Missing Middle Housing

Thinking Big and Building Small to Respond to the Housing Crisis

City of San Jose, CA
18 December 2019

Presenter:
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Founding Principal
Opticos Design, Inc.
What is the problem?

Why is this so important to discuss?
Shifting household demographics

Today, 30% of households are single persons.

By 2025, 75-85% of households will not have children.

By 2030, 1 in 5 Americans will be 65+.

From 2005 to 2050, Latinos will account for 60% of the nation's population growth.
Shift in demand for walkable living and MMH

Baby Boomers (55-64)
- Single Family: 71%
- Townhomes: 11%
- Condos: 9%
- Multifamily: 7%
- Mobile Homes: 2%

Millennials (25-34)
- Single Family: 39%
- Townhomes: 34%
- Condos: 10%
- Multifamily: 15%
- Mobile Homes: 2%

27% Looking for MMH
59% Looking for MMH

Source: realtor.com
The affordable housing crisis is rapidly growing

In 2017, 31% of American households were housing cost burdened.

~American Housing Survey

This also requires us to reflect back on inequitable housing policies that did not allow/made it harder non-white households to own and build equity.
Zoning has been ineffective in delivering choices

Has given density a bad name

Should avoid using that term in framing housing conversation.

Higher density does not have to equal bigger or ugly
Disconnect: Walkable Contexts vs MF Zoning
Majority of most cities zoned for single family housing only

Source: New York Times
What is Missing Middle Housing?

Getting it right: It’s not just medium-density housing
Defining Missing Middle Housing

House-scale buildings with multiple units in walkable neighborhoods
It is middle in two different ways

1. A **middle form and scale** between single family and multifamily buildings

2. Can deliver **affordability by design** to middle income households
House Scale: Height, width, and depth matter
3 Units, Looks Like a House

Triplex Achieves Average Densities of 16 du/acre
The Barbell of Affordable Housing

Affordable by design
Lower land costs
Lower construction costs
Smaller units
Local, incremental development
Why do we call it missing?

Less than 10% of all housing units produced between 1990 and 2013 were Missing Middle scale

-American Housing Survey
The concept has become a movement

State of New South Wales, Australia

MISSING MIDDLE

The type of development that can support transit in new and established suburban neighbourhoods is “gentle density” in the form of midrise commercial buildings and condos with street level retail, stacked townhouses and row houses.

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<tr>
<th>Storeys</th>
<th>High Rise</th>
<th>Mid-Rise</th>
<th>Stacked Townhouse</th>
<th>Townhouse</th>
<th>Semi-Detached</th>
<th>Detached</th>
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<tr>
<td>Avg New Price</td>
<td>$492,250</td>
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<td>$457,112</td>
<td>$776,365</td>
<td>$758,634</td>
<td>$1,116,289</td>
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<tr>
<td>Avg People Per Unit</td>
<td>2.03</td>
<td>2.32</td>
<td>2.32</td>
<td>2.08</td>
<td>3.12</td>
<td>3.19</td>
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Toronto
Missing Middle Housing: San Luis Obispo, CA

Triplex (Three-Flat)

Bungalow Court

Courtyard Apartment
Missing Middle Housing: Santa Barbara, CA

Multiplex: Small

Cottage Court

Courtyard Building

Opticos Design, Inc. 19
Missing Middle Housing: San Jose, CA

Triplex

Duplexes

Fourplex

Opticos Design, Inc. 20
Missing Middle Housing: Sacramento

Duplex: Side by Side

Bungalow Court

Courtyard Apartment
Overview of the types

Form, scale, design characteristics
Used to be able to buy these in a catalog!
Duplex: Side-by-Side

Typical Lot Size | Density
--- | ---
60’ x 125’ | 12 du/acre
50’ x 100’ | 17 du/acre
50’ x 85’ | 19 du/acre
Bungalow/Cottage Court

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<th>Density (6 units / lot)</th>
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<td>100’ x 125’</td>
<td>17 du/acre</td>
<td>21 du/acre</td>
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<tr>
<td>100’ x 100’</td>
<td>22 du/acre</td>
<td>26 du/acre</td>
</tr>
<tr>
<td>80’ x 100’</td>
<td>27 du/acre</td>
<td>33 du/acre</td>
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Fourplex

Typical Lot Size Density
(4 units / lot)

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<th>Typical Lot Size</th>
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<td>32 du/acre</td>
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<td>65’ x 115’</td>
<td>23 du/acre</td>
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Same building: Variety of densities based on parking

21 du/acre

49 du/acre
## Townhouse

**Typical Lot Size** | **Density**
---|---
25’ x 125’ | 14 du/acre
25’ x 100’ | 17 du/acre
20’ x 75’ | 29 du/acre
Remember: Not all townhouses are the same
Be careful what you enable/allow!

These types fight against **placemaking** and the creation of **high-quality places**.

They do not deliver the range of affordability intended by most medium density zones.

Mountain View R3 project is focused on addressing this issue.
## Multiplex: Small

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<th>Density (8 units / lot)</th>
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<td>100' x 125'</td>
<td>17 du/acre</td>
<td>27 du/acre</td>
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<tr>
<td>100' x 100'</td>
<td>22 du/acre</td>
<td>35 du/acre</td>
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<tr>
<td>80' x 100'</td>
<td>27 du/acre</td>
<td>43 du/acre</td>
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Courtyard Building

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<th>Density (8 units / lot)</th>
<th>Density (12 units / lot)</th>
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<td>125’ x 150’</td>
<td>18 du/acre</td>
<td>28 du/acre</td>
</tr>
<tr>
<td>100’ x 100’</td>
<td>34 du/acre</td>
<td>53 du/acre</td>
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System Assumes High Density=Big Building
What are the important characteristics?

Getting it right: Missing Middle Housing is not just medium-density housing
Characteristics of Missing Middle Housing

1. Located in a walkable context
2. House scale. Lower perceived impact
3. Provide fewer off-street parking spaces
Think creatively about our approach to parking

1. Housing needs to be prioritized over parking

2. You cannot be pro-affordable housing and pro-high parking requirements
How is the concept being applied?

Policy, planning, zoning, effective communication, getting it built
Progressive local policy and state legislation

Starting Big: Rethinking single family land use and zoning
Minneapolis’ progressive housing policy

Eliminated single family zoning citywide

Adopted a new citywide policy that allows up to 3 units on any lot, even those currently zoned for single family.
In 2019 Oregon Governor Kate Brown signed House Bill 2001, which authorizes **missing middle housing** in large cities’ single-family zones.

- Cities with pop. 10,000: Duplex allowed on any lot
- Cities with pop. 25,000: Up to four units on any lot
Effectively communicating with communities about the need

Eliminate push back/resistance
AARP informing its members and supporters

38 million members!

1. Walking tours
2. Roadshows/workshops
3. CA AAPR-Video series
Brisbane, Australia community outreach
Informing Small Area Plans/Specific Plans

Downtowns, Corridors, Neighborhood Plans

Downtown Davis, CA Specific Plan
Form and Scale: Small, Medium, Large

Formalizing the design direction from the Charrettes:

- Establish a hierarchy of form and scale.
- Create appropriate transitions in built form.
- Ensure predictable built outcome.
Regulating Plan/Zoning Map
Building Scale Sustainability

Courtyard building

- **Roof Access**: Access to flat roofs for outdoor open space supports use as a community garden or similar program.
- **Native Vegetation**: Native plantings minimize maintenance and water demands.
- **Courtyard Orientation**: Open space oriented towards the south takes advantage of sun and summer winds, and blocks winter winds, encouraging active use.
- **Cross-Ventilation**: Designing for cross-ventilation enables passive building cooling.
- **Energy Saving Incentives**: Source control measures, such as glazed windows, result in energy savings.
- **Roof Materials**: High SRI roof materials help mitigate the heat island effect.
- **Solar Panels**: New construction projects can be solar ready buildings.
- ** Preferential Parking**: If parking is limited, environmentally-friendly vehicles have preference.
- **Permeable Pavers**: Permeable pavers reduce runoff and filter stormwater onsite.
- **Waste Source Separation**: Color-coded landfill, compost, and recycling bins are located in convenient areas.
Mountainview: R3 Zoning Revisions

- Where most of their older, more affordable rental housing stock exists
- Being torn down and replaced with lower density luxury townhouses
Portland, OR: More units-higher FAR

- House
- House + ADU
- Duplex
- House +2 ADUs
- Duplex +1 ADU
- Triplex
- Fourplex
Informing Regional and General Plans

Housing policy and land uses

California and across the country
Zoning

Land use explicitly exercised through zoning, is an important role of local government. It shapes the common spaces, settlement patterns, community development and urban development policies and regulatory frameworks for future growth. Most of the housing in the SACOG region is for single-family housing or large lots with lots greater than 3,500 square feet. This is a product of zoning and is fairly common across the rest of the State. If adding more diverse housing in more locations is a policy goal, then standard zoning practices should be reconsidered.

The following zoning policies and tools affect the types, locations, and costs of allowable housing to provide more housing choice in new and established communities.

Expand “Missing Middle” Zoning

“Missing middle” describes multiunit housing that fills within the scale of existing neighborhoods. It is sometimes termed as missing rental opportunities. This is where buildings, duplexes, triplexes, rowhouses, courtyard apartments, and single-family units. Missing middle is cheaper in practice than larger apartment buildings. Land is converted to naturally affordable rental housing. As it ages, provides sufficient density to support shops, restaurants, and transit that are associated with walkable neighborhoods, and usually fit in with the local and feel of a single family neighborhood. Here the appendix for examples of missing middle from the SACOG region.

What to Share:

- Mix use for houses, triploxs, and fourplexes as all residentially oriented land.
- Strategically reserve land to share for missing middle over existing site names.
- Allow for higher lot coverage or percent or more for missing middle products.
- Consider using minimum floor area or height instead of units/area to regulate intensity.

SACOG Housing Policy Toolkit

Opticos Design, Inc. 51
Strategies for Housing Affordability

San Diego County

Allow Small Lot Single Family Homes
Modify Land Development Code (LDC) regulations to allow for single family homes at multifamily densities.

Provide More Types of Homes
Introduce new Zoning Ordinance standards to allow for different home types, sizes, configurations, and price points.

Shorten Commutes
Reduce transportation expenses by providing opportunities for people to live closer to where they work, to connect to regional transit services, and to be able to access local goods and services.

Promote Sustainable Development
Preserve open space and rural lands, while promoting development in areas where transit, services, and infrastructure are provided.

Incentivize ADUs
Make it easier and less expensive for single-family home owners to add a small unit to their lot, so they can provide housing for aging parents, young adults, or others seeking affordable rental housing.

Update Community Plans
Use Community Plan Updates as the forum to meaningfully engage the community, determine effective locations and design parameters for Missing Middle and other home types.

Expand Home Ownership
Modify LDC regulations to encourage development of townhomes and condominiums that provide a different form of single-family home ownership.

Missing Middle Housing
All Nashvillians need housing that is affordable ...

In recent years, people making less than 120 percent of Nashville Median Family Income (MFI) have felt the pinch of higher housing costs. This includes seniors and veterans on fixed incomes, those in the hospitality and retail industries, teachers and public safety providers, as well as nurses and technicians in the healthcare profession. Housing is considered affordable when a household spends less than 30 percent of their gross income on housing. Housing affordability leads to economic stability for individuals, families, and our community as a whole.

<table>
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<tr>
<th>Extremely Low Income</th>
<th>Very Low Income</th>
<th>Low Income</th>
<th>Moderate Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 30% MFI</td>
<td>30–50% MFI</td>
<td>50–80% MFI</td>
<td>80–120% MFI</td>
</tr>
</tbody>
</table>

81% of individuals with income make less than $56,280

- 27% make less than $14,050
- 17% make between $14,050 - $23,450
- 17% make between $23,450 - $37,450
- 20% make between $37,450 - $56,280
- 19% make greater than $56,280

65% of families with income make less than $80,280

- 35% make less than $80,280
- 17% make less than $24,250
- 10% make between $24,250 - $33,450
- 19% make between $33,450 - $53,500
- 19% make between $53,500 - $80,280
- 17% make greater than $80,280
Cincinnati, OH Citywide Form-Based Code and Comp Plan

- Future land use based on place types
- Designated 42 walkable neighborhoods for Form-Based Code application and city prioritization
- Winner of National APA Burnham Prize and CNU Charter Award Grand Prize
Embedded allowed types within new zones
Identifying policy, planning, and zoning barriers

City of Greenville and Greenville County, SC
Identify Missing Middle-Ready Contexts

**Key**

**Identified Walkable Centers**
- Downtown
- Urban Center
- Neighborhood Center
- Medical/Institutional
- Parks/Open Space

**Zoning Districts**
- Residential Districts
- Commercial Districts

**Walkable Environments**
- 5 min walking distance from Centers
- 5 min walking distance from Bus Stops
Comparing Allowed Densities to Required Densities

City

<table>
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<tr>
<th>Multiplex Large</th>
<th>Courtyard Building</th>
<th>Townhouse</th>
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</thead>
<tbody>
<tr>
<td>63-70 du/ac</td>
<td>54-60 du/ac</td>
<td>N/A du/ac</td>
</tr>
<tr>
<td>(Front Vehicular Access)</td>
<td>(Front Vehicular Access)</td>
<td>(Front Vehicular Access)</td>
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<tr>
<td>52-70 du/ac</td>
<td>58-70 du/ac</td>
<td>20-28 du/ac</td>
</tr>
<tr>
<td>(Rear Vehicular Access)</td>
<td>(Rear Vehicular Access)</td>
<td>(Rear Vehicular Access)</td>
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County

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<tr>
<th>Multiplex Large</th>
<th>Courtyard Building</th>
<th>Townhouse</th>
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<tbody>
<tr>
<td>44-55 du/ac</td>
<td>54-60 du/ac</td>
<td>N/A du/ac</td>
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<tr>
<td>(Front Vehicular Access)</td>
<td>(Front Vehicular Access)</td>
<td>(Front Vehicular Access)</td>
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<tr>
<td>52-70 du/ac</td>
<td>58-70 du/ac</td>
<td>20-28 du/ac</td>
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<td>(Rear Vehicular Access)</td>
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### Greenville County

<table>
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<th>Barriers to MMH</th>
<th>Imagine Greenville Comp Plan</th>
<th>Berea Plan</th>
<th>Brandon Plan</th>
<th>Conestee Plan</th>
<th>Monaghan Mill Plan*</th>
<th>Cherrydale Plan</th>
<th>City View Plan</th>
<th>Dublin Road Plan</th>
<th>Dunean Plan</th>
<th>East Woodruff Plan</th>
<th>Fountain Inn Plan</th>
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<tbody>
<tr>
<td>Max. Density Allowed: Too Low</td>
<td>X</td>
<td>X</td>
<td>N.S.</td>
<td>N.S.</td>
<td>X²</td>
<td>X</td>
<td>N.S.</td>
<td>X</td>
<td>X⁴</td>
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<td>Min. Lot Area: Too High</td>
<td>X</td>
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<td>MMH Types Not Identified¹</td>
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<tr>
<td>Content is Supportive of MMH</td>
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<tr>
<td>Content is Guidelines (Not Regulatory)</td>
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### Notes:
- ¹Only reference to duplex, townhouses and multifamily.
- ²Plan update proposes down-zoning from multifamily to single-family, and down-zoning R-7.5 to R-10.
- ³Policy direction to limit "apartment" style of multifamily housing leaving it unclear if MMH is intended or not.
- ⁴Majority of area is zoned for single-family.
- ⁵Guidelines appear as regulations but are only advisory.
- ⁶In R-M and R-MA, multifamily requires a min. of 2-acre site size and 12,000 sq.ft. size respectively.
- ⁷In R-M, once 2-acre site is provided, no individual lot minimum.
- ⁸Duplexes through Fourplexes mentioned but majority of R-M Zoning being changed to Single-Family Zoning.
- N.S. Not Specified
- * In Progress version reviewed
- The PD and FRD are not shown because it is unclear what they allow given that each project is reviewed on a case-by-case basis.
Informing Zoning Reform Across the Country

Removing barriers to housing choices and ensuring quality
Most zoning does not see differences
Top Missing Middle Zoning Hacks

1. Reduce Minimum Lot Size
2. Regulate Maximum Building Width and Depth
3. Increase Allowed Density/min. Square Footage of Lot
4. Reduce/Remove Parking Requirements
5. Remove Open Space Requirements
6. Map More Broadly!!
7. Don’t Allow Tuck Under Townhouses
Allowed Building Types Embedded in Zones

Form-Based Coding:

Each zone thoughtfully allows a range of Missing Middle housing types
**Zoning Research Completed by Opticos for NAHB**

**Diversifying Housing Options with Smaller Lots and Smaller Homes**

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Concluding Thoughts

A few takeaways
Built results are shaking up the building industry
How many neighborhoods do you feel would be open to “increasing density” as a general concept?

Housing choices, and options as alternative.
Instead focus on form, scale, and housing types.
Find out more at MissingMiddleHousing.com
“It’s time to rethink and evolve, reinvent and renew.”

What’s Next - Urban Land Institute