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How can we build cheaper urban housing?

October 25, 2013 //

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Richardson Housing by David Baker Architects

There were a number of suggestions from readers, via both the blog comments and Twitter, on how we could build cheaper multifamily housing. Here are a few ideas with my thoughts:

1. **Prefabrication** – Most large projects already take advantage of this to some degree. Many contractors pre-frame wood walls in a factory and crane them in to place on site, and things like roof trusses are typically factory made as well. These things can improve the project schedule, which saves money. Prefabricating entire units is possible too- [Zeta Communities](#) is a local company that is doing exactly that. They build entire rooms in a factory and crane them into place on site. SmartSpace in SOMA took advantage of this system and is being called the “[first prefab micro housing project in the US.](#)” Still, this is a system that only works on particular sites. It limits design freedom on difficult sites which can often result in fitting fewer units on a constrained parcel. It is often easier to use these systems on small sites, but I don’t think it’s going to reduce construction cost enough to make a huge difference.
2. **New Construction Technology** – Cross Laminated Timber could reduce costs and construction time. Basically, it’s huge sheets of laminated wood that are cut out in a factory and assembled on site. This technology has already been in use in Europe for a few years and is coming to North

America via Canadian manufacturers. [Check out Murray Grove in London by Waugh Thistleton Architects.](#)

3. **Smaller Units** – San Francisco recently [legalized a trial period for microunits](#), which are apartments that are smaller than what was previously allowed in city regulations. My example in the previous post was an 800 square foot apartment, which is an average size, but you could go a lot smaller (I've lived in a place that was a LOT smaller than that myself). Cost per square foot goes up as size goes down- it's a result of having more bathrooms and kitchens in the same building, but it does create cheaper apartments. I personally don't think there should be a legal minimum size for residences as long as there are no safety issues- if somebody wants to rent it, that's their decision. For a lot of people, living in a very small apartment alone is preferable to having roommates.
4. **SROs** -[Martha Bridegam](#) and I had a chat about these on twitter. There used to be a lot of Single Room Occupancy hotels in San Francisco. There still are some in the Mission and in the Tenderloin (with a sprinkling elsewhere) but they are traditionally where single people at the lower end of the economic spectrum were able to afford to live. They provided a huge source of affordable housing and kept many people off the streets, and the remaining ones still fill this role. Unfortunately, many of these units were removed from the city when they were declared to be blight during the Urban Renewal era. Yerba Buena gardens stands where many low-income people used to live (they were clustered between the old train depot and Market Street in SOMA). UC Berkeley professor Paul Groth wrote a book titled [Living Downtown](#) that I recommend reading that discusses the history of this type of housing. Providing incentives for developers to build modern SRO-type housing in San Francisco (yes, even with shared bathrooms) might be a good way to create non-luxury housing that lower income people and young people on limited budgets would be able to afford. These type of buildings, built without parking and near transit, could be a good way to provide more market-rate affordable housing. I know some people object to this type of development, but it is very similar to a roommate situation and could be equally affordable. It also would not put people renting rooms at the whims of the master tenant, which is often a bad situation.
5. **No/Limited Parking** – San Francisco already has just about the most progressive planning code in the US when it comes to parking. It already sets parking maximums that are below 1:1 (i.e. one space per unit) as opposed to most cities that have parking minimums. It also now requires unbundled parking so people buying a condo unit can decide whether or not to purchase a space, which can reduce the cost of buying significantly. Parking spaces cost A LOT. Tens of thousands of dollars each to build, and they are doubly expensive if they are built underground because the cost of building a basement in an urban area is astronomical (most new residential buildings in SF do not have basements unless there is an underground garage). Identifying areas to zone for “no parking” might be a good option for creating more affordable housing, although neighborhood groups are very likely to oppose this. [Developers often are forced to add additional parking during the planning process to appease neighbors.](#)
6. **Increasing Height Limits to Increase Density** - height limits are set for every part of a city. This is in the planning code and is available online in most places ([San Francisco has lots of online maps](#)). Even slightly taller buildings would allow for more density – there are parts of the city where a few more feet would mean one extra floor. This would be a good way to create more units without changing neighborhoods drastically. However, land is usually priced based on how

many units fit within the zoning. If parcels are upzoned, expect the price to increase as well. Generally, the increased density still outweighs the penalty of the slightly higher land cost.

7. **Find Other Ways to Fund Subsidized Affordable Housing** - the current method of funding BMR units per project puts a big cost burden on the selling price of new units, and is a disincentive to building housing when the market is less-than-booming. There are not many other ways to fund development though, so I'm not sure what this would look like- I would love to hear ideas. With the death of the Redevelopment Agencies at the hands of Governor Brown, California is not handing out money for housing. [Prop C, which passed in 2012](#), created a fund for affordable housing last year but it isn't funded yet. Currently the affordable housing requirement for new construction is the biggest source of affordable units.

Please leave your thoughts in the comments.

Categories [Architecture](#), [politics](#), [San Francisco](#)

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1. [GG](#) says:

[October 25, 2013 at 5:52 pm](#)

Really interesting thoughts – thank you for sharing!



2. [Zouaf](#) says:

[October 25, 2013 at 9:38 pm](#)

All good thoughts. Two more ideas to throw out there:

1. Special development zones, where the city agrees to simplify or expedite the planning process to encourage housing creation.
2. Offering low-cost financing directly to builders on condition that they sell units at or below a certain multiple of cost.



3. [Derek](#) says:

[October 28, 2013 at 2:02 pm](#)

Nice, Mark.



4. [Tim McCormick](#) says:

[October 31, 2013 at 3:10 am](#)

thanks for your interesting and productive thinking on this issue. I would suggest some additional