**TABLE 2: DATA FOR FIGURE 3**

Household Size	1 person	2 people	3+ people	All Households
Upper Limit <i>for eligibility for affordable housing</i>	\$49,100	\$56,300	\$63,200+	—
Total # Households <i>at that size</i>	73	40	47	160
# Households <i>below upper limit for eligibility</i>	71	38	41	150
% Households <i>below upper limit</i>	97%	95%	87%	94%
% Households <i>who do not qualify for a mortgage on the lowest priced house now available†</i>	80%	63%	53%	68%
% Households <i>who qualify for a mortgage and qualify for affordable housing</i>	17%	32%	34%	26%

**Notes**

† As of 12/29/08, there were four affordable units available on Boulder City's website at: [http://www.bouldercolorado.gov/index.php?option=com\\_content&task=view&id=2645&Itemid=2807](http://www.bouldercolorado.gov/index.php?option=com_content&task=view&id=2645&Itemid=2807)

- Unit #1 = 738 sq ft, 1 bed/1 bath, \$114,300
- #2 = 738 sq ft, 1 bed/1 bath, \$118,260
- #3 = 1069 sq ft, 2 bed/2 bath, \$154,200
- #4 = 1232 sq ft, 2 bed/1.5 bath, \$160,535

\* Ineligibility for mortgage is based on lowest priced currently available affordable home (\$114,300) minus minimum required down payment (\$2,000). Annual mortgage payment of \$29,379 is based on 30-year mortgage at optimistic 6.5% interest.



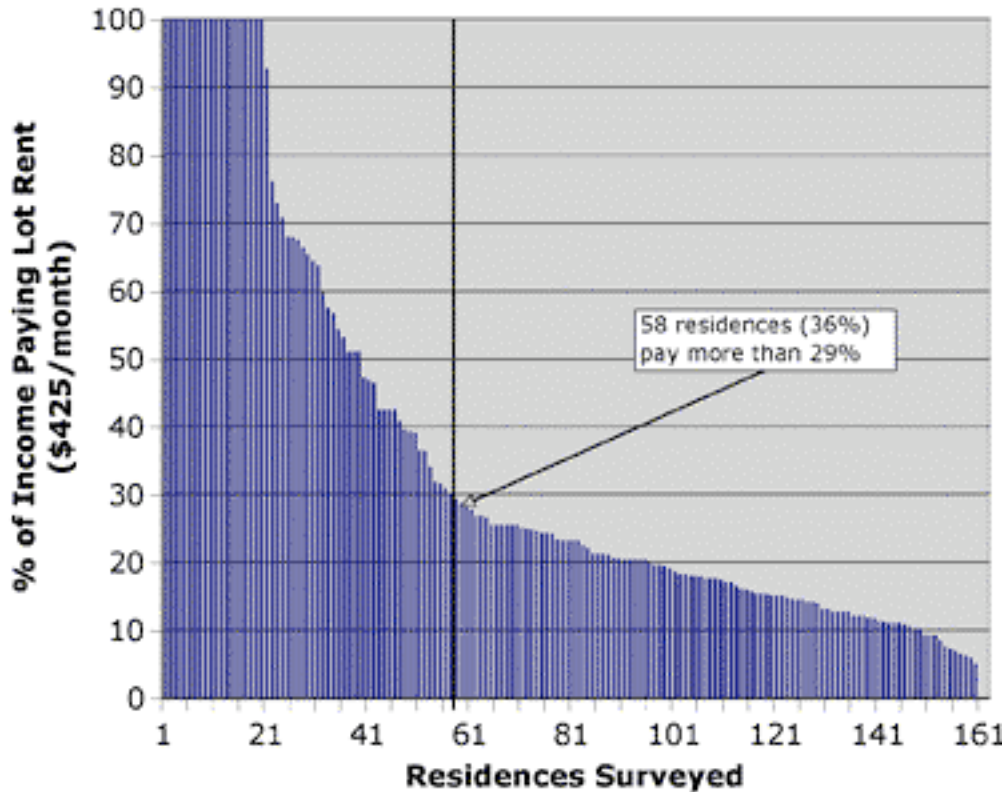
**Question 6.**

Based on the FHA/HUD guideline that housing costs comprise no more than 29% of income, how many Orchard Grove households currently pay more than 29% of their income for lot rent?

*36% of Orchard Grove households currently pay more than 29% of their income for lot rent.*

*Many residents have mortgage payments on top of lot rent.*

**FIGURE 4: PERCENT OF ORCHARD GROVE HOUSEHOLDS PAYING MORE THAN 29% OF INCOME FOR LOT RENT @ \$425/MO**



Ordered from lowest income (left) to highest (right).



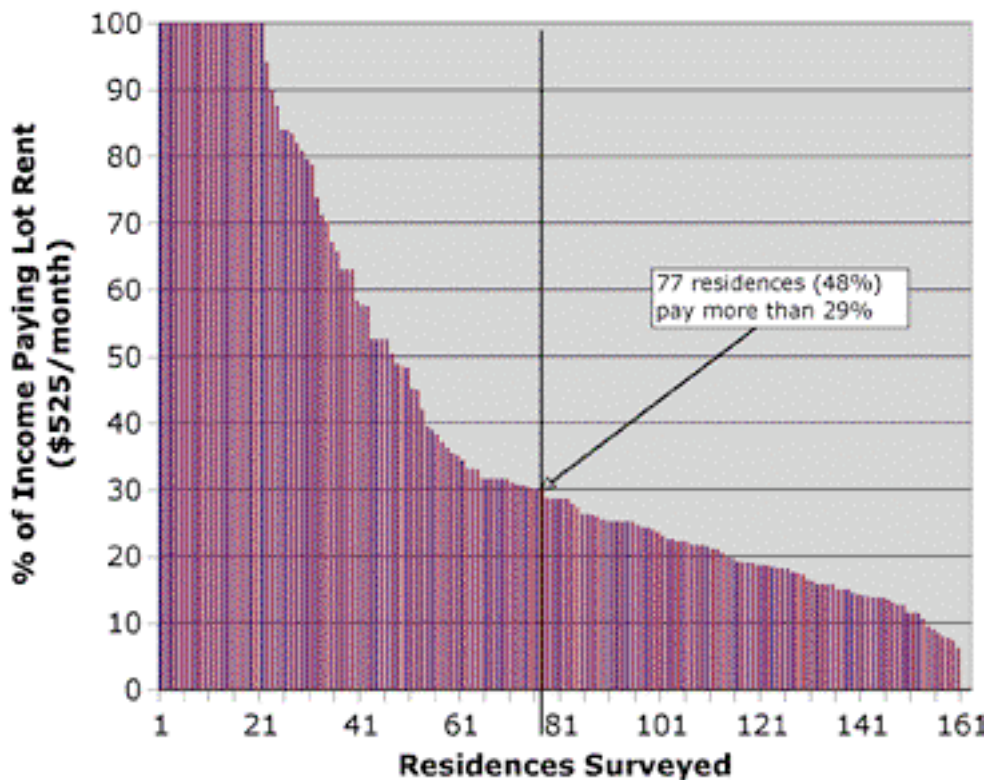
**Question 7.**

Based on the FHA/HUD guideline that housing costs comprise no more than 29% of income, how many Orchard Grove households will pay more than 29% of their income for lot rent, when lot rents rise to market levels?

*When lot rents rise to market levels, or \$525/month, 48% of Orchard Grove households will pay more than 29% of their income for lot rent.*

*Many residents have mortgage payments on top of lot rent.*

**FIGURE 5: PERCENT OF ORCHARD GROVE HOUSEHOLDS PAYING MORE THAN 29% OF INCOME FOR LOT RENT @ \$525/MO**



Ordered from lowest income (left) to highest (right).



### **Question 8.**

If the residents are unable to purchase Orchard Grove and run it cooperatively, and it is owned by a private/corporate investor who increases lot rents to market rates, how will this affect the most vulnerable homeowners?

*Orchard Grove households' median annual income is \$22,000. At 29%, that's \$531 available for housing costs per month. At the current lot rent of \$425/month, half of Orchard Grove's households therefore have less than \$106/month to make mortgage payments.*

*Looking at the most vulnerable residents, the lowest 26% earn less than \$11,000 per year. At \$425/month (\$5,100/year), over 46% of income goes to lot rent. At the predicted lot rent of \$525/month (\$6,300/year), over 57% of income would go to lot rent.*

*It is unlikely that the lowest income households could withstand any further increases in lot rent. In fact, given that lot rent increased from \$350 on November 1, 2008, many of these residents are likely to face eviction even at the current rate.*

The very essence of leadership is that you have a vision.

– THEODORE HESBURGH

## Discussion

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### Orchard Grove Resident Finances

The Income Assessment of Orchard Grove shows clearly that Orchard Grove is a very low-income community. Most pointedly, 26% of Orchard Grove households are officially impoverished. This, in one of the wealthiest per capita cities in the USA.

We believe that it is in Boulder's best interest to maintain a place in the community for Orchard Grove's low-income residents. Purchase of Orchard Grove by a private/corporate investor will push lot rents beyond the modest means of the park's most vulnerable residents.

To that end, stabilizing lot rents at Orchard Grove is of the utmost importance. Until recently, lot rents at Orchard Grove were stable. For at least a decade, Orchard Grove lot rents were fixed at \$300/month or less. (This fact facilitated the wonderfully diverse neighborhood that we call home.) Then, in March 2007, lot rents were increased by \$25/month. In June 2008, lot rents increased another \$25. Most recently, effective November 1, 2008, all lots were increased to \$425/month, an increase of at least \$75/month. Sale of the park to an investor would likely push lot rents to market levels of \$525/month or higher.

This recent pattern of rent increases has been initiated by Orchard Court Development Company, the current owner of the park. However, similar results can be expected under any for-profit entity that might purchase the park in the future. Residents of Orchard Grove believe that the only way to permanently stabilize lot rent is to purchase the park as a tenant-owned cooperative.

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### Mobile Homes as Affordable Housing

Boulder is to be honored for her commitment to quality of life issues. From her pioneering open space program, to accommodating bicycles, and promoting sustainable living practices, Boulder has become a center for innovation and quality of life, which has resulted in economic prosperity. Boulder has also long recognized that its economic success causes problems such as increased in-commuting. Thus Boulder's affordable housing program, as well as inclusionary zoning (among other policies), were implemented.

In the fall of 2008, Boulder City Council restored the protective MH zoning that it intended to apply to Orchard Grove Mobile Home Park in 1985. City Council expressed their opinion that mobile homes provide an important housing type, especially for low and moderate income residents. Both the City of Boulder's Land Use Code and the Boulder Valley Comprehensive Plan (BVCP) stipulate a commitment to diverse housing stocks, especially regarding affordable accommodations. It is a goal of the BVCP to preserve and expand the county's stock of manufactured housing.

Manufactured housing offers unique benefits in this context. They are the only option for very low-income residents who wish to own their own home with all the freedoms and responsibilities that ownership brings. Further, ownership allows residents to build equity.

These benefits of mobile home living, however, do not hold up under the pressure of rapidly increasing lot rents. An eviction generally results in a complete loss of equity, or – worse – when the tenant is responsible for the cost of removing and dumping an older home. To preserve the benefits of mobile home living, and the benefits that this brings to the city, lot rents at Orchard Grove need to be stabilized. This would be best accomplished by a tenant-owned cooperative structure.



## Cooperative Ownership

In completing the Income Assessment of Orchard Grove, it has become apparent that the tenants of Orchard Grove are even more fiscally constrained than had been believed. It is now clear that even slight increases in lot rent will have disruptive consequences on at least a quarter of our households.

Since June 2008, Orchard Grove residents have worked for cooperative ownership of Orchard Grove Mobile Home Park. Our long-standing desire has been to purchase the park independently and manage it with the lowest possible cost to the residents. Due to the reticence of Orchard Court Development Company to sell to or even negotiate with the residents, plus the risks associated with the park's aging infrastructure, this desire has yet to be achieved.

With the results of this Income Assessment in hand, we find a renewed urgency to establish the cooperative and stabilize the shared cost of servicing a mortgage and maintaining the park with the highest standards possible. We also realize that purchasing the park without low-cost housing assistance could leave our most vulnerable residents in the lurch – the purchase price and other costs could result in lot rents too high for them to afford.

Cooperative ownership with 100% financing would put lot rents at approximately \$564/month, if the park could be purchased for \$10.5 million, the price we offered. Even at that price, some of our lower income residents would be unable to pay the lot rent. At a higher purchase price, even more residents will be displaced. In order for the very lowest income residents of Orchard Grove to be able to stay in their homes, financial assistance from the City with some permanently affordable housing support will be required. The results of the Income Assessment have shown us that, without that kind of help, and with the continual threat of further lot rent increases from an absentee private landlord, fully 30-40% of our lower income residents will likely be out on the street. Many of these people are disabled and retired with low fixed incomes, who – without the stability of their homes – will end up accessing multiple public services, including Boulder’s full homeless shelter.

In December 2008, Orchard Grove residents participated in negotiations with several developers and the City of Boulder. The idea, initiated by the developers, was that in exchange for the developers’ assistance to the residents, the City would waive some of the developers’ low-income housing obligations. In a December 2008 memo, Boulder city staff essentially rejected the idea as proposed by the developers, causing those developers to pursue other avenues for satisfying their inclusionary zoning requirements.

Given our new-found understanding of the economic realities of Orchard Grove households, we feel obliged to pursue some assistance vis-à-vis our lowest income residents. To that end, we envision that some lots would pay a discounted lot rent and fall under a permanently affordable, low-income designation. In exchange for such designation, and for increasing the City of Boulder’s permanently affordable housing portfolio, Orchard Grove residents are requesting an infusion of capital from the city, to provide a down-payment on the required loan. Having a down-payment qualifies Orchard Grove residents for lower interest rates, extended payment terms and other advantages that would allow lower lot rents overall, as well as a subset of reduced-rent lots.

It is our sincere hope that the City of Boulder will provide assistance toward our greater dream.

## *Acknowledgements*

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DR. RICHARD WILLIAMS

*We are especially grateful* to Dr. Richard Williams, the guiding light of this project. He patiently, meticulously made sure that the assessment was done according to professional standards, and that our results were valid.

We are indebted to Cindy Brown, Stuart Grogan, Ryan Hibbard, and Liz Wolfert of Boulder Housing Partners, who critiqued our approach, compiled our data, and kindly gave us feedback at every turn.

Orchard Grove residents spent countless hours surveying our community – Soledad Zubia, Humberto Zelaya, Giorgian Zekay, Gretchen Williams, Ruth Waukau, Greta Thompson, James Songfield, Analee Perez, Ava B. Goodheart, Lilli DuHamel, Sarah Canfield, Jeffrey Buechler, and Sam Alschuler: *thank you.*

# Appendix A – Surveys

## ORCHARD GROVE RESIDENT SURVEY

Dear Neighbor,

There is a very real possibility that we, the residents of Orchard Grove, can buy this wonderful park. The agencies that want to help us finance the purchase of Orchard Grove require an eligibility survey of our community.

About the survey:

- The information will be used to determine if Orchard Grove meets the basic income requirements to qualify for funding.
- Providing this information will ensure that our lot costs remain affordable, perhaps even lower than the rent that begins in November 2008.
- The reality is, if we don't provide this information we will not be able to get the funding needed to buy Orchard Grove.

Please answer the following questions:

What is your name? \_\_\_\_\_

What is your lot number? \_\_\_\_\_

What is your ethnicity? \_\_\_\_\_

What is the total number of people living in your household? \_\_\_\_\_

What is the gross annual income of your household for the year 2007? \$ \_\_\_\_\_

Gross income means all of your income – before taxes are paid.

Include all money you receive from employment, benefit payments, and any source.

In a week or two, you will be asked to provide proof of your 2007 income – this can be done with a copy of your 2007 income tax return or a copy of your 2007 social security benefit award statement.

**This information will be kept strictly confidential.** It will be sent only to Cindy Brown, Co-Director of Boulder Housing Partners, one of the agencies in Boulder that works with affordable housing.

Sincerely,

The Orchard Grove Conservancy

## ENCUESTA DE LOS RESIDENTES DE ORCHARD GROVE

**Estimado Vecino,**

Hay una posibilidad muy real que nosotros, los residentes de Orchard Grove, vamos a poder comprar este maravilloso parque. Las organizaciones que quieren ayudarnos a financiar la compra de Orchard Grove requieren una encuesta de elegibilidad de nuestra comunidad.

Acerca de la encuesta:

- La información se utilizará para determinar si Orchard Grove cumple los requisitos básicos de ingreso para calificar para financiamiento.
- Dar esta información asegurará de que nuestros costos siguen siendo bajos, tal vez más bajos que la renta que empieza en Noviembre de 2008.
- La realidad es, si no damos esta información no vamos a poder obtener los fondos necesarios para comprar Orchard Grove.

**Por favor, conteste las siguientes preguntas:**

¿Qué es su nombre? \_\_\_\_\_

¿Qué es el número de su casa? \_\_\_\_\_

¿Qué es su origen étnico? \_\_\_\_\_

¿Qué es el número total de personas que viven en su hogar? \_\_\_\_\_

¿Qué es el ingreso bruto anual de su hogar para el año 2007? \$ \_\_\_\_\_

Este es el ingreso antes de que los impuestos se paguen.

Incluye todo el dinero que usted recibe de empleo y de cualquier otro fuente.

En las próximas semanas, se le pedirá dar prueba de sus ingresos del año 2007 – esto se puede hacer con una copia de su declaración de impuestos para el año 2007 o una copia de sus documentos de la seguridad social.

**Esta información se mantendrá estrictamente confidencial.** Será enviado solamente a Cindy Brown, co-directora de Boulder Housing Partners, una de las organizaciones en Boulder que trabaja con la vivienda asequible.

**Sinceramente,**  
**Orchard Grove Conservancy**

## Appendix B – Is Household Size Related to Income?



The answer, in plain English, is "NO." The crosstabulation procedure shows that the odds are well over 50–50 (69.1%) that incomes are distributed as they are regardless of household size. If we apply the analysis of variance method (ANOVA) to the income figures directly (not just to the percentile rankings), there is a slight indication of a trend that income might increase as household size increases up to 3 persons, but starts tapering off after that, so it is certainly not a linear relationship; that is, income does not increase smoothly and directly with household size, and then only very slightly. The graph is included to show that. Plainly said, household size does not significantly influence income.

TABLE 3: CROSSTABULATION OF SIZE OF HOUSEHOLD AND PERCENTILE RANKING

Frequencies  
PERCGRP (rows) by HHSIZE (columns)

Percent Rank	Household Size					Total
	1	2	3	4	5	
1	14	4	2	3	0	23
2	16	6	2	2	0	26
3	7	7	4	4	3	25
4	14	6	3	6	2	31
5	8	5	2	3	2	20
6	6	5	2	0	0	13
7	1	3	0	0	0	4
8	4	2	1	0	0	7
9	3	2	0	0	0	5
10	2	1	2	1	0	6
Total	75	41	18	19	7	160

TABLE 4: TEST OF STATISTICAL SIGNIFICANCE OF THE HYPOTHESIZED RELATIONSHIP BETWEEN HOUSEHOLD SIZE AND INCOME

Test statistic	Value	df	Prob
Pearson Chi-square	31.318	36.000	0.691

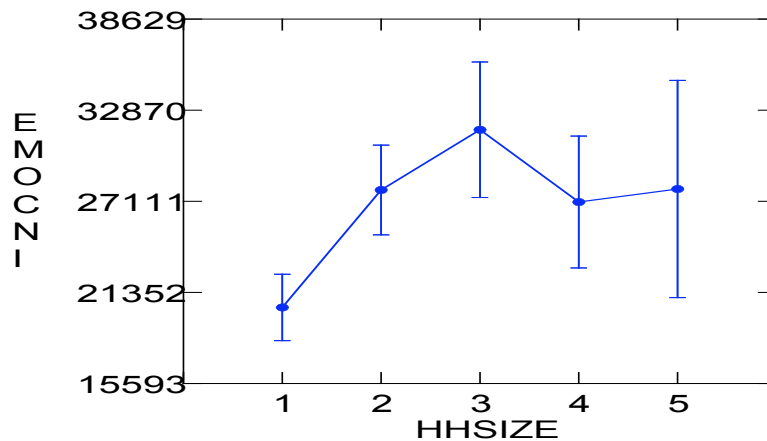
  

Coefficient	Value	Asymptotic Std Error
Goodman-Kruskal Gamma	0.069	0.077
Somers D (column dependent)	0.048	0.053

### *Interpretation*

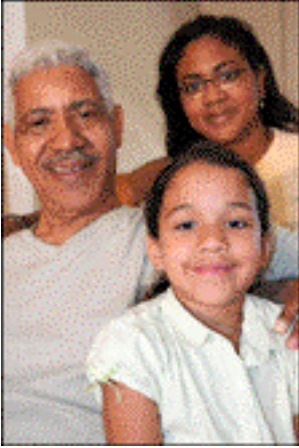
Since the probability associated with the Chi-square is greater than 0.05, there is no indication of any relationship between the size of the households and the income percentile rankings. This could be explained by the fact that the percentile rankings were adjusted for the size of household by the CHFA formula. An ANOVA analysis of income, as influenced by the size of household may be more appropriate for this kind of situation. The results of such an analysis is shown below:

FIGURE 6: SIZE OF HOUSEHOLD AND PERCENTILE RANKING – LEAST SQUARES MEANS



The p-value for the ANOVA was 0.655, indicating a 65.5% probability that there is no systematic relationship between income and household size.

## Appendix C – Is Ethnicity Related to Income?



A statistical analysis of ethnicity vs. income levels shows, not too surprisingly, that there is no significant relationship between ethnicity and income within our park community. The crosstabulation procedure shows that the odds are well over 85% that incomes are distributed as they are regardless of ethnicity.

**TABLE 5: CROSTABULATION OF ETHNICITY AND PERCENTILE RANKING**

Frequencies

PERCGRP (rows) by ETHCODE (columns)

1=Caucasian, 2=African-American, 3=Hispanic, 4=Asian, 5=Native American, 6=Other

	1	2	3	4	5	6	Total
1	15	0	5	2	0	0	22
2	16	2	6	2	0	0	26
3	12	0	11	1	0	0	24
4	16	0	11	2	1	1	31
5	10	0	7	2	0	0	19
6	8	1	2	1	0	0	12
7	4	0	0	0	0	0	4
8	6	0	1	0	0	0	7
9	5	0	0	0	0	0	5
10	6	0	0	0	0	0	6
Total	98	3	43	10	1	1	156

TABLE 6: TEST OF STATISTICAL SIGNIFICANCE OF THE HYPOTHESIZED RELATIONSHIP BETWEEN ETHNICITY AND INCOME

Test statistic	Value	df	Prob
Pearson Chi-square	35.144	45.000	0.854

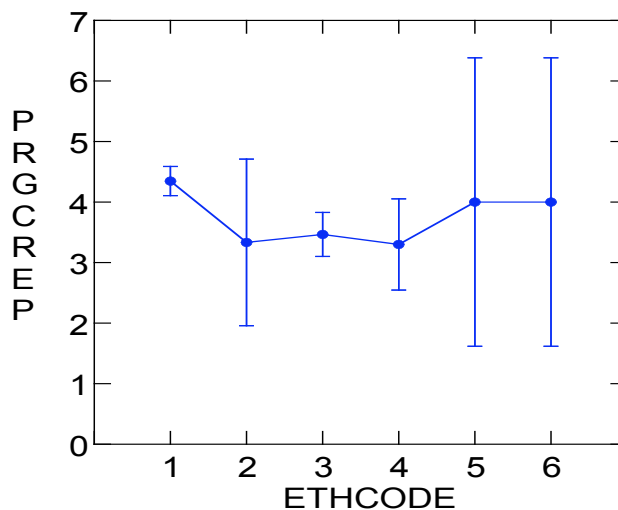
  

Coefficient	Value	Asymptotic Std Error
Somers D (column dependent)	-0.073	0.049

### Interpretation

Since the probability associated with the Chi-square of 0.854 is considerably greater than 0.05, there is no indication of any real relationship between ethnicity and income in Orchard Grove. An ANOVA analysis with ethnicity coded into six categories (Euro-American [white], Afro-American, Hispanic, Asian, and Native American [only 2 families]), and with a comparison of Least Square Means, using percentile levels of income, the P-value was 0.381. This P-value, at 38.1%, is well above the 5% error level necessary to conclude that any real relationship could exist. Even using the family size (formerly found to be unrelated in any case) as a control, the P-value remained at 0.770, much too high an error rate for a significant conclusion. What this kind of analysis shows is that the variation in incomes is much higher within each ethnic group than it is between the groups.

FIGURE 7: ETHNICITY AND PERCENTILE RANKING - LEAST SQUARES MEANS



The p-value of this analysis was 0.381, indicating no significant relationship between ethnicity and income within income within the Orchard Grove community.

# Appendix D – Orchard Grove & Boulder AMI, and National Poverty Thresholds

TABLE 7: 2007 NATIONAL POVERTY THRESHOLDS

**Poverty Thresholds for 2007 by Size of Family and Number of Related Children Under 18 Years**

Size of Family Unit	Weighted Average Thresholds	Related children under 18 years								
		None	One	Two	Three	Four	Five	Six	Seven	8 or more
One person (unrelated individual)	10,590									
Under 65 years	10,787	10,787								
65 years and over	9,944	9,944								
Two people	13,540									
Householder under 65 years	13,954	13,884	14,291							
Householder 65 years and over	12,550	12,533	14,237							
Three people	16,530	16,218	16,689	16,705						
Four people	21,203	21,386	21,736	21,027	21,100					
Five people	25,080	25,791	26,166	25,364	24,744	24,366				
Six people	28,323	29,664	29,782	29,168	28,579	27,705	27,187			
Seven people	32,233	34,132	34,345	33,610	33,098	32,144	31,031	29,810		
Eight people	35,816	38,174	38,511	37,818	37,210	36,348	35,255	34,116	33,827	
Nine people or more	42,739	45,921	46,143	45,529	45,014	44,168	43,004	41,952	41,691	40,085

Source: U.S. Census Bureau

TABLE 8: 2007 BOULDER AMI

Persons	Boulder (CHFADData)						
	100%	80% (adjusted from original chart)	65%	60%	50%	40%	30%
1 Person	\$60,900.00	\$48,720.00	\$39,585.00	\$36,540.00	\$30,450.00	\$24,360.00	\$18,250.00
2 Persons	\$69,600.00	\$55,680.00	\$45,240.00	\$41,760.00	\$34,800.00	\$27,840.00	\$20,900.00
3 Persons	\$78,300.00	\$62,640.00	\$50,895.00	\$46,980.00	\$39,150.00	\$31,320.00	\$23,500.00
4 Persons	\$87,000.00	\$69,600.00	\$56,550.00	\$52,200.00	\$43,500.00	\$34,800.00	\$26,100.00
5 Persons	\$94,000.00	\$75,200.00	\$61,100.00	\$56,400.00	\$47,000.00	\$37,600.00	\$28,200.00