

Inclusionary Housing and its Impact on Housing and Land Markets

By David Rosen

What Effect Has Inclusionary Housing Had on Housing Production in California Cities?

To determine if inclusionary housing programs are associated with a decline in housing production, the author compiled data on annual housing starts over a 20-year period in California. For the period 1981 through 2001, annual new construction residential building permit figures for 28 cities-with and without inclusionary housing programs-located in Los Angeles, Orange, San Diego, San Francisco and Sacramento counties were reviewed. The author also analyzed housing start data for the State of California for the same period. The analysis includes separate tabulations for single family and multifamily housing starts.

The annual housing start data were then compared to passage of the 1986 Tax Reform Act (which significantly reduced favorable tax treatment for the construction of market-rate investment property) and key economic indicators: the prime rate, the 30-year mortgage rate, the unemployment rate and area median home price.

An analysis of these data shows that for the jurisdictions surveyed, adoption of an inclusionary housing program is not associated with a negative effect on housing production. In fact, in most jurisdictions as diverse as San Diego, Carlsbad and Sacramento, the reverse is true. Housing production increased, sometimes dramatically, after passage of local inclusionary housing ordinances.

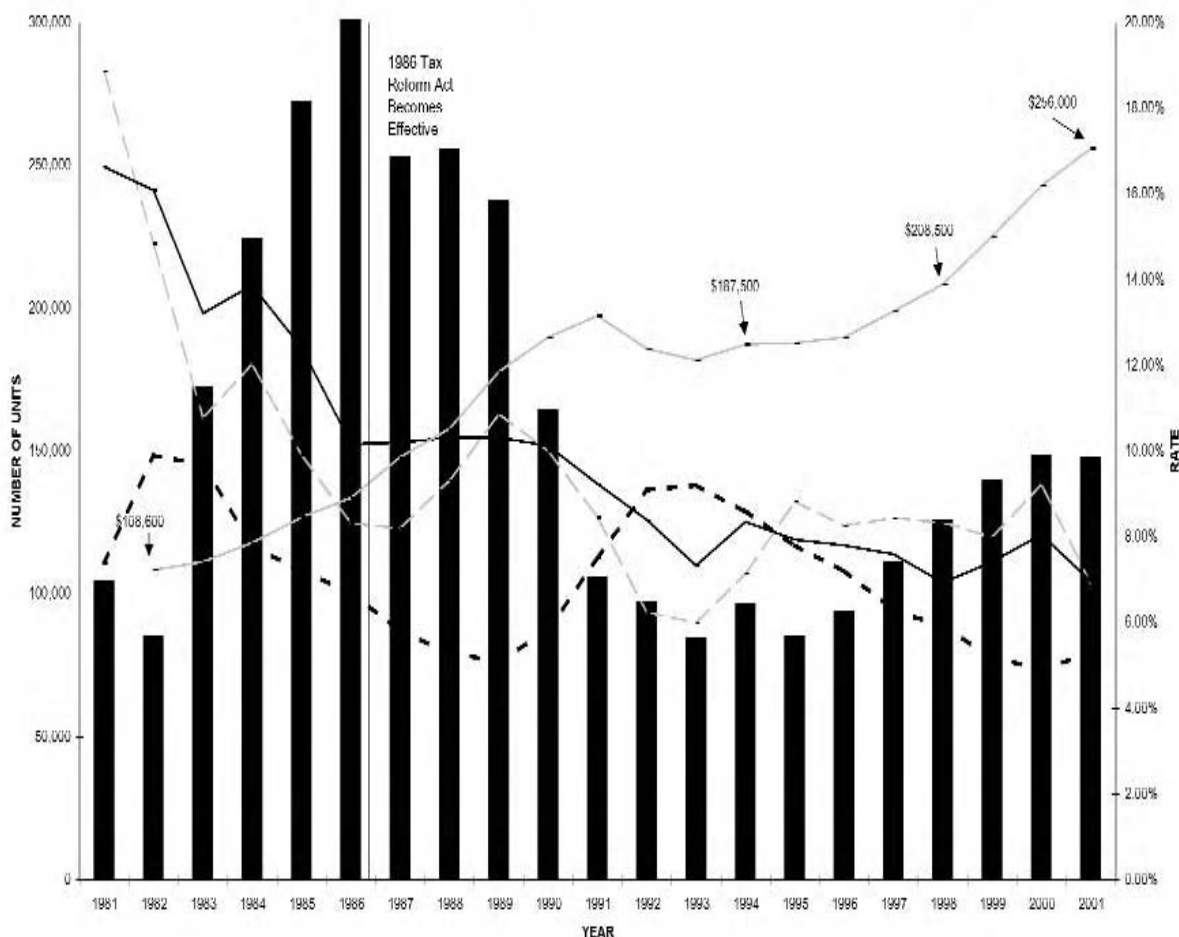
In only one of the cities surveyed, Oceanside, did residential building permit activity drop immediately after passage of inclusionary zoning (from 1,430 units in 1991 to 536 units in 1992). Although the inclusionary housing ordinance adopted in 1991 may have had some effect, other factors may have had a more important impact on housing production. The Gulf War (1990-91) dramatically increased vacancy rates in Oceanside, which is located next to United States Marine Corps Camp Pendleton. According to Margery Pierce, Director of Housing and Neighborhood Services for Oceanside, the vacancy rate increased to approximately 17 percent during that war. Second, the San Diego County unemployment rate increased steadily beginning in 1990 through 1993. In fact, housing starts were down during the same years for other cities in San Diego County: Escondido, Carlsbad, Chula Vista and San Diego itself.

A review of the data indicates that the one factor that most clearly tracks housing production is the unemployment rate. For most jurisdictions, there is an inverse relationship between the county unemployment rate and housing production. In Los Angeles, housing production figures have an inverse relationship with the Los Angeles County unemployment rate. For example, beginning in 1989 and through 1993, the increase in the Los Angeles County unemployment rate tracks the dramatic decrease in new housing production. Modest increases in new housing production did not occur until the late 1990s. Unemployment steadily dropped beginning in 1994 and continued to drop through 2000. The unemployment rates in Orange, San Diego, San Francisco and Sacramento Counties as well as the state follow similar patterns.

The passage of the 1986 Tax Reform Act is associated with a sharp drop in new housing production. The act ended favorable tax treatment of market-rate rental housing, which effectively subsidized that housing. In almost all jurisdictions surveyed, housing production figures dropped significantly after 1986. In Los Angeles, the highest number of residential units (as measured by building permits) was developed in 1986. After 1986, housing production figures dropped dramatically until a small upward trend in production beginning in the mid to late 1990s. Carlsbad is another example of a city that experienced a dramatic drop in housing production in 1987. In most instances, the drop in housing production after 1986 was not immediate. Therefore, it may be a combination of the recessionary period beginning in the early 1990s and the 1986 Tax Reform Act that dampened production of housing.

Chart 1 summarizes residential building permit figures over time for the State of California.

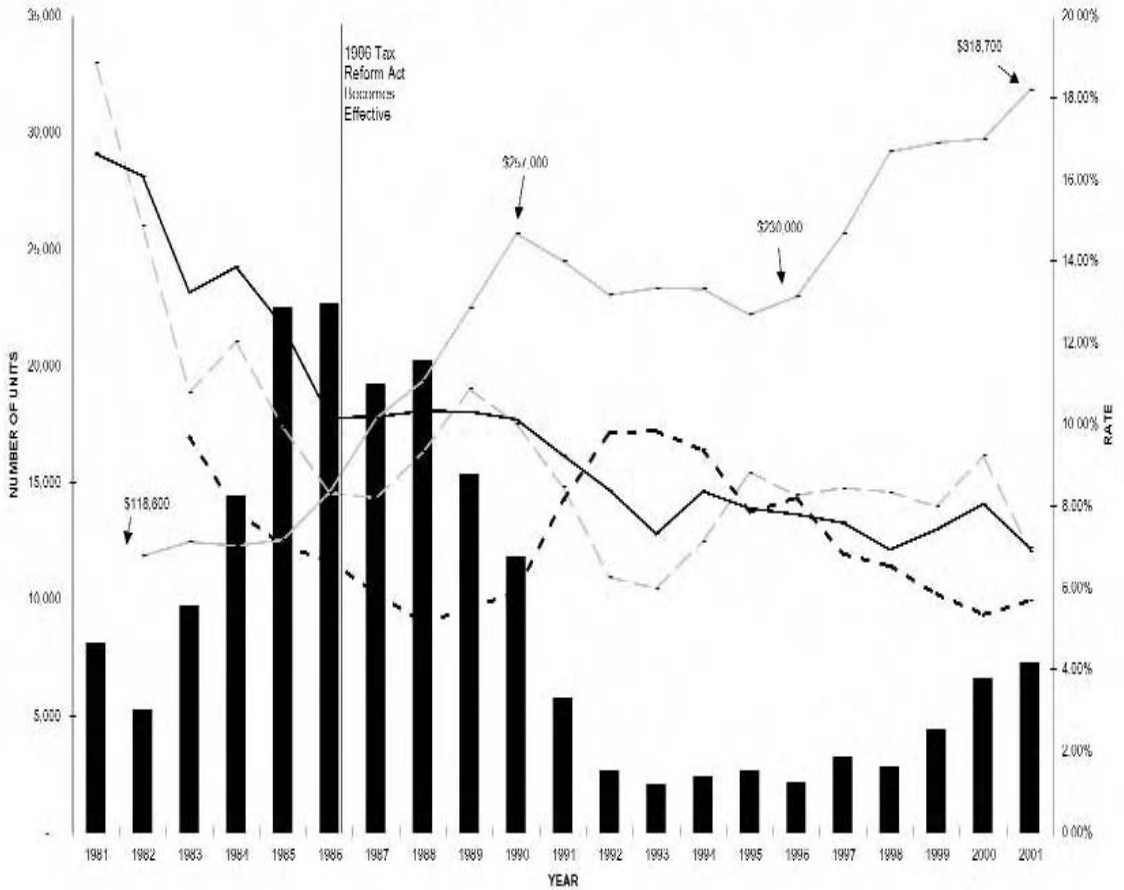
Chart 1: STATE OF CALIFORNIA TOTAL RESIDENTIAL BUILDING PERMIT ACTIVITY, 1981-2001



Sources: David Paul Rosen & Associates, Oakland, California
 Residential Permit Data - Construction Industry Research Board
 Unemployment Rate - Employment Development Department, Labor Market Information
 Prime Rate - Federal Reserve Board
 30 Year Mortgage Rate - Federal Home Loan Mortgage Corporation (FHLMC) Survey of Major Lenders
 Median New Home Price - Construction Industry Research Board

Chart 2 shows the residential building permit figures for the City of Los Angeles.

Chart 2: CITY OF LOS ANGELES TOTAL RESIDENTIAL BUILDING PERMIT ACTIVITY, 1981-2001

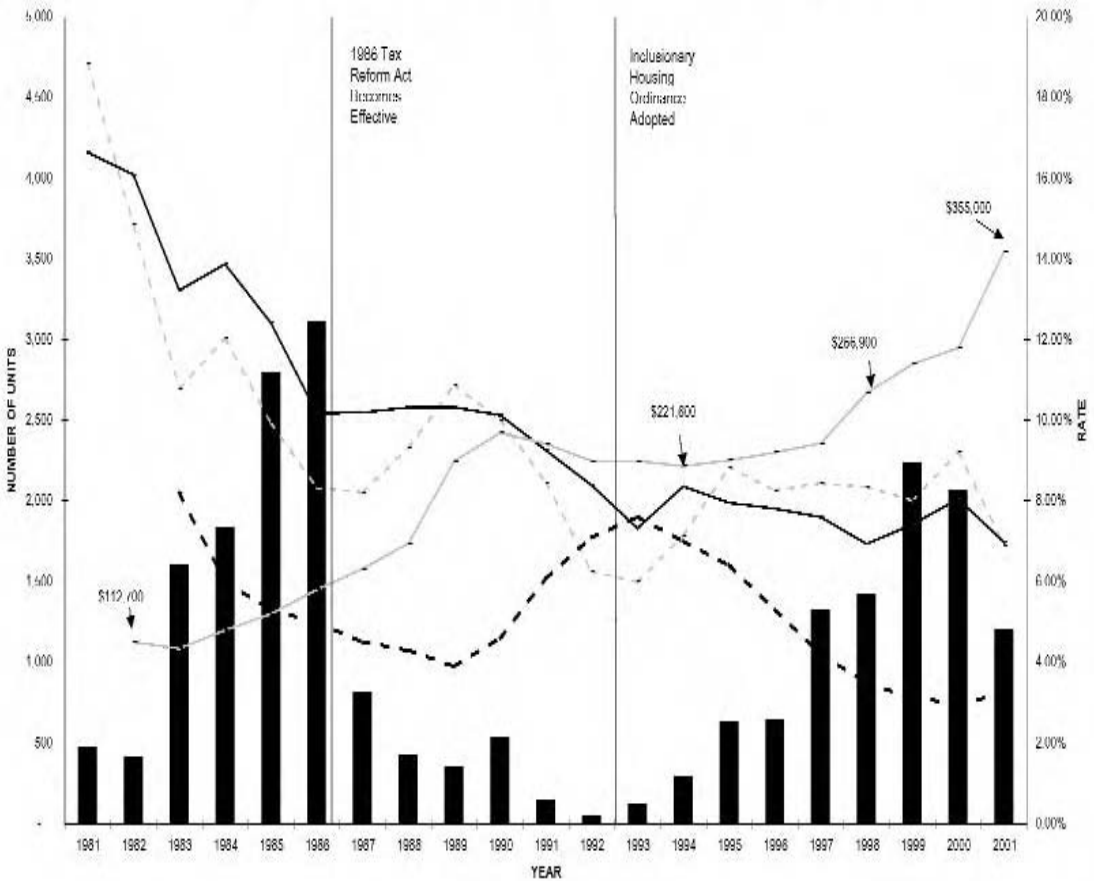


Sources: David Paul Rosen & Associates, Oakland, California
 Residential Permit Data - Construction Industry Research Board
 Unemployment Rate (seasonally adjusted) - Employment Development Department, Labor Market Information
 Prime Rate - Federal Reserve Board
 30 Year Mortgage Rate - Federal Home Loan Mortgage Corporation (FHLMC) Survey of Major Lenders
 Median New Home Price - Construction Industry Research Board (CIRB provides data by county, not city)

Chart 3 displays trends in the City of Carlsbad (one city in San Diego County with inclusionary housing).

In conclusion, after reviewing 20 years of building permit history for both multifamily and single family housing in 28 California jurisdictions plus the state itself, no correlation whatsoever was found between a city's adoption of inclusionary housing and a reduction in housing development activity.

Chart 3: CITY OF CARLSBAD TOTAL RESIDENTIAL BUILDING PERMIT ACTIVITY, 1981-2001



Sources: David Paul Rosen & Associates, Oakland, California
 Residential Permit Data - Construction Industry Research Board
 Unemployment Rate - Employment Development Department, Labor Market Information
 Prime Rate - Federal Reserve Board
 30 Year Mortgage Rate - Federal Home Loan Mortgage Corporation (FHLMC) Survey of Major Lenders
 Median New Home Price - Construction Industry Research Board

Measuring the Cost and Feasibility of Inclusionary Housing

In order to assess the potential impact of alternative inclusionary housing requirements and incentives, one needs to start with basic information on how housing actually gets built in a city today. Using information from developers, one can establish the economic assumptions, development prototypes and incentives to be used in the analysis.

The approach takes care to quantify the cost of imposing an inclusionary obligation on housing developers. The approach also measures the economic value of various incentives and alternative compliance options a city may provide to offset this cost.

Inclusionary housing imposes a prospective cost on development which can be partially to completely offset with economic incentives and alternative compliance options. We determine whether and to what extent the cost of alternative inclusionary requirements can be offset by the value of incentive “packages.”

This analysis assists policymakers in making informed decisions about inclusionary housing for their communities. A land residual value analysis is used to measure these effects.

Some policymakers and developers concerned with the adoption of inclusionary housing assert that it will drive up the price of apartments and homes. This assertion is belied by the fundamentals of real estate market supply and demand. The price of housing is not a function of its development cost. Rather, housing price, be it rents or sale prices, are solely a function of market demand. For example, a developer may experience an increase in construction interest from that contained in his or her development pro forma. That developer can no more pass along the “cost increase” of higher than projected interest rates to renters or homebuyers than could be done for a “cost increase” associated with inclusionary housing. Similarly, if the price of lumber or steel experiences a sharp increase during a project’s construction, it too cannot be passed on in the form of higher rents or home prices. Conversely, no one expects a developer enjoying lower than projected interest costs to lower rents or home prices accordingly.

Why Was a Land Residual Approach Used?

Land residual analysis is commonly used by real estate developers, lenders and investors to evaluate development financial feasibility and select among alternative uses for a piece of property. The land residual methodology calculates the value of a development based on its income potential and subtracts the costs of development and developer profit to yield the underlying value of the land. An alternative land use that generates a negative land value is not financially feasible. Similarly, an alternative use which generates a land value lower than the land seller is willing to accept is infeasible. Recent land sales (“market comparables”) provide an indication of the range of land prices sellers may accept for different types of land.

Land residual analysis is the most realistic way to view the potential impact of inclusionary requirements on residential development. Developers and landlords already charge the maximum rents and sales prices the market will bear. Therefore, any increase in development costs resulting from government regulation or other factors, will ultimately impact the price of land and/or profits to developers and owners, and cannot

be passed on to the consumer. A reduction in developer profit margins does not necessarily render a project infeasible. Developers typically have “threshold” profit and overhead requirements. When developers reach their maximum profit thresholds, the price they will pay for a given land parcel will be reduced.

In some market climates, developers are willing to build and lenders and investors are willing to finance a development based on a “future value.” One example of such “speculative” development is constructing apartments which may later be sold as condominiums.

What Are the Low, Middle and High Rent/ Land Value Scenarios?

In large cities, residential land sales prices vary widely in different locations. The land prices are tied to the market rents and/or sales prices in different market areas of a city. For the Los Angeles analysis, the author analyzed actual land sales prices for 79 residential developments receiving building permits in the City of Los Angeles in 2001.

The market land sales comparables were divided into thirds based on price per square foot of site area to represent *low*, *middle* and *high* land price ranges in the City. For the rental land residual analysis, the author used *low*, *middle* and *high* average rent data from 45,000 rental units (*RealFacts*, 2002) to calculate rents for the three (low, middle and high) rent/land values scenarios.

Prototype: Los Angeles

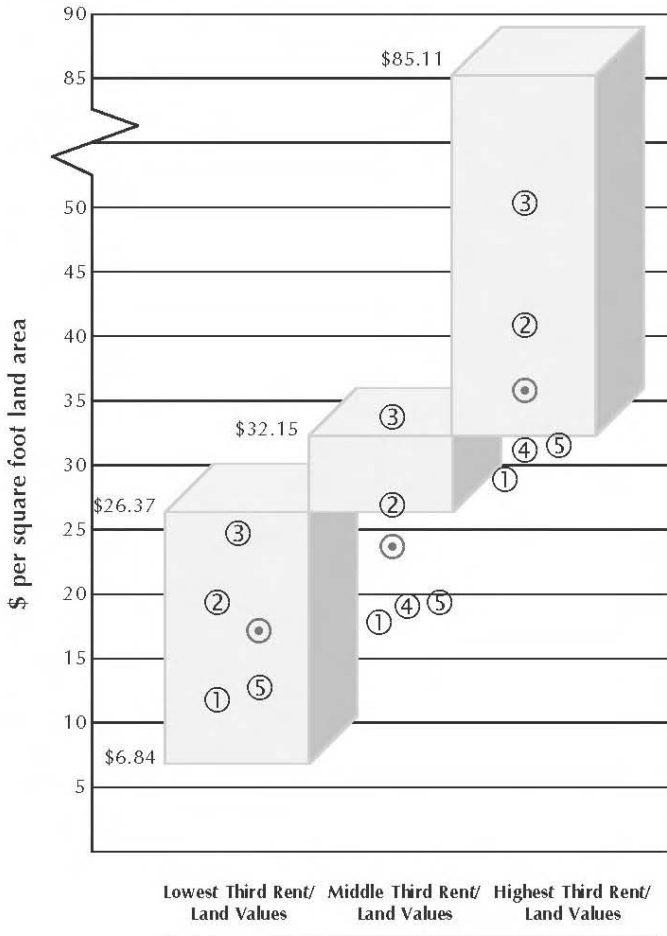
Chart 4 illustrates one set of land residual value findings applying this methodology to the City of Los Angeles. A rental residential development prototype is shown in this chart: a 30-unit infill project of stacked flats at 25 units to the acre with covered parking at grade. In this case, the market-rate prototype in the lowest third of land comparable values and rents for Los Angeles yields a residual land value of approximately \$17 a square foot. Setting aside 10 percent of the units affordable to families at 45 percent of the 2003 area median income (approximately \$25,000) yields a residual land value of \$12 a square foot, with no offsets. A 25 percent density bonus, as required by California state law, yields a residual land value higher than the market-rate prototype: \$20 a square foot. For middle-tier rents and land values, the market-rate prototype yields a land value slightly below land comparables, and suggests that a developer/buyer and land seller may not come to terms on land price for this project. However with the affordable set-aside of inclusionary housing and a 25 percent bonus, land value increases above that for the market-rate project to competitive prices (\$27 a square foot).

For the Los Angeles analysis, most of the 10 prototypes analyzed yielded market comparable land values. Exceptions were adaptive reuse of existing commercial buildings, where no density bonus or parking concessions could reasonably be applied, and high-rise steel frame construction where luxury rents and home prices were not modeled. Los Angeles has seen no high-rise steel frame construction housing in recent years, with the exception of Marina Del Rey, a luxury oceanfront location.

Los Angeles Inclusionary Housing Economic Impact Analysis Land Residual Values Based on Alternative Incentive/Compliance Options

Chart 4

**Renter Prototype:
Type V Low Density Construction**



- KEY: Incentive/Compliance Options ***
- ① No offsets
 - ② 25% density bonus; fee deferrals; affordable unit modifications
 - ③ 50% density bonus; fee deferrals; affordable unit modifications
 - ④ Off-site compliance; fee deferrals; affordable unit modifications
 - ⑤ Multifamily acquisition/rehabilitation compliance; fee deferrals
 - ⊙ Market-rate prototype

The \$6.84-\$85.11 represents actual land sale comparables in Los Angeles for residential projects permitted in 2001.

* All options require 10% of total units to be affordable to households at 45% of the area median income; approximately \$25,000 for a household of four in Los Angeles, 2002.

Chart prepared for the Los Angeles Housing Department.

DAVID PAUL ROSEN & ASSOCIATES

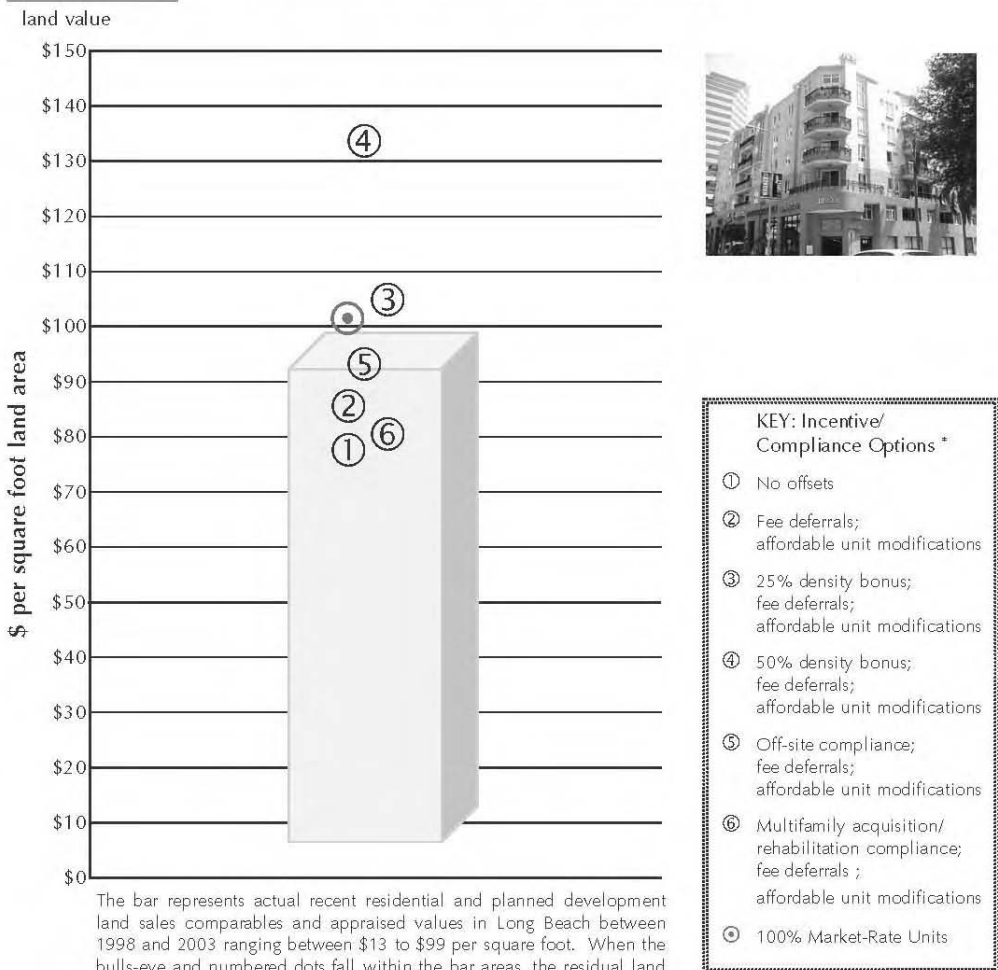
Prototype: Long Beach

Similar results were found for a comparable study in the City of Long Beach. **Chart 5** shows an owner condominium prototype of Type V stack flat condominium construction at 70 units to the acre with one level of subterranean parking. Here, the affordability set-aside is 15 percent of the units at 90 percent of the area median income, or \$50,000 for a family of four in Long Beach in 2003. The market-rate prototype, without inclusionary requirements, yields a land value of \$100 a square foot, slightly above the top of the range of recent land sales in the City. The set-aside requirement, with no offsets, reduces land value to approximately \$78 a square foot, still near the top of the range of land sale comparables in Long Beach. When incentives and/or offsets are added, land values approach, and exceed, the market-rate prototypes' land value.

Long Beach Inclusionary Housing Economic Impact Analysis Land Residual Values Based on Alternative Incentive/Compliance Options

Chart 5

Owner Prototype:
Type V Stacked Flat Condos



The bar represents actual recent residential and planned development land sales comparables and appraised values in Long Beach between 1998 and 2003 ranging between \$13 to \$99 per square foot. When the bulls-eye and numbered dots fall within the bar areas, the residual land values generated by the prototype and "package" option are within the range of recent land sales comparables in Long Beach, and should generally be reviewed as financially feasible.

* All options require 15% of total units to be affordable to households at 90% (45% for package 6) of the area median income; approximately \$50,000 for a household of four in Long Beach, 2003.

In both the Los Angeles and Long Beach analyses, it is important to note that conservative (i.e., high) assumptions regarding developer profit, overhead and interest rates were used. Developer profit and overhead was modeled at 16 percent; construction and permanent interest rates were modeled at 8.5 percent and eight percent respectively. Developer profit is often acceptable as low as eight percent and market interest rates as of this writing are more than two points lower than that modeled. Thus, land residual values are understated, as is the economic feasibility of the inclusionary housing set-asides shown.

Furthermore, holding developer profit constant in this illustration has the effect of assuring an acceptable profit margin. In the real world of land sellers (land owners) and land buyers (developers), land price is a delicate negotiation between the two parties, each seeking to maximize their own profit. If development costs, be they associated with construction interest rates, the price of lumber or steel or the projected costs of inclusionary obligations, are excessive, land buyers and sellers may agree to part company without concluding a sale. We have shown an approach to balance the cost of inclusionary housing obligations against the economic value of a variety of incentives, offsets and alternative compliance provisions. When the combined effect of such costs and incentives does not reduce current comparable land values by more than 10 to 20 percent, the policy package may be deemed economically feasible in a given jurisdiction. Land prices, with no public sector intervention whatsoever through the zoning or regulatory process, readily fluctuate 10 to 20 percent in any given rolling 12-month period. Thus, a projected effect of 10 to 20 percent on land values may be seen as operating within the normal limits of real estate land values within relatively short business cycles.

The land residual value methodology applied to inclusionary housing economic analysis helps policymakers and stakeholders craft inclusionary housing set-aside requirements which maximize the yield of affordable units without unduly restricting land value or developer profit.

Real estate development is a customized process. No project is the same. Thus, citywide analysis may only be properly modeled through prototypes fully representative of the range of housing product developed in that jurisdiction. Political constraints may also restrict the application of various incentives or alternative compliance provisions for an inclusionary housing program. For example, while a density bonus may be offered, if limits on height, floor area ratio or set backs render such a density bonus unusable, it will prove of little value to developers. Similarly, if neighborhood or political opposition forces developers to scale back or eliminate their projects, then prototypical analysis becomes an academic exercise. Development, like politics, is the art of the possible.

Nevertheless, empirical analysis uncovers no chilling effect of inclusionary housing on California jurisdictions which have adopted the program. More importantly, the land residual economic methodology shows that policymakers can craft inclusionary programs which fall within the range of economic feasibility.

Long-term, perhaps no other single local housing policy is more valuable in the production of affordable housing. For the period 1981 through 2001, approximately 190,000 units were built in Los Angeles. If the City had a 15 percent set-aside requirement, throughout that time, 28,500 units of affordable housing would have been constructed.