An Economic Impact Analysis of an Inclusionary Zoning Ordinance

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Section 1. The Problems with Inclusionary Zoning

Subsidized Housing is Not Affordable Housing

This economic impact analysis began in response to a specific inclusionary housing ordinance in Pleasanton, California. The study results have shown the proposed Pleasanton approach to be so destructive to housing affordability, that it could fairly be described as an anti-affordable housing ordinance. The Pleasanton ordinance, as originally proposed, would require each new housing project to provide 15 per cent of its units as affordable (subsidized) housing in perpetuity for persons with incomes ranging from 50% to 80% of the area median income.

The City staff and policymakers must be commended for their desire to address housing affordability. But inclusionary zoning is the wrong solution to the very real problem of housing affordability.

"Inclusionary zoning makes the perpetrators of housing scarcity feel better, but it actually increases total housing costs."

Local government restrictions upon housing supply have given the Bay Area the highest housing costs in the nation. "Inclusionary zoning" is the term used by those who want to tax the housing consumer to "solve" this self-inflicted lack of affordable housing. With inclusionary zoning, the developer is required to rent or sell new housing units at below their cost of production.

Inclusionary zoning makes the perpetrators of housing scarcity feel better, but it actually increases total housing costs. Study data included in Appendix A, based upon reasonable conservative assumptions, projects that the proposed Pleasanton inclusionary zoning ordinance would cause new housing costs to increase as follows:

- ♦ \$40,587 Increased cost of market rate single family dwellings.
- ♦ \$104 per month Increased rent per market rate multifamily rental dwelling.

Inclusionary zoning exactions raise the cost of new housing, and the cost of the used housing which competes with that new housing. The resulting increase in new and used housing costs dwarfs the size of any subsidies collected from new housing. An eight year projection of the impacts of the proposed Pleasanton inclusionary zoning ordinance shows the following result:

- ♦ \$17,713,832 Eight year total housing subsidy from Inclusionary Ordinance.
- \$243, 243,562 Eight year total increase in private housing costs.
- ♦ \$13.73 Dollar Increase in Private Housing Costs per Dollar of Housing Subsidy.

Although the \$13.73 dollars are paid by private parties, that cost is really a form of government waste. This equates to a public project with a 92.72% administrative cost. (I.e. 1 - [\$1.00/\$13.73])

The Economics of Scarcity

To a socialist, the solution is to have the capitalist apartment owner just cut back his or her profits. But that result simply drives capital away from rental housing construction, because capital will earn higher returns elsewhere. Specifically, the burden of in perpetuity inclusionary rentals lowers the return (projected profit) on potential apartment projects, making them infeasible. Eventually the resulting lack of new supply drives rents up until market rent levels are sufficiently high to "carry" the inclusionary units.

Inclusionary zoning is based upon the same economic strategy as rent control. But the victims are the other tenants, rather than the landlords, because the government cannot force investors to go into the rental housing business, but it can force landlords to stay in the rental housing business. The more government undertakes to manage the scarcity it creates, the more severe the scarcity becomes.

"Inclusionary zoning is based upon the same economic strategy as rent control."

Legal Problems

The State Department of Housing and Community Development has opposed inclusionary zoning in a letter addressed to the City of Pleasanton:

"We do not support the City's adoption of inclusionary requirements and are very concerned that existing in-lieu fee and proposed land dedication requirements will add to the cost of housing for all levels. These additional costs could constrain the development of the market rate units upon which the inclusionary units depend".

Adoption of the proposed inclusionary ordinance would be an act of lawlessness which would render Pleasanton's Housing Element and its implementation legally inadequate.

There is no nexus (i.e. legal connection) between the shortage of affordable housing and the act of creating or buying new housing. The housing consumer is the victim, not the perpetrator of the housing shortage.

Arbitrary Land Use Process

One insidious aspect of the draft inclusionary zoning ordinance is that it throws up a shroud of regulatory uncertainty over every proposed residential project. Under the proposed ordinance, the type of required inclusionary units and their level of affordability is left to be determined on a political basis after the project proposal is received by the City. There is no safe harbor (i.e. no plan) to which a residential project can be designed. There is always an excuse for the City to require a redesign. That means the inclusionary exactions will vary erratically from project to project depending on neighborhood reaction, planner whims, political clout, and degree of

developer desperation. A simple and fair approach to inclusionary housing is to have a set fee which the landowner has the first option to pay, together with incentives which make landowners want the advantages offered for providing inclusionary units.

Alternatives to Inclusionary Zoning

There are many incentive based approaches which could improve housing affordability. For example, a strategy to soften voter resistance to housing supply might be to raise the regional traffic fee high enough to cover the real cost of traffic congestion from new growth. Within less than one City Council term, it would be possible to substantially increase the supply of small homes, condominiums, and apartments in Pleasanton. Quality of life is a function of community setting far more than home size. Pleasanton has a community setting which can absorb a fair share of regional housing needs. But we will achieve that goal only by enabling the housing market rather than further burdening the housing market. (See Appendix B for additional ideas.)

Conclusion

True solutions come from better understanding. The real housing affordability problem is the artificially high price of market rate housing, which would be exacerbated by inclusionary zoning. Our California children can have affordable housing, like the rest of this country, but only when we rediscover and unleash the power of a free housing market. We must work together to develop safe harbor incentives and market based approaches to achieve improved housing affordability.

"We can have affordable housing, like the rest of this country, but only when we rediscover and unleash the power of a free housing market."

Section 2. How Inclusionary Zoning Costs Increase the Cost of Housing

Inclusionary Zoning Is Funded by Private Housing Consumers, Not Developer's Profits

At the joint Planning Commission/Housing Commission public hearing on the proposed inclusionary zoning ordinance, several Commissioners were in denial that the increased costs imposed by inclusionary zoning would affect the cost of market rate housing. After all, their reasoning goes, developers and home sellers will charge "whatever the market will bear".

Pleasanton's exclusionary housing policies have already had a devastating effect on the housing prices this market will bear: Four bedroom tract houses in Pleasanton Valley are now selling for \$600,000. That means the next generation of home buyers, including many of our children, will qualify to live in the kind of home in which they grew up only when their family income reaches about \$175,000 per year, and when they can afford a \$5,000 per month house payment. Now the proposed inclusionary zoning ordinance would add yet another \$40,000 to the cost of that Pleasanton Valley tract home. Here is how it happens:

Figure 1. Housing Market

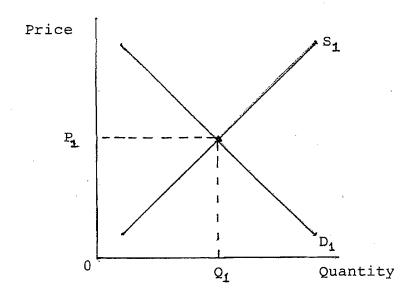
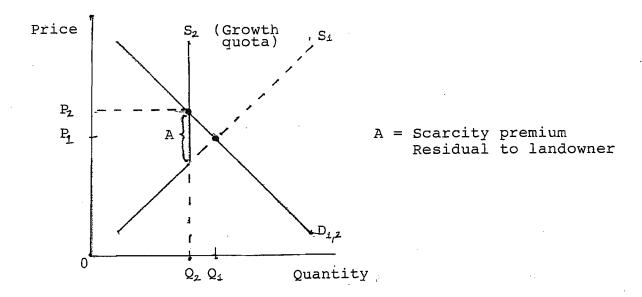


Figure 1. Shows a conventional supply / demand graph for the new home market (for a community like Pleasanton) with supply (S1) and demand (D1) in equilibrium at a price of P1 and quantity of Q1.

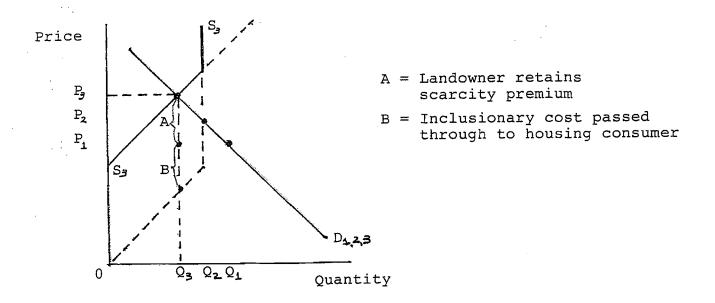
4

Figure 2
Growth Control



- Figure 2 introduces growth control into the housing market. The growth control quota (shown at Q2) effectively alters the supply curve causing it to rise vertically once the growth control quota is reached. With growth control, the equilibrium price increases to P2 and the quantity supplied decreases to Q2.
- At Q2:P2, the difference between the free market supply price and growth controlled equilibrium price is shown on Figure 2 as A. "A" constitutes a scarcity premium which goes to the landowner.
- In the absence of further government intervention, any residual above the cost of producing a house becomes a windfall profit (rent) to the landowner. See <u>Price Theory</u>, by Milton Friedman, University of Chicago, Aldrine Publishing Company 1962, p.142 "The returns to specialized factors are now "rent", at least in part, and in consequence, do not determine price but are determined by it." The windfall profit or rent will only go to the developer if the developer has locked onto an option price prior to the rise in housing prices to P2.
- Now comes the City saying "We created this scarcity premium, so we will now expropriate the windfall profit and apply it to the worthy cause of inclusionary zoning". Figure 3 illustrates what happens next.

Figure 3
Growth Control and Inclusionary Zoning



"The funding source for inclusionary zoning costs is artificial housing inflation in market rate housing."

- In Figure 3, note that the developer is charging "whatever the market will bear" and yet the cost of the inclusionary mandate has been passed through to the housing consumer. The funding source for inclusionary zoning costs is artificial housing inflation in market rate housing.
- In effect, the landowner and City have a shared monopoly. The landowner can charge a "rent" on location and space while the City can charge a "rent" on its zoning permit.
- The landowner and the City each holds out for its expected rent such that the supply curve rises and the new higher equilibrium price is reached at P3:Q3. You can think of this as a test of wills between the City and the landowner (representing the supply side) and the developer (representing the demand for housing). The City exaction is relatively fixed so the landowner's elasticity of supply of land is pitted against the developer/home buyer's elasticity of demand for new homes. When building permits and project approvals become difficult and scarce, the landowner gets his or her "rent", the City gets its "rent" and the housing consumer pays for both rents (A + B in Figure 3).
- Anything the City does to restrict the supply of building permits tends to increase the scarcity premium to the landowner. Land scarcity is self reinforcing in that land bankers will tend to hold land away from the housing market (i.e. restrict supply) when its scarcity value is increasing at a higher rate than its carry cost.

• Because housing is a basic need, like water, the demand is highly inelastic when housing becomes scarce. Thus, entities with monopoly power, like cities, can drive the price of housing to levels far above the commodity cost of producing a house. Since California local governments were granted substantial control over housing supply in the early 1970's, California planning practices have driven the median price of a California home to a level which is nearly twice the median price of a US home. In 1970 California median home prices were approximately equal to the national median.

Increased Demand

Increased demand further increases housing prices. The demand curve is shown as constant in Figures 1,2 and 3 to focus on the supply. That assumption is unrealistically conservative because a record of home price appreciation will typically trigger a rise in the demand curve. A record of housing price appreciation encourages increased investment in housing, bidding up the price of the existing housing stock, because homeowners and investors desire to participate in the windfall gains from rising prices. Moreover with each one dollar increase in housing prices, existing homeowners see an approximately one dollar increase in their home equity, thus increasing effective demand (i.e. home purchasing power).

Decreased Demand

During a severe recession, such as the early nineteen-nineties, housing prices can fall below the cost of producing new housing. But, as soon as the real growth rate turns positive, housing costs will reflect the cost of the inclusionary zoning exaction. With a positive growth rate, the surplus of home buyers will bid up the cost of existing housing until the price level is sufficient to cover the cost of producing new homes for the surplus buyers, including the inclusionary zoning costs. In the absence of inclusionary housing exactions, housing production will pick up again at a lower price level, and will generate the supply which keeps housing prices from rising to higher levels.

"Inclusionary zoning as a strategy is dependent upon maintaining housing scarcity whereas affordable housing is dependent on maintaining housing surpluses."

Cumulative Effects

To borrow a term from the environmental bureaucracy, the "cumulative effects" of Pleasanton's inclusionary zoning are felt beyond Pleasanton's housing market, and vice versa. Livermore's inclusionary zoning ordinance increases Livermore housing prices and chokes off an escape route for those from Pleasanton who would rather not pay \$40,000 more for their housing, and vice versa. For communities which do not undertake comparable inclusionary exactions, there will typically be a blended result with some increased price (based upon higher priced competition in the region) and some increased supply (in response to higher profit potential from the lower cost of production).

Overall, the cumulative effect of supply restrictions by Bay Area Cities has caused a massive decrease in housing affordability. Widespread municipal adoption of inclusionary zoning is a strategy incompatible with improved housing affordability. Inclusionary zoning as a strategy is dependent upon maintaining housing scarcity whereas affordable housing is dependent on maintaining housing surpluses.

Section 3. Inclusionary Zoning is Exclusionary Zoning

Who Really Benefits from Scarcity?

Every California city is required to provide for its fair share of the regional housing need. Many California cities seek to avoid providing their fair share of the regional housing need by means of exclusionary zoning. Exclusionary zoning policies seek to restrict new housing supply below the market demand and, in addition, frequently limit the type of housing, preferring large expensive homes on large lots to small homes and apartments. Theoretically, exclusionary zoning is illegal.

In connecting inclusionary zoning to its exclusionary purpose, it is useful to recall that for each one dollar (\$1) of housing subsidy generated by the Pleasanton inclusionary ordinance, private housing consumers are being forced to pay an additional thirteen dollars (\$13) in market rate housing costs. Standing alone, this formula fails to provide a "rational basis in support of a legitimate governmental interest" which any legislative enactment is required to meet. No rational city council member would support a government program with a cost/benefit ratio of 13/1.

But, we have not yet shown the whole benefit picture. For every dollar in increased housing cost paid by a housing consumer coming into the Pleasanton housing market, an existing homeowner or apartment owner will reap a dollar of increased rent or sales price. These are the primary beneficiaries of inclusionary/exclusionary zoning. Moreover, the homeowner group lives and votes in Pleasanton, while the people who will pay the higher housing costs from the inclusionary/exclusionary zoning do not yet live and vote in Pleasanton. So, the simplistic answer to the question of who benefits from housing scarcity is the existing homeowner.

"For each one dollar (\$1) of housing subsidy generated by the Pleasanton inclusionary ordinance, private housing consumers are being forced to pay an additional thirteen dollars (\$13) in market rate housing costs."

It is not that many of the supporters of exclusionary zoning do not believe in the free market. They merely carry their free market philosophy into the voting booth with them. In their view, Pleasanton is a municipal corporation and they are shareholders of Pleasanton, Inc. They bought their share in Pleasanton, Inc. at one price, and now they want their City Council to maximize their shareholder value, primarily by maximizing their home value. The City Council has done a magnificent job of raising values in Pleasanton Valley to \$600,000 per share. The inclusionary zoning ordinance should produce an additional \$40,000 rise in the value of a share in Pleasanton Inc.

It must be noted that the use of government monopoly power over land use to force up home prices to increase private homeowner equity is not a "legitimate governmental interest". In other words, if you take the exclusionary benefits out of inclusionary zoning, we are back to the cost/benefit ratio of 13/1. The cost/benefit ratio from inclusionary zoning is so small and so negative that it cannot be justified legally, economically, or morally.

But even for those who could care less about affordable housing or future residents, and would willingly accept the benefits of exclusionary zoning, the benefits turn out to be surprisingly skimpy, as described in Section 4. The real answer to the question, "Who benefits from scarcity?" turns out to be "No one."

Section 4. Exclusionary Zoning Is Excluding Our Children from California

The Real Economics of Growth Control

The higher real cost of housing in California is alarming evidence that my generation is failing to produce a better world for our children. Both exclusionary and inclusionary zoning are designed to create housing scarcity. The California strategy of controlling growth through artificial housing scarcity targets the wrong victims. Two thirds of the growth of California during the 1990's has been from our own children.

If my brother's child purchases a home in Denver for less than ½ of the price for which my child can purchase the equivalent home in the Bay Area, who is better off? If the Denver resident's house payment is more than a thousand dollars a month less than the Bay Area resident's house payment, then the Denver resident can apply that difference in purchasing power to an enhanced standard of living. Enhanced purchasing power can mean better schools, more family time, and a bigger house for the Denver resident.

Calculation of lost purchasing power from inflated housing prices:

	Median House Price ¹	Monthly House Payment ²
San Jose, CA PMSA	\$410,000	\$2,406.77
Denver, CO PMSA	\$172,000	\$1,009.68
Wasted Purchasing Power: (Per month)		\$1,397.09

This calculation of wasted purchasing power represents a reasonable approximation of the price of California's growth control.³

In effect, artificial housing inflation operates as a tax upon economic ignorance. The Bay Area, in particular, has combined the most productive private sector in the nation with the most restrictive government housing policies in the nation to produce a very mediocre standard of living relative to our productivity.

"The California strategy of controlling growth through artificial housing scarcity targets the wrong victims."

Paper Wealth

But what about all of us existing California homeowners with our appreciated home equity? It's paper wealth. The owners of existing houses do see their home equity increase dollar for dollar with the inflated home price. But what can a homeowner do with this paper wealth?

First, the paper wealth of overpriced housing is almost worthless unless the owners move out of state. And this only works until other states start restricting their housing supply like California.

Second, increased home equity can be turned into cash by refinancing the home. But then, of course, that higher debt must be paid back.

Third, some increased home equity can be liberated by moving to a smaller, cheaper home; i.e. by lowering your living standard.

Fourth, if the house is sold at the current inflated price, the proceeds of sale buy only an equivalent house, so the homeowners are no richer.

Fifth, the homeowners can roll their increased home equity forward as a higher down payment on a larger, more expensive house. But, in so doing, the homeowners are forced to buy housing at the new inflated housing price level. Thus, the homeowners become victim of the very artificial inflation which increased their home equity in the first place.

The Anti-growth Ponzi Scheme

In order for the homeowner to come out ahead, financially, on the move up house, a new increased level of housing scarcity must be attained. Only by creating greater housing scarcity can there be more housing inflation, which is necessary to generate more home equity. What we have going in California is a Ponzi scheme in which the addictive fix of increased home equity requires ever greater inflation in real housing costs.

With this Ponzi scheme, any increase in California real income gets sucked into higher housing costs. But even with greater scarcity, home price increases cannot exceed the growth in family income for extended periods because at some point prospective purchasers no longer qualify for home loans. This Ponzi scheme finally reaches its limit when housing prices climb to the point that a preponderance of young families are priced out of the California housing market and are forced to leave the state.

"Two thirds of the growth of California during the 1990's has been from our own children."

Who really pays?

As it turns out, the existing homeowner is forced to pay real dollars for that paper wealth. Through the magic of economics, the higher cost of California housing is fed back to the existing homeowner in the cost of virtually every private product and public service in California. This happens primarily through operation of the labor market.

For example, California ranks 37th among the states in total K-12 education spending per student. But because of its artificially inflated housing prices, California ranks 9th among the states in teacher salaries and 50th among the states in student/teacher ratio.⁴ When teachers apply that 9th highest teacher salary to purchase of overpriced California housing, the new teacher's living standard also ranks near 50th. Our kids get bigger class sizes and our new teachers get near subsistence living standards. Moreover, many California schools are having trouble finding new teachers and have been forced to reduce their quality standards for new teachers. This is just one example of how the economy passes the cost of housing scarcity on to all consumers, no matter when they bought their home.

The Intended Victims Do Not Pay

The intended victims of housing scarcity are in-migrants to California from elsewhere. However, in-migrants typically avoid the housing scarcity because of labor market competition for their services. Specifically, in order to attract the engineers or technicians from Denver or elsewhere, the Bay Area firm has to offer its prospective employee a salary high enough to compensate for the overpriced Bay Area housing market. Otherwise, she won't take the job. Not surprisingly, recruitment of skilled employees has become a major problem for Bay Area employers.

Another group of people who are not victim to our high housing prices are distant purchasers of products made in the Bay Area. The purchaser of a computer in Denver or Taiwan will not pay one red cent above the world market price for a computer, just because the people who made that computer live in the overpriced housing of the Bay Area. If Bay Area residents choose to squander the highest incomes in the nation on artificially high housing prices, that is a local political choice. The market does not permit us to foist that cost off on distant consumers.

"The anti-growth advocates are proposing a California in which our children must choose between living in poverty or leaving the state."

The Primary Victims: Our Children

The primary victims of artificial housing inflation are our own children. When our sons and daughters want to buy a house in the Bay Area (or equivalent communities) the real price may be double or triple what we paid. And our children will not have inflated home equity to roll forward as a down payment.

Our children will face far higher real costs of housing than we faced, and therefore will face lower standards of living than we faced. The anti-growth advocates are proposing a California in which our children must choose between living in poverty or leaving the state. How ironic, and how just, that people who set out to enrich themselves at the expense of others, succeed primarily in impoverishing their own children.

"How ironic, and how just, that people who set out to enrich themselves at the expense of others, succeed primarily in impoverishing their own children."

Footnotes:

- 1. From NAHB (National Assoc of Homebuilders) Web page, Website Facts and Figures. Housing Opportunity Index: First Quarter of 2000.
- 2. Both examples assume 20% down payment, 30 year loan at 8.0% interest with property taxes and insurance not included. I.e. \$82,000 down payment for San Jose median and \$34,400 down payment for Denver median.
- 3. This is true to the extent that other economic factors (primarily the cost of building materials) are comparable between the metropolitan regions. Differences in many factor costs, such as wage level for construction workers, can be caused by differences in housing costs as well as being a cause of such differences.
- 4. EdFact Report, EdSource, Inc. Palo Alto, CA, September 1998. Data are for the 1996-97 school year, which is after implementation of California's "class size reduction" program.

APPENDIX A

ECONOMIC IMPACT

ANALYSIS DATA SERIES

Study Assumptions

1. Table 3: Row A, Column 1

The model for analysis of Pleasanton's draft Inclusionary Zoning Ordinances is set out in Table 3. The simplified model assumptions are compared with data in the 1999 Growth Management Report ("GMR") at Table III - 2, as follows:

	<u> GMR</u>	<u> Model</u>
Total Dwelling Units	23,184	23,000
Single Family Units	15,167	15,000
Multifamily Units	8,017	8,000

2. Table 3: Row D

The Pleasanton General Plan sets a growth goal of 350 dwelling units per year and the model assumes growth of 300 dwelling units per year.

3. Table 3: Rows E and F

The model assumes 220 single family dwelling and 80 multifamily dwellings per year (Single family 73.3%; multifamily 26.7%).

4. Table 3: Rows H and I

The model assumes 15% of all new single family units and 15% of all new multifamily units are "inclusionary" subsidized units.

5. Table 4: Row E "Impact Per Subsidized Unit Per Year".

This statistic is based upon Table 1, No. 3, which calculated the subsidy per affordable unit at \$140,000. Monthly payment for 30 year equal amortization loan of \$140,000 at 8% interest is \$1,027.28 per month, which equals to an annual subsidy of \$12,327 - as shown in Row E.

6. Table 4: Row G "Cost Per Year Per Market Unit of Subsidy".

Table 1, No. 6 shows \$40,587 cost per market rate unit of inclusionary mandate. Table 4 Row G is the annual cost to a homeowner on a \$40,000 30 year loan at 8% interest (\$3,522).

7. Table 4: Row H "No. of Market Rate Units Impacted by Subsidy".

This is a key assumption of the analysis. The formula assumes that, in addition to all new single family units being impacted by the subsidy cost, that 10 percent of existing houses are sold each year, and their sales prices reflect and incorporate the higher home prices for new units resulting from the inclusionary mandate. E.g. Formula for H3: (Stated verbally)

H3 equals: "Previously impacted single family homes plus new market rate single family homes plus 10% of previously unimpacted existing single family homes".

$$H3 = H2 + B3 + .10 [A3 - H2 - D3]$$

$$H3 = 3221 + 187 + .10 [15,440 - 3221 - 99]$$
 or 4620 units

Over the eight year period, the number of price impacted homes gradually rises to 60.59% of the total.

8. Table 5: Row E "Impact per Subsidized Unit per Year".

This figure is based upon annualized value of the \$592 per month per unit rent subsidy from Table 2.

9. Table 5: Row G "Annual Increase in Rents per Market Rate Unit"

Annualized value of a \$104 per month per unit subsidy cost.

10. Table 5: Row H "No. of Market Rate Units Impacted by Rent Subsidy"

This is a key assumption of this analysis. The model assumes that the higher cost of market rate rentals (resulting from inclusionary mandates) migrates into existing market rate rental units at 25% per year. Thus, after four years, all existing and new market rate rents have incorporated the cost of the inclusionary mandates.

11. Entire Study

As a simplification, the model assumes all multifamily units are rented and all single family units are owner occupied. In actuality, some multifamily units are owner occupied and some single family units are rented, and those differences approximately balance. The 1999 Growth Management Report estimates the overall percentage of owner occupied units at 73 percent and rental units at 27 percent. GMP p.III - 4.

Table 1

Real Cost of 15% Inclusionary Mandate on Single Family Housing Costs

1. Assume

- 17 market rate units
- _3 subsidized units
- 20 total units (15% inclusionary)

2. Market Rate units

Assume average 6000 sq. ft. lot with 2500 sq. ft. units Market price \$700,000+

3. Subsidized units

Assume average 3000 sq. ft. lot with 1200 sq. ft. unit

\$320,000

market price

\$180,000

restricted (subsidized) price

\$140,000

subsidy per affordable unit

4. Cost of direct subsidy:

\$420,000

Direct cost

(i.e. 3 units $\times $140,000$)

\$ 24,705

Direct cost per market unit

(i.e. \$420,000 / 17 market rate units)

5. Additional cost impact from loss of market unit density

E.g. applicable if density of market rate units is reduced below midpoint of general plan density range*

\$180,000

Net value of market rate paper lot

-assume 1.5 market rate paper lots replaced by 3 subsidized

lots.

\$270,000

-additional cost from loss of density

(i.e. $1.5 \text{ lots } \times \$180,000$)

\$ 15,882

cost per market rate unit of density loss

(i.e. \$270,000 / 17 market value)

6. Impact of 15% subsidized units on supply cost of market rate units

\$ 24,705

Direct cost of subsidy

\$ 15,882

Impact of reduced density(when applicable)

\$40,587

Cost per market rate unit of inclusionary mandate

^{*}Even if project is at midpoint of general plan density range or above, there would still be an impact from smaller lot sizes of market rate units on the sales value of those units.

Table 2

Real Cost of 15% Inclusionary Mandate on Multifamily Rental Costs

Consider who pays for an "in perpetuity" set aside of inclusionary rental units. Say, the Pleasanton market permits construction of new rental units at rents of \$1690 per month. Now assume 15% of the units in that project are set aside as affordable units in perpetuity. The only source to cover the cost of the inclusionary units is the market rate tenant. If the inclusionary units are reserved for a range of low income tenants (families at 50%, 65% and 80% of the median income) the affect on the market rate units in a 20 unit apartment complex would be as follows:

	% of Units	No. of Units	Rent per Month	Subsidy per Unit per Month
Very Low Income Unit (50% of median)	5%	1	\$845	\$845
Low Income Unit (65% of median)	5%	1	\$1,098	\$592
Low Income Unit (80% of median)	5%	1	\$1,351	\$339
Market Rate Unit (100% of median)	85%	17	\$1,690	0
Total Subsidy				\$1,776

- Subsidy per market rate unit: \$1,776 subsidy/17units = \$104 per month per unit.
- Market rate rent plus cost of subsidy: \$1,690 + \$104 = \$1,794 per month.
- Percent Increase in market rate rents resulting from subsidy (\$104/\$1,698) = 6.15%.

This model may substantially understate the real impact of inclusionary zoning on market rents in that the model attributes:

- No additional cost to administration of subsidized units, including City control over selection of rental occupants.
- No cost to displacement of market units by subsidized units (and/or the smaller unit sizes and land area which result).
- No cost is assigned to the risk that subsidized rents will fall even further below market rents (thereby increasing the subsidies).
- No cost to the increased uncertainty resulting from the "flexible" inclusionary requirement upon the City discretionary approval process.

Table 3: Housing Unit Counts and Related Assumptions for Analysis of Pleasanton Inclusionary Zoning Ordinance

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	End of Yr 8 Totals
	Number of									
<u>A</u>	Housing Units	23,000	23,300	23,600	23,900	24,200	24,500	24,800	25,100	25,400
	No. of Single Family									
В	Detached Units	15,000	15,220	15,440	15,660	15,880	16,100	16,320	16,540	16,760
	No. of Attached									
С	Multifamily Units	8,000	8,080	8,160	8,240	8,320	8,400	8,480	8,560	8,640
	No. of New									
D	Housing Units	300	300	300	300	300	300	300	300	2,400
	No. of New									
Ε	Single Family Units	220	220	220	220	220	220	220	220	1,760
<u> </u>	No. of New		<u></u>	·						
F	Multifamily Units	80	80	80	80	80	80	80	80	640
•										070
_	No. of New Subsidized	00	00	00	22	00	00	00	00	004
<u>G</u>	Single Family Units	33	33	33	33	33	33	33_	33	264
	Cumulative Total: Subsidized								,	
H	Single Family Units	33	66	99	132	165	198	231	264	
	No. of New Subsidized									
	Multifamily Units	12_	12	12	12	12	12	12	12	96
	Cumulative Total: Subsidized									
J	Multifamily Units	12	24	36	48	60	72	84	96	
	Cumulative Total:									
K	All Subsidized Units (H+J)	45	90	135	180	225	270	315	360	

Table 4: Private Housing Cost per Dollar of Subsidy from Inclusionary Zoning Ordinance, Single family Units

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Totals
	No. of Single									
<u>A</u>	Family Housing Units	15,000	<u> 15,220</u>	15,44 <u>0</u>	15,660	15,880	16,100	16,320	16,540	
	No. of New Single Family									
В	Market Rate Units	187	187	187	187	187	187	187	187	1,496
	No. of New Subsidized				-					
C	Single family Units	33	33	33	33	33	33	33	33	264
_	Cumulative Total: Subsidized									
D	Single Family Units	33	66	99	132	165	198	231	264	
	Impact per Subsidized									
E	Unit per Year	\$12,327	\$12,327	\$12,327	\$12,327	\$12,327	\$12,327	\$12,327	\$12,327	
	Annual Total of Single									
F	Family Subsidy (D*E)	\$406,803	\$813,606	\$1,220,409	\$1,627,212	\$2,034,014	\$2,440,817	\$2,847,620	\$3,254,423	\$14,644,904
	Cost Per Year Per Market									
G	Unit of Subsidy	\$3,522	\$3,522	\$3,522	\$3,522	\$3,522	\$3,522	\$3,522	\$3,522	
	No. of Market Rate Units								,	
Н	Impacted by Subsidy	1,687	3,221	4,620	5,898	7,066	8,137	9,119	10,022	
	Annual Increase in Private Sir	ngle Family H	ousing							
l	Costs from Subsidies (G*H)	•	_	\$16,271,243	\$20,771,903	\$24,888,361	\$28,659,037	\$32,118,508	\$35,297,896	\$175,292,458
	Dollar Increase in Market Hou	-								
<u>J</u>	of Housing Subsidy (I/F)	<u>\$14.61</u>	\$13.94	\$13.33	<u>\$12.77</u>	\$12.24	\$11.74	\$11.28	\$10.85	\$11.97

Table 5: Private Housing Cost per Dollar of Subsidy from Inclusionary Zoning Ordinance, Multifamily Units

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Totals
	No. of Attached									
Α	(Multifamily) Units	8,000	8,080	8,160_	8,240	8,320	8,400	8,480	8,560	
	No. of New Market		•							
В	Rate Multifamily Units	68	68_	68	68	68	68	68	68	544
	No. of New Subsidized			_						
С	Multifamily Units	12	12	12	12	12	12	12	12	96
	Cumulative Total:		-		_					
D	Subsidized Multifamily Units	12	24	36	48	60	72	84	96	
		<u>-</u>								
Ε	Impact per Subsidized Unit per Year	7,104	7,104	7,104	7,104	7,104	7,104	7,104	7,104	
		7,10-	7,104			1,104	1,104	1,104	7,104	
_	Annual Total of	005.040	0.170.100	0055 744	# 0.40.000	6400.040	# E44 400	# 500 700	0004.004	40.000.000
F	Rent Subsidy (D*E)	\$85,248	\$170,496	\$255,744	\$340,992	\$426,240	\$511,488	\$596,736	\$681,984	\$3,068,928
_	Annual Increase in Rents									
<u>G</u>	per Market Rate Unit	\$1,248	\$1,248	\$1,248	\$1,248	\$1,248	\$1,248	\$1,248	\$1,248	
	No. of Market Rate Units								,	
H	Impacted by Rent Subsidy	2,068	4,136	6,204	8,272	8,340	8,408	8,476	8,544	
	Annual Increase in									
1	Market Rents (G*H)	\$2,580,864	\$5,161,728	\$7,742,592	\$10,323,456	\$10,408,320	\$10,493,184	\$10,578,048	\$10,662,912	\$67,951,104
	Dollar Increase in Market Re	nt								
J	per Dollar of Rent Subsidy	\$30.27	\$30.27	\$30.27	\$30.27	\$24.42	\$20.52	\$17.73	\$15.64	\$22.14
	(Row I divided by Row F)						*	•	·	<u> </u>

Table 6: Increase in Private Housing Costs per Dollar of Subsidy From Pleasanton Inclusionary Zoning Ordinance over Eight Years

		Totals
	Eight Year Total of Single Family Subsidy	
Α	From Table 2, Row F	\$14,644,904.00
	Eight Year Total of Multifamily Subsidy	
В	From Table 3, Row F	\$3,068,928.00
	Eight Year Total Subsidy	
С	(A + B)	\$17, 713,832.00
	Eight Year Increase in Private Single Family Housing Costs from Subsidies	
D	From Table 2, Row I	\$175,292,458.00
	Eight Year Increase in Multifamily Market Rents from Subsidies	
E	From Table 3, Row I	\$67,951,104.00
-	Eight Year Increase in Private Housing Cost	
F	(D + E)	\$243,243,562.00
	Dollar Increase in Private Housing Costs per Dollar of Housing Subsidy	
G	(F / C)	<u>\$13.73</u>

Appendix B

Examples: Possible Incentive based Affordable Housing Policies

square foot in size.	
2. The affordable housing fee shall be \$ foot unit size that exceeds 1500 square feet. (E.g pay 500 x \$) (X = \$ and a 3000 square (X = \$).	g. A 2000 square foot home would
3. Landowner shall always have the option of affordable housing. [Otherwise, it's not an incen substantially different from project to project.]	

1. No affordable housing fee shall be required for any housing unit less than 1500

5. Affordable units may be supplied onsite or offsite, so long as located within Pleasanton.

About the Author: Peter MacDonald

Peter MacDonald has a B.A. in Economics from University of Montana 1969, a M.S. in Urban Planning from University of Arizona 1972 and a Jurisdoctorate from the University of Arizona 1975. He has been a member of California Bar Association since 1976. He served as City Attorney for the City of Pleasanton from 1982 through 1988. Since 1988 he has practiced law in Pleasanton specializing in planning law. He has been active in community affairs having served as president of the Bay Area City Attorneys Association, the Pleasanton Chamber of Commerce, the Eastern Alameda County Bar Association, and the Rotary Club of Pleasanton. He is presently the Chair of the Board of Directors of Valley Community Bank in Pleasanton.

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