

Supplemental Communications (1)

(Received after 8am on May
24 and before 12pm May 31)

Communications

From: Dan <daniel.parolek@opticosdesign.com>
Sent: Friday, May 27, 2022 2:10 PM
To: Commission <Commission@cityofberkeley.info>
Subject: Comments on June 1 Missing Middle Draft Standards

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City of Berkeley Planning Commission,

I am submitting these comments on the draft regulations in the document titled “Objective Standards for Middle Housing”, dated June 1, 2022, that has the intent to deliver Missing Middle Housing in Berkeley. I’m excited to see my city initiate the effort to enable a broader range of housing choices, and the draft has made great progress since the earlier draft. I’ve prepared the following recommendations to further inform the refinement of the zoning in order to successfully delivery much-needed high-quality, house-scale, attainable Missing Middle Housing (MMH) choices.

Attached are my recommendations. Do not hesitate to reach out with any questions.

Best,
Dan Parolek
c.510.367.3595

Daniel Parolek (he/him), Founding Principal, RA, AIA
Author of “Missing Middle Housing: Thinking Big and Building Small to Respond to Today’s Housing Crisis”

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A certified B Corporation | Architects of the Missing Middle Housing movement | missingmiddlehousing.com

Comments On:
City of Berkeley
Zoning Ordinance Revision Project
Objective Standards for Missing Middle Housing
May 27th, 2022

City of Berkeley Planning Commission,

I am submitting these comments on the draft regulations in the document titled “Objective Standards for Middle Housing”, dated June 1, 2022, that has the intent to deliver Missing Middle Housing in Berkeley. I’m excited to see my city initiate the effort to enable a broader range of housing choices, and the draft has made great progress since the earlier draft. I’ve prepared the following recommendations to further inform the refinement of the zoning in order to successfully delivery much-needed high-quality, house-scale, attainable Missing Middle Housing (MMH) choices.

The following are my recommendations:

1. Remove the density maximums or at the very least increase the maximum density allowed to remove the disincentive for delivering smaller, more attainable units.
 1. Density-based zoning generally discourages the delivery of smaller, more attainable units
 2. In these draft standards, the density caps in combination with other regulations work against the incentive of allowing more FAR for more units. See metric testing below.
 3. Notes:
 1. Providing a density cap does not provide predictable outcomes. Regulating a predictable maximum form provides predictable outcomes.
 2. Higher density does not have to equal a bigger building but rather more smaller, attainable units with the same form. See image below as an example.
 4. Do the math/testing: On a 50’ x 125’ lot the allowed number of units according to allowed densities and build out are:
 1. R-1H zone
 1. Max density: 20 du/acre = 3 Units allowed on this lot size
 2. Max FAR =1.0 (3 units)
 3. Total developable square footage= 6250
 4. What will get developed: Three 2,083 square foot units are allowed/encouraged
 1. These will not be attainable units. At least 5-6 units need to be allowed in this zone on this size lot to deliver any level of attainability.
 2. R-1A, R-2 zones

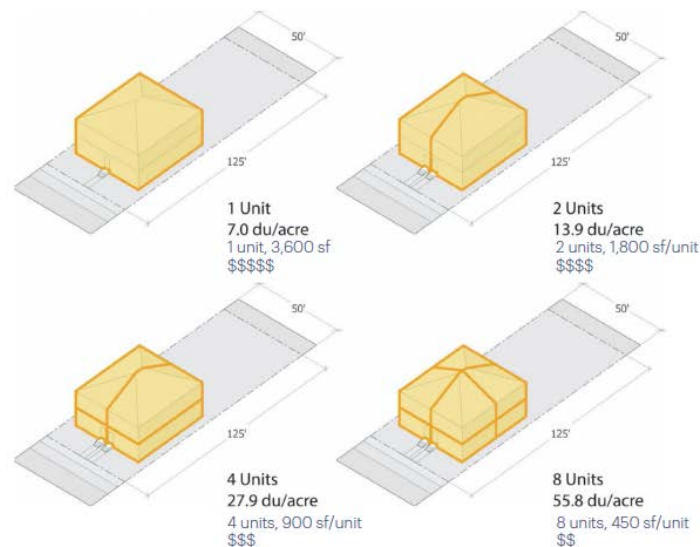
1. Max density: 35 du/acre = 5 Units allowed on this lot size
2. Max FAR = 1.0 (5 units)
3. Total developable square footage= 6250
4. What will get developed: Five 1,250 square foot units are allowed/encouraged
 1. These may provide a small amount of attainability, but why not allow a few more units in the allowed density to encourage a broader range of attainability.
3. R-2A, R-2AH zones
 1. Max density: 55 du/acre = 8 units per lot allowed
 2. Max FAR = 1.25
 3. Total developable square footage=7,813
 4. What will get developed: Eight 980 square foot units are allowed/encouraged, This is closer to delivering attainability, but why not allow developers to build more smaller, more attainable units that are less than 980 square feet.

2. Regulate maximum building size, but allow any number of units within that building size

Why: Limiting to 3-4 units per lot discourages the delivery of smaller more affordable/attainable units. Builder may need 6 units to deliver attainable price points or for feasibility.

Message: More units, but building stays the same size. Units get smaller, thus costing less.

Should run proforma analysis of these options.



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Image Source: Opticos Design. These diagrams illustrate why a much higher density should be allowed to allow a developer to deliver smaller, more attainable units while keeping the form predictable. An even better approach that delivers much more predictable results and takes away the need for lot coverage, FAR, and density is to regulate a maximum building width, depth and height. This also takes away the incentive to aggregate lots.

5. What: Do 3D testing of these standards on range of typical lot sizes
 1. As demonstrated above, the metrics of open space, lot coverage, FAR and density add up to a predictable build out and delivery of smaller, attainable units.
 2. How were these metrics selected?

3. 3D testing on a range of existing and common lot sizes can help refine these metrics.
 4. The regulations become even less effective on smaller lots.
2. Heights:
1. Reduce maximum height to 2 1/2 stories
 1. From a design and development perspective you do not need 35' of height to achieve 1.0 or 1.25 FAR, so why allow it?
 2. Both Seattle and Portland generally capped their Missing Middle regulations at 2.5 stories.
 2. Remove the ability to get an additional allowed height up to 35' with an AUP. Decide what you want the maximum height to be and do not allow negotiation for taller buildings. If a developer opens up negotiations they will likely negotiation for more changes in zoning as well, thus not ensuring predictable results. This is a very Berkeley way of regulating development and incentivizing negotiation. Very few other cities allow for this type of negotiation in form and scale with a use permit.
 3. This also increases the likelihood of getting smaller, more attainable units.



Image Source: Opticos Design. This project was designed under Seattle's SLR zone, which caps heights at 2½ stories, thus delivering house-scale Missing Middle. The half story is tall enough for usable program, which supports feasibility of projects. Some of these are townhouses over flats and others are 2½-story townhouses.

3. Be sure to eliminating the incentive to aggregate lots which will deliver large, out of scale building (not missing middle/house scale)
 1. Why not regulate maximum building footprint directly (see notes below)
4. Consider reducing the maximum FAR even more (if the pro forma still works) after doing the 3D testing.
 1. Why:
 1. The draft standards are better than the first draft, but they still allow far too much square footage to deliver attainably-priced housing choices.

2. Based on our high-value market, developers will likely deliver the largest, most expensive home/unit allowed by the zoning, leaving many of the new homes outside of an attainable price point.
 3. The increase in number of units on a lot counters this a bit, but there are still not a high enough number of units allowed on smaller lots.
2. What: Use Portland as an example/reference point.
1. Compare this to Portland's very well refined approach, which caps square footage much lower to achieve attainable, house-scale buildings (See image below):
 1. Fourplex: 3,500 square feet max per lot (875 sf/unit)
 2. Triplex: 3,000 square feet max per lot (1,000 sf/unit)
 3. SF home: 2,500 square foot max per lot (2,500 sf/unit)
 2. This approach also caps heights at 2 stories maximum.

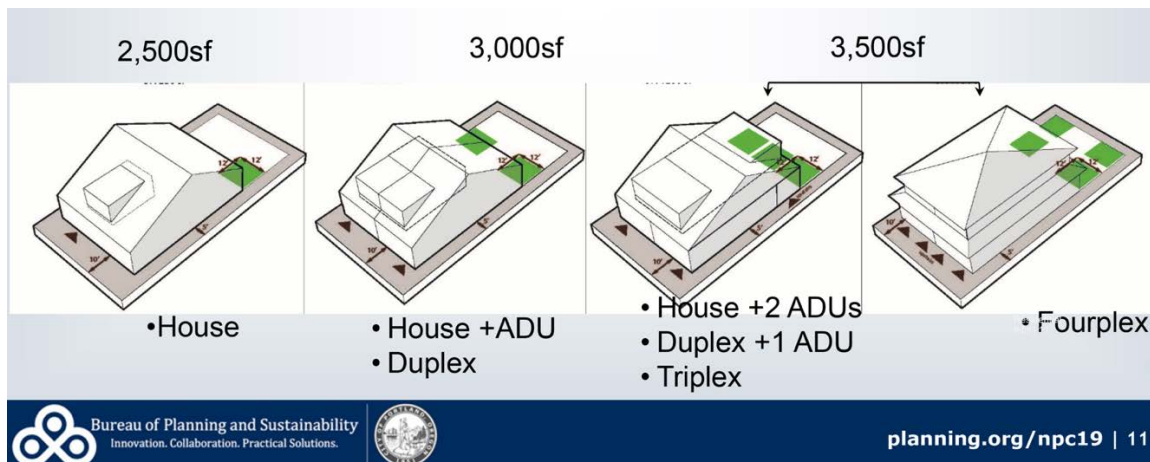


Image Source: City of Portland. In Portland the total allowed square footage for any building maxes out at 3,500 square feet, the size of most older examples of Missing Middle Housing. This clearly demonstrates that the allowed square footage in the draft standards, which ranges from 6,240 to 10,500 square feet, is too large to meet the Missing Middle intent.

5. Let's further collapse standards into fewer zones to simplify this system.
6. Test of the standards: What in the standards would prevent the development of the "dingbat" apartments which were common in 1970s infill that caused much backlash.
 1. Parking head in off the street
 2. One long building extruded from front to rear setback
 3. No windows on the street-facing facade



Let's learn from our 1970's mistakes: What in the draft standards would prohibit these types of "dingbat" apartments from being developed?

7. Let's think of more compelling, 21st century naming for these new zones. Ex Does "Restricted Multi-Family" sounds like a good thing? How about "Mixed Housing: Medium/Small, Mixed Housing: Medium, Mixed Housing: Large, etc."

I would be happy to discuss these at any point if it would be helpful to inform this effort.

Best,

Daniel A. Parolek

Daniel Parolek

daniel.parolek@opticosdesign.com

Architect, urban designer, author of "Missing Middle Housing: Thinking Big and Building Small to Respond to the Housing Crisis," and creator of www.missingmiddlehousing.com

Attachment 3: Learning from local Berkeley Missing Middle Examples

1. Classic Fourplex: Rose and Milvia Streets

Number of units: 4

Estimated footprint: 35' x 50'

Estimated total square footage: 3,500

Estimate square footage per unit: 875

Note: This would not meet many of the new standards.



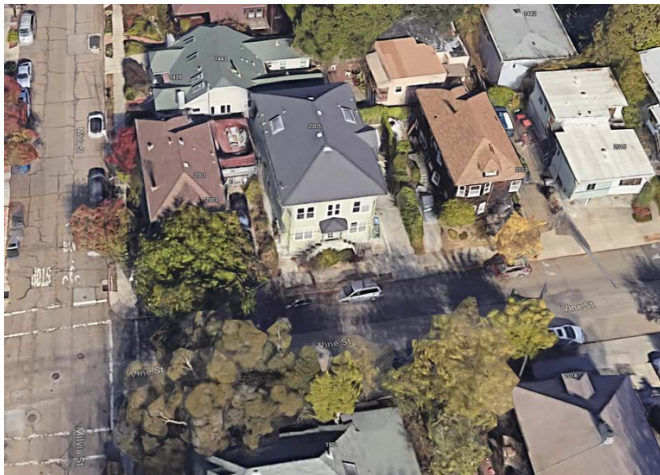
2. Converted Four-Fiveplex: Vine and Milvia

Number of units: 4-5

Estimated footprint: 35' x 55'

Estimated total square footage: 3,850

Estimate square footage per unit: 770 (if 5 units), 962 (if 4 units)



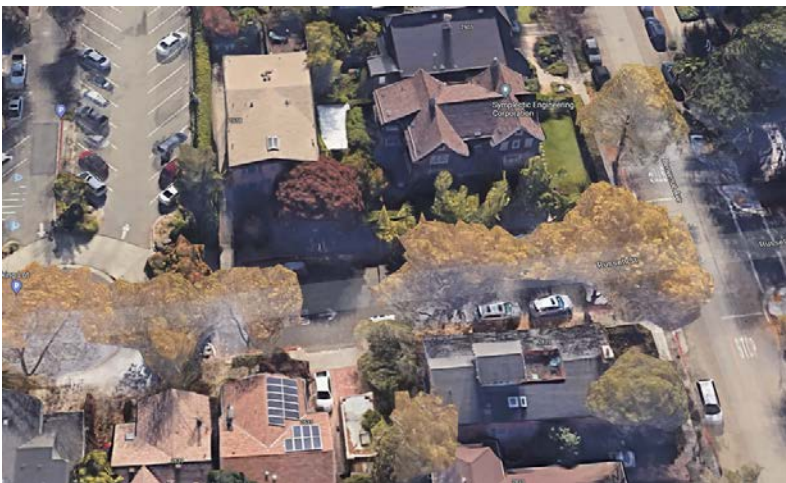
3. Classic Fourplex: Russell St. and Benvenue Ave.

Number of units: 4

Estimated footprint: 35' x 50'

Estimated total square footage: 3,500

Estimate square footage per unit: 875



Communications

From: David Ushijima <davushijima@gmail.com>
Sent: Tuesday, May 31, 2022 11:51 AM
To: Pearson, Alene <apearson@cityofberkeley.info>
Cc: Horner, Justin <JHorner@cityofberkeley.info>
Subject: June 1 Planning Commission; Comments on Middle Housing Objective Standards

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Dear Alene,

Attached are my comments for the June 1, 2022 Planning Commission meeting on Objective Standards for Missing Middle Housing.

Thank you,
David

31 May 2022

To: Ms. Grace Wu, Acting Principal Planner; Planning Commissioners
cc: Alene Pearson
Re: Solar Access in Middle Housing Objective Stds;
(June 1, 2022 Planning Commission)

Dear Ms Wu and Planning Commissioners,

I write to clarify several omissions in the staff report for the June 1, 2022 Planning Commission meeting. In that report the Planning staff and consultants do not properly account for the full impacts of solar blockage caused by allowing 35 ft. structures by-right in the R1A, R2, and R2A zones.

While the consultants and staff have included a shadow study (p.22 of 52), there are several areas where that study falls short and fails to properly consider the severe negative impacts to rooftop solar arrays:

1. First, the shadow renderings are shown only on the Spring and Fall Equinox. While this may have been done to represent an average over the year, it fails to analyze the worst impacts which would occur during the months surrounding the Winter Solstice (Dec. 21st). Without analyzing the worst case impacts, before and after the Winter Solstice (Dec. 21st), the study fails to consider the maximum detriment to the neighboring homeowners. That detriment would occur in months when the energy usage for lighting and heating is at its highest.
2. The shadow study fails to acknowledge the fact that in all cases shown, the rooftops of neighboring single-story homes would be shadowed by a 28 ft. structure and even more severely shadowed by a 35 ft. structure. The resulting shadows would cause a major reduction in power output from any rooftop mounted solar panels. Such a negative impact should not be allowed or incentivized via ministerial approval.
 - Solar studies conducted by the City of San Francisco show that even a 10% blockage of a solar panel array can reduce electrical output by 50% or more. https://sfenvironment.org/sites/default/files/fliers/files/protecting_solar_access.pdf Allowing an additional 10% additional blockage caused by an increased 7 feet in height would cause even more serious impairment and effectively rendering a \$20K-\$30K solar installation useless.

As Berkeley encourages homeowners to transition to renewable energy sources via the installation of solar arrays, it is vital that the city does not at the same time incentivize through irresponsible zoning the construction of buildings which would invalidate a homeowner's \$20K-\$30K investment in renewable green energy.