

## ATTACHMENT E

### **An Examination of Single-Family Regulatory Controls and Property Values**

The development of regulatory language to address the impacts of incompatible single-family development is not unique to the city of Boulder. This issue has been felt by a number of communities across the United States, particularly where teardowns have become commonplace. Citizens within these communities are worried that there will be a disintegration of neighborhood character and a destabilization of local property prices due to these new developments. In an effort to curb the adverse affects of these teardowns, many municipalities across the country have implemented ordinances that place restrictions on single-family development which often include floor area ratios (FAR), lot coverage, and setbacks.<sup>1</sup>

Concern has been expressed in many communities, as well as in the city of Boulder, regarding the potential economic consequences to property values when ordinances of this type are adopted. Many feel that these restrictions limit the ability to maximize development potential and thereby cause a decrease in the average home price. To better understand how new regulations restricting the mass and scale of single-family development may affect property values, a review of both empirical and anecdotal evidence was conducted. Included in this report is a spreadsheet of some communities that have adopted similar massing ordinances and the economic effects they experienced.

Of the included case studies, most if not all of the community's experienced positive growth within their housing market. Most notably in Palo Alto, California, where regulations restricting house size have been in place since the 1970's and their housing prices have increased by over 3,000 percent.<sup>2</sup> Additionally impressive is Newton, Massachusetts where the average annual increase of the assessed value of single family homes has exceeded the entire U.S.<sup>3</sup> In other cases, the communities' residential development management ordinances are relatively new, but there has not be any evidence that they have adversely impacted the housing markets in which they have been applied.

While much of the evidence indicates that new regulations effecting house size have not detrimentally harmed property values there is also no direct evidence that these regulations have contributed to housing market growth. Much empirical evidence fails to draw a direct relationship between growth controls and their effect on housing price. It's possible that many of the more desirable communities where housing values continue to increase are likely to have more regulatory control.<sup>4</sup> The direct correlation between the factors in the community that make it desirable and the regulations that control mass and scale of housing can not be definitively reached.

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<sup>1</sup>Alex Wilson and Jessica Boehland, "Small is Beautiful: U.S. House Size, Resource Use, and the Environment," *Journal of Industrial Ecology* Winter/Spring: 2005.

<sup>2</sup>Wayne Martin, "Battling a Palo Alto Myth: Housing Prices Driven Solely by Schools," *Palo Alto Weekly Online Addition* 2005.

<sup>3</sup> John E. Petersen, Professor of Public Policy and Finance, George Mason University, "The Economic Impact of Proposed FAR Regulations, A Report to the Town of Chevy Chase, Maryland," 28 April 2008.

<sup>4</sup>John M. Quigley and Larry A. Rosenthal, "The Effects of Land Use Regulation on the Price of Housing:" *Citiescape: A Journal of Policy Development and Research* 2005: Volume 8, Number 1.

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Location	Regulatory Measure Enacted	Year Adopted	Results
Palo Alto, California	<ul style="list-style-type: none"> <li>▪ Building coverage- 35%</li> <li>▪ FAR - 0.45 for the first 5,000 sq. ft. Any additional square footage must have 0.30 FAR.</li> </ul>	1978; and revised in 2001.	Since 1970's housing prices have gone up over 3000 percent in Palo Alto. <sup>1</sup> Even with the long standing size limitations, the values of single-family homes have increased to relatively high standards. <sup>2</sup> In this area, housing prices have gone up far more than home sizes, this may be attributed to people seeking location based amenities rather than larger homes. <sup>3</sup>
Austin, Texas	<ul style="list-style-type: none"> <li>▪ Building coverage- range between 40% and 45%</li> <li>▪ FAR - 0.40 (ordinance only applies to R1 zoned neighborhoods)</li> </ul>	2006.	Median prices of single-family homes in affected areas have increased since 2006; new home construction permits in the same area are up 23 percent. <sup>4</sup> Several data sets conclude that the implementation of the ordinance has not had a negative affect on the housing market.
Alexandria, Virginia	<ul style="list-style-type: none"> <li>▪ Maximum FAR permitted on lots of:                             <ul style="list-style-type: none"> <li>○ 5,000 sq. ft.—0.45</li> <li>○ 10,000 sq. ft.—0.35</li> <li>○ 15,00 sq. ft.—0.30</li> </ul> </li> </ul>	1951	There is no evidence that its long-term policy of restrictions on residential development has led to a curtailment in housing prices. Between 1999 and 2006, the assessed value of single-family homes rose in Alexandria by an annual average of 16 percent while in other regions the average was around a 15 percent. <sup>5</sup>
Newton Massachusetts	<ul style="list-style-type: none"> <li>▪ Building Coverage- ranges from 15% to 30%</li> <li>▪ Maximum FAR permitted on lots of:                             <ul style="list-style-type: none"> <li>○ 10,000sq.ft.—0.35</li> <li>○ 15,000sq.ft.—0.3</li> </ul> </li> </ul>	1997	Between 1992 and 1997 (before implementation) the value of a single-family home rose on average 2.4 percent per year. Following the passage of the regulations in the years between 1998 and 2008 the average assessed value increased by 8.4 percent per year. This period's average annual increase exceeded the average sale price (4.8 percent) in the entire U.S.
Cupertino, California	<ul style="list-style-type: none"> <li>▪ Building coverage- 45% of the net lot area. An additional 5% is allowed for roof overhangs, patios, porches, and other similar features.</li> <li>▪ FAR - 0.45</li> </ul>	1999	Housing prices continue to go up because of the amenities that residents have access to by living in the city. <sup>6</sup>
Arlington, Virginia	<ul style="list-style-type: none"> <li>▪ Building coverage- from 25% to 45% depending on zoning district.</li> <li>▪ Side wall articulation and height standards</li> </ul>	2005	In the short term, the ordinances have caused little negative impact on property values. Studies have shown that there have been no significant or widespread decreases in value or in future appreciations on single-family residential properties. Available inventory has remained low and the average prices have increased 6 percent. <sup>7</sup>

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Bayside, Queens NY	<ul style="list-style-type: none"> <li>▪ Building coverage – 30%</li> <li>▪ Lowered allowed building height.</li> <li>▪ Many areas have been down-zoned.</li> </ul>	2005	There are fewer teardowns overall, yet this has not put a damper on the market, houses are still being sold in two or three weeks. There have been very few instances where property values have gone down. <sup>8</sup>
Scarsdale, New York	<ul style="list-style-type: none"> <li>▪ Building coverage- range between 20% and 30%</li> <li>▪ Maximum FAR permitted:                             <ul style="list-style-type: none"> <li>○ 5000sq.ft.—0.43</li> <li>○ 10,000sq.ft.—0.35</li> <li>○ 15,000sq.ft.—0.29</li> </ul> </li> </ul>	2002	The average full market value of single-family residences continues to rise; the average increase between 2003 and 2007 was 8.5 percent per year. The village assessor reports that the introduction of the FAR regulations did not have any negative impact whatsoever.
Alamo Heights, Texas	<ul style="list-style-type: none"> <li>▪ Building coverage – 35% (some additional building coverage is provided if 50% of the original structure is saved.</li> <li>▪ FAR – 0.53</li> <li>▪ Side wall articulation and height standards</li> </ul>	January, 2008	Resulted in decreased building permits in the first year, but then became business as usual for new development and remodels. Property values have continued to increase or remain level after the adoption of the new regulations. The city plans to monitor and continue to tweak the code language as needed to ensure proper balance between private property rights and the public good. <sup>9</sup>
Durango, Colorado	<ul style="list-style-type: none"> <li>▪ Building coverage – range from 25 percent to 30 percent</li> <li>▪ FAR – range from .0.45 to 0.50</li> <li>▪ Enacted in four residential districts based on lot size.</li> </ul>	2006	Have not experienced any economic impacts to property values based on new code regulations. <sup>10</sup>

<sup>1</sup> Wayne Martin, “Battling a Palo Alto Myth: Housing Prices Driven Solely by Schools,” Palo Alto Weekly Online Addition 2005.

<sup>2</sup> Sandy Sims, “Buried Measure,” Saratoga News 2001.

<sup>3</sup> Aaron Wheeler, “Market Update for Cupertino,” Report for July 27, 2007.

<sup>4</sup> Kate Miller Morton, “New Home Construction Remains Strong Despite New Rules,” Austin American Statesman 2008.

<sup>5</sup> John E. Petersen, Professor of Public Policy and Finance, George Mason University, “The Economic Impact of Proposed FAR Regulations, A Report to the Town of Chevy Chase, Maryland,” 28 April 2008..

<sup>6</sup> Conversation with Cupertino Planner

<sup>7</sup> Arlington Real Estate Assessment, “Economic Indicators,” Arlington Economic Development 2008.

<sup>8</sup> Marc Ferris, “Bayside: A Posh Corner of Queens Wrestles with Zoning,” New York Real Estate News 2006.

<sup>9</sup> Ann McGlone, Community Development Director, City of Alamo Heights 2009.

<sup>10</sup> Greg Hoch, Planning Director, Durango, CO 2009.

## Economic Overview of Massing and Scale Standards

An important issue for many when considering massing and scale standards is whether they support or detract from property values. A short answer is that it depends on what characteristics confer value. There is an ingrained assumption that limiting size also limits potential profit. It is true that limiting size may limit unit sale value, but this is not the same as limiting profit. Depending on the neighborhood and the reason for purchasing a unit in a given neighborhood, building larger units may or may not confer more profit.

To understand this better, Urban Advisors looked at values in each of the neighborhoods using city GIS data for every parcel in the city. For each area we tested for pricing effects of the year built, land area and unit size in order to understand how each area differed. The results indicate that in a few neighborhoods, restricting size might restrict *profit in an upwardly bound market*, but that in most neighborhoods, creating units near the current size limit increases cost such that little profit is gained despite a much higher sales price.

In some areas of Boulder, building age increases value, while in others, new construction adds value. Larger lot size adds to value in some areas and adds little difference in others. Average building value per square foot varies by area. In each of the areas examined, these factors vary and add differing amounts to the total value of land and buildings. Land values change as building types change so a differential for land value for each area was formulated based on building value to calculate change in land value resulting from the interaction of land value and building value (in all areas, as building value rises land value also rises by some amount).

To evaluate the impact of new standards, we combined the results of our analysis with current construction pricing<sup>1</sup> to see whether the neighborhoods had differences in profit available by adding to unit size. Using typical existing unit sizes, the net profit of an addition to bring the unit up to the FAR proposed in Option 1 was calculated. We then calculated the net profit of adding on to an existing building to achieve a floor area ratio of 0.7 for each lot size. To test for different lot sizes, we used a variety of sizes from small to very large. The results are shown in the tables below.

This analysis is based upon the idea that the potential profit available from increasing unit size is part of the profit to existing owners when they sell (that is, that zoning regulation is capitalized into lot value). Thus a net profit of zero or greater indicates that redevelopment is feasible for a given lot size and floor area ratio. The results indicate that building the largest house does not necessarily confer the best net profit for the existing owner. Reducing the unit size lowers the total unit value, but increases the net change to the owner in most areas. In other words, a current property owner is likely to make more money with a smaller addition than with a larger one in most areas of Boulder.

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<sup>1</sup> New construction was priced at \$200 per square foot (costs range up to \$300/sf for custom work), and remodeling of existing units at \$85 per square foot. Consultation with local contractors indicates that the remodeling number is low, but we wished to be conservative.

<b>Strategy Option 1 FAR Versus Maximized FAR</b>								
Lot Size SF	5,000	7,000	10,000	15,000	20,000	25,000	30,000	50,000
Option 1 FAR	0.45	0.42	0.35	0.3	0.3	0.3	0.3	0.25
New House Size SF	2250	2940	3500	4500	6000	7500	9000	12500
Old House Size	900	1800	2400	3100	3700	3700	3700	3700
<b>Net Change in Value by Area</b>								
Central Boulder	\$ 129,141	\$ 140,281	\$ 221,233	\$ 382,307	\$ 552,954	\$ 775,674	\$ 998,393	\$ 1,884,803
Crossroads	\$ (245,102)	\$ (293,212)	\$ (334,775)	\$ (422,742)	\$ (574,531)	\$ (747,640)	\$ (920,750)	\$ (1,311,851)
East Boulder	\$ (204,802)	\$ (236,723)	\$ (261,404)	\$ (331,104)	\$ (480,775)	\$ (667,918)	\$ (855,060)	\$ (1,235,001)
North Boulder	\$ 103,385	\$ 122,301	\$ 199,827	\$ 335,072	\$ 446,968	\$ 578,012	\$ 709,057	\$ 1,365,946
South Boulder	\$ 97,537	\$ 126,709	\$ 208,997	\$ 338,018	\$ 420,516	\$ 498,991	\$ 577,467	\$ 1,120,630
Southeast Boulder	\$ 77,506	\$ 109,238	\$ 192,807	\$ 320,546	\$ 396,171	\$ 462,184	\$ 528,197	\$ 1,044,803
University of Colorado	\$ 178,605	\$ 233,324	\$ 344,544	\$ 509,266	\$ 606,977	\$ 680,179	\$ 753,380	\$ 1,360,811
<b>Maximized FAR (Takes into account that unit size may be restricted by Solar Regulation)</b>								
Lot Size SF	5,000	7,000	10,000	15,000	20,000	25,000	30,000	50,000
Maximized FAR	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
New House Size SF	3500	4900	7000	10500	14000	17500	21000	35000
Old House Size	900	1800	2400	3100	3700	3700	3700	3700
<b>Net Change in Value by Area</b>								
Central Boulder	\$ 131,375	\$ 143,784	\$ 227,488	\$ 393,030	\$ 567,252	\$ 793,546	\$ 1,019,839	\$ 1,925,014
Crossroads	\$ (395,770)	\$ (529,461)	\$ (756,648)	\$ (1,145,953)	\$ (1,538,812)	\$ (1,952,992)	\$ (2,367,172)	\$ (4,023,892)
East Boulder	\$ (389,117)	\$ (525,729)	\$ (777,485)	\$ (1,215,815)	\$ (1,660,390)	\$ (2,142,436)	\$ (2,624,482)	\$ (4,552,667)
North Boulder	\$ 37,030	\$ 18,256	\$ 14,033	\$ 16,568	\$ 22,295	\$ 47,172	\$ 72,049	\$ 171,555
South Boulder	\$ (17,094)	\$ (53,034)	\$ (111,972)	\$ (212,213)	\$ (313,125)	\$ (418,061)	\$ (522,996)	\$ (942,737)
Southeast Boulder	\$ (48,772)	\$ (88,764)	\$ (160,770)	\$ (285,585)	\$ (412,003)	\$ (548,034)	\$ (684,064)	\$ (1,228,188)
University of Colorado	\$ 21,293	\$ (13,342)	\$ (95,931)	\$ (245,834)	\$ (399,823)	\$ (578,322)	\$ (756,820)	\$ (1,470,815)

The impact of the proposed Option 1 FAR limits should not have an adverse impact on any of the areas evaluated. In all areas except for Crossroads and East Boulder, where no scenarios for redevelopment as modeled showed a profit, the proposed FAR regulations appear to be at a threshold where adding to unit size is feasible, and in addition appear to add to potential profit in most areas.

Another interesting aspect of the comparison is that adding dramatically to unit size does not change the net profit significantly in Central and North Boulder. In most areas, as lot size grows, building to a maximum FAR appears to be uneconomic.

This raises the question of why people are buying units and building the maximum possible. The above table indicates that this is economically feasible only in Central and North Boulder. Where it is less feasible, the question of whether buying decisions are based upon non-economic factors becomes important (i.e. are people willing to spend more than the property is worth to be in the neighborhood). Part of the price inflation of the past eight years has been due to favorable interest rates and an unfounded sense of confidence in markets that has been recently dashed. The pressure to get as much house as possible in the best neighborhood possible, with construction fueled by relatively low transaction costs and appraisal standards that posit an upward price spiral, rather than realistic economic considerations of profit available, may abate in the current economy and financing environment.

At the moment financing and sales trends militate against a continuation of pop and scrape development. Recent sales trends show a decline in sales (a 48 percent year over year decline in Boulder from November, 2007 to November, 2008). This low level of sales is likely to continue until pricing reaches a level consonant with national economic trends and the financial sector of the economy recovers. House pricing is traditionally known as “sticky,” meaning that most people will hold a unit in a down market until prices improve. With fewer people willing to sell and with lenders exercising tighter standards out of aversion to risk, construction is likely to slow or halt.

A well-known study of jurisdictions with zoning controls argues that such controls maintain higher prices of units in comparison with areas that do not have such controls.<sup>2</sup> While some may argue with the meaning of that conclusion, if true it means that Boulder, by maintaining controls over the character of what is built, will maintain value for its present homeowners. This would seem to indicate against a drop in value from regulation.

At the same time, standards for massing and scale do not appear to harm the ability to profit from improving existing units. Standards can also serve to maintain neighborhood character and some measure of affordability for middle-income residents by damping down financially unrealistic development in some areas. In addition, in areas where land costs are low, there is a possibility of maintaining a measure of affordability through regulation that maintains existing neighborhood character. Boulder can expect to hold value better than many cities because of its convenient location between a major metropolitan market and the magnificent surrounding countryside, but it will also hold value because of its sense of community and actions to preserve its character.

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*Edward Starkie, principal of Urban Advisors Ltd., has 23 years experience in real estate that includes moving complex projects from conception and feasibility analysis to financing and development. A particular career focus has been the economic structure of vital urban places, of downtowns and neighborhoods that are pedestrian and transit oriented environments. His work has received four awards from the American Planning Association in the areas of main streets and downtown revitalization, and he contributed to the current EPA guidelines for promoting Smart Growth. His recent work has also gained an award from the California Preservation Foundation and a Charter Award from the Congress for New Urbanism.*

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<sup>2</sup> The study is *Zoning's Steep Price* by Edward Glaeser of Harvard and Joseph Gyourko of the University of Pennsylvania published in 2002 and is available on the web. Their conclusion states, “Measures of zoning strictness are highly correlated with high prices. While all of our evidence is suggestive, not definitive, it seems to suggest that land-use regulation is responsible for high housing costs where they exist.” The dispute one might have with this conclusion is obvious to those living in a great community—great places where the community values the amenities and resources of their city are also those where people insist on community regulation to avoid poor quality construction and poor quality environments. Put another way, we can all agree, I think, that poorly regulated communities with ugly development are less desirable and command lower prices.