Outline

- Summary
- Context: the housing and climate crises
- Zoning Background: problems with current residential standards
- Proposal: the Missing Middle Housing (MMH) Zoning Amendment
- Impact
The “Missing Middle”: Small Multi-family Housing

Housing like this is largely missing from new construction, due to being illegal under current zoning.
“Adjust zoning in residential districts to be more compatible with prevailing patterns of development, including building setbacks, maximum heights, open space, parking requirements, and uses”

- Envision Cambridge Urban Form Recommended Actions (p. 188)

“WHEREAS: single-family only zoning is an unnecessary artifact of historically exclusionary housing practices, and two-family zoning can have similar effects...”

- POR 2020 #289, introduced by Councillor Nolan, passed unanimously December 14th 2020
Proposal: Missing Middle Housing for Cambridge

- Create a zoning category for residential neighborhoods that **allows up to three stories of multi-family housing**
- **Remove off-street parking requirements** for new housing citywide

This proposal would **allow three-deckers and townhouses** in every neighborhood
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Cambridge Has a Severe Housing Shortage

- From 1980 to 2019, Cambridge added **45,000 jobs** but only **13,000 units**

- Household sizes have declined (72% of households are 1 or 2 people), but unit sizes remain large, especially in detached/semi-detached houses
  - Many small households have few options to downsize and live in larger units than they need, taking space away from larger households

“I want Cambridge to expand its housing supply so that there are more units that families and young people can move to. Cambridge has good schools, transit access, job access, etc that should be available to more people.”

- **Twitter user**, 1/22/2021
The Housing Shortage Damages Our Community

- People pushed out of Cambridge include municipal employees (teachers, police), church community members, high school graduates, artists, friends, etc.

- Nearly half of Cambridge residents are rent-burdened; even those who can stay do not have security for the future

- With rising rents and without more local patrons, local businesses have to work harder to succeed

“Every year, at high school graduation, leaders tell CRLS graduates that Cambridge is their home. But we need to add housing so that Cambridge's children have some hope of being able to return to the city they've always been proud to call home.”

- Public Commenter, 2/17/2021
Multi-family Housing is Less Expensive

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Median Price (Mar ‘20–’21)</th>
<th>Monthly Payment (Zestimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single detached house</td>
<td>$1,580,000</td>
<td>$7,678</td>
</tr>
<tr>
<td>3BR condo</td>
<td>$1,062,000</td>
<td>$4,953</td>
</tr>
<tr>
<td>2BR condo</td>
<td>$806,000</td>
<td>$3,892</td>
</tr>
<tr>
<td>1BR condo</td>
<td>$561,000</td>
<td>$2,826</td>
</tr>
</tbody>
</table>

(Source: Redfin Property Sales Data, Zillow Mortgage Calculator)

“Only broad market affordability will maintain Cambridge as a community for everyone. Cambridge should lead the region to increase local and regional housing supply.”

- Envision Cambridge Housing Plan Goals (p. 140)
Existing Affordability Strategies in Cambridge

- **20% Inclusionary Zoning** for large-scale / mixed-use buildings
- **Affordable Housing Overlay** for projects built with public funds by non-profits
- **Down payment assistance** and **HomeBridge** for low-income buyers to access medium-price homes ... if any medium-price homes exist
- **ADU ordinance** has produced 13 housing units since its 2016 update

Currently, Cambridge has no major strategy for bending market housing costs in residential neighborhoods.
Housing Policy is Climate Policy

**GHG Reduction Potential in 2030 from Local Policies**

- Heating Electrification
- Commercial Efficiency
- VMT Reduction
- Urban Infill
- Electric Vehicles
- Energy Efficiency
- Healthy Diets
- Shift Consumption
- Renewable Electricity
- Water & Waste
- Air Travel Reduction
- 50+ MPG Vehicles

**Greater Boston CO₂ emissions per household**

Analysis for Berkeley, CA by the CoolClimate Network at UC Berkeley

Analysis by the CoolClimate Network at UC Berkeley
Attached homes and apartments are much more energy-efficient than single detached homes.

Cambridge’s housing shortage results in long car commutes, which increase traffic and emissions.
- ~50% of MA carbon emissions are from transportation (and rising).

Many would rather not drive if they could afford to live in a walkable, transit-oriented neighborhood close to work, family, and community.
- 100% of Cambridge is within ½-mile of bus or T stop.

www.CambridgeMMH.org
Outline

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Current Zoning Does Not Allow for Growth

- Today, renovations in neighborhoods do not create more units, but instead create larger, expensive, detached and semi-detached houses
- Over 80% of neighborhood residential lots are at or above their unit limits
Current Zoning Does Not Allow for Growth

- Today, renovations in neighborhoods do not create more units, but instead create larger, expensive, detached and semi-detached houses.

- Over 80% of neighborhood residential lots are at or above their unit limits.

"I live with my parents in a nonconforming single-family home. They looked into converting part of the house into an apartment, but they could not do so due to zoning. It is decisions like this, multiplied a thousand times, that add up to the housing crisis we have today."

- Public Commenter, 2/17/2021
Current Zoning Does Not Allow for Growth: Example

<table>
<thead>
<tr>
<th>Dimension</th>
<th># of units</th>
<th>FAR</th>
<th>Lot area per unit</th>
<th>Height</th>
<th>Parking</th>
<th>Side setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>99 Fayerweather St</td>
<td>2</td>
<td>1.07</td>
<td>1875 sqft / unit</td>
<td>37.7’</td>
<td>1 space</td>
<td>5’ and 10’</td>
</tr>
<tr>
<td>Residence B Standards</td>
<td>Max. 2</td>
<td>Max. 0.5</td>
<td>Min. 2500 sqft / unit</td>
<td>Max. 35’</td>
<td>Min. 2 spaces (1 / unit)</td>
<td>Min. 7’6”</td>
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Apartment Bans Perpetuate a History of Exclusion

- Bans on new multi-family housing
- Percentage of residents of color

www.CambridgeMMH.org
Apartment Bans Perpetuate a History of Exclusion

Bans on new multi-family housing

1938 “redlining” map of Cambridge
Parking Minimums Undermine Sustainability Goals

- Cambridge is a great place to live without a car... but zoning makes residents pay for a parking space even if they don’t use one

- Providing extra off-street parking encourages car ownership

Photo by chensiyuan, CC BY-SA 4.0, via Wikimedia Commons

Living Space Vs. Parking Space

size for 2 bedroom apartment: 675 FT²
size for 2 parking spaces: 650 FT²

Sources: Transportation Cost and Benefit Analysis II – Parking Costs (Victoria Transport Policy Institute, www.vtpi.org)
Genres: Adapted from Graphing Parking (https://graphingparking.com/2012/07/23/parking-size-scales)
Image compiled by Parkorder for Parking Reform: https://pilothopsticks.com/-@pilothopsticks

www.CambridgeMMH.org
Current Zoning Undermines Climate Resiliency

Required off-street parking means **less grass, less trees, and less permeable area**
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Proposal: Missing Middle Housing for Cambridge

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- Remove off-street parking requirements for new housing citywide

This proposal would allow three-deckers and townhouses in every neighborhood
Dimensional Standards

- 1.25 FAR means up to ~40% lot coverage in a rebuild scenario
- Smaller lot size/DU allows for more, smaller, less expensive units
- Smaller setback requirements allows flexibility on small lots

<table>
<thead>
<tr>
<th>District</th>
<th>Max. FAR</th>
<th>Min. Lot Area/DU</th>
<th>Min. Setback Front Yard</th>
<th>Min. Setback Side Yard</th>
<th>Min. Setback Rear Yard</th>
<th>Max. Height</th>
<th>Min. OS Ratio</th>
<th>Allowed Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1</td>
<td>0.50</td>
<td>6,000</td>
<td>25</td>
<td>15 sum to 35</td>
<td>25</td>
<td>35</td>
<td>50%</td>
<td>single-family detached dwellings</td>
</tr>
<tr>
<td>A-2</td>
<td>0.50</td>
<td>4,500</td>
<td>20</td>
<td>10 sum to 25</td>
<td>25</td>
<td>35</td>
<td>50%</td>
<td>single- and 2-family detached dwellings</td>
</tr>
<tr>
<td>B</td>
<td>0.50</td>
<td>2,500</td>
<td>15</td>
<td>7.5 sum to 20</td>
<td>25</td>
<td>35</td>
<td>40%</td>
<td>single- and 2-family detached dwellings</td>
</tr>
<tr>
<td>C</td>
<td>0.60</td>
<td>1,800</td>
<td>(H+L) ÷ 4 at least 10</td>
<td>(H+L) ÷ 5 ≥ 7.5, sum ≥ 20</td>
<td>(H+L) ÷ 4 at least 20</td>
<td>35</td>
<td>36%</td>
<td>single- and 2-family detached dwellings</td>
</tr>
<tr>
<td>C-1</td>
<td>0.75</td>
<td>1,500</td>
<td>(H+L) ÷ 4 at least 10</td>
<td>(H+L) ÷ 5 at least 7.5</td>
<td>(H+L) ÷ 4 at least 20</td>
<td>35</td>
<td>30%</td>
<td>single- and 2-family detached dwellings</td>
</tr>
<tr>
<td>N</td>
<td>1.25</td>
<td>500</td>
<td>10' or modal</td>
<td>7.5' or 5'</td>
<td>10'</td>
<td>40'</td>
<td>25%</td>
<td>multifamily dwellings</td>
</tr>
<tr>
<td>AHO</td>
<td>2.0</td>
<td>n/a</td>
<td>10' -15' or modal</td>
<td>7.5' or 5'</td>
<td>20'</td>
<td>45'</td>
<td>30%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

www.CambridgeMMH.org
Dimensional Standards and Housing Possibilities

Typical housing on medium sized lot (7,500 sf) in different zones.

<table>
<thead>
<tr>
<th>zoning district</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>N</th>
<th>AHO(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of dwelling units</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>size of units (s.f. avg.)</td>
<td>3,200</td>
<td>1,875</td>
<td>1,200</td>
<td>1,000</td>
<td>935</td>
</tr>
<tr>
<td>% open space</td>
<td>70</td>
<td>60</td>
<td>45</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>impervious surface per unit (s.f.)</td>
<td>1,825</td>
<td>1,100</td>
<td>785</td>
<td>355</td>
<td>240</td>
</tr>
</tbody>
</table>

(1) AHO model presented for scale; due to funding parameters, this lot is likely too small to be feasibly acquired for 100% affordable housing.
Infill Rendering

99 Fayerweather St
Lot size: 3750 sqft
(close to Cambridge median)
Current zoning: Residence B

Current “B” zoning
FAR: 0.50
Lot area/DU: 2000
Max height: 35'
Min. OS: 40%
Parking: 1/unit

As built
3,190 sf
40% open space
2 units @ 1,700 sf ea
1 parking (tandem)

By right
1,875 sf
43% open space
1 unit @ 1,875 sf
2 parking

Proposed “N” zoning
FAR: 1.25
Lot area/DU: 500
Max height: 40'
Min. OS: 25%
Parking: n/a

Option A: “Addition”
4,685 sf
25% open space
3 units: 2 @ 1,700 sf ea, 1 @ 1,285 sf
1 parking (existing)

Option B: “Rebuild”
4,685 sf
45% open space
6 units @ 780 sf
0 parking

Option C: “Rebuild w/ parking”
3,200 sf
28% open space
2 units @ 1600 sf
2 parking

Current “B” zoning
Lot area/DU: 2000
Max height: 35'
Min. OS: 40%
Parking: 1/unit

By right
1,875 sf
43% open space
1 unit @ 1,875 sf
2 parking

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3,200 sf
28% open space
2 units @ 1600 sf
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Similar Reforms in Other Progressive Cities

- **Minneapolis, MN (2018):** Approved [MPLS 2040](#) comprehensive plan to allow triplexes everywhere, end residential parking minimums

- **Austin, TX (2019):** has not ended single-family-only zoning, but passed an “Affordability Unlocked” program similar to Cambridge’s AHO

- **Portland, OR (2020):** adopted the [Residential Infill Project](#), allowing fourplexes and ending parking requirements almost everywhere

- **Sacramento, CA (2021):** Approved [2040 General Plan](#) to end residential parking minimums, allow fourplexes everywhere

- **Berkeley, CA (2021):** has ended residential parking minimums, is studying fourplexes everywhere as well as an Affordable Housing Overlay
Topics for Conversation

- Neighborhood retail districts (O-1, BA-1, BA-3)
- Portland-style “sliding FAR scale” to prevent large single-family homes
- Open space tradeoff vs. parking, infill scenarios
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MMH Will Activate Affordable Homeownership

- MMH will create **more housing options at lower prices** - putting new units not only within reach for more Cambridge renters and homebuyers, but also within reach for Cambridge’s affordable homeownership programs

- MMH will put more homes within reach for city-assisted buyers
  - Homebridge will not buy a unit above e.g. $550K (for a 2BR buyer at 80% of AMI)
  - There were only 3 Homebridge purchases in 2020
  - Over 50% of CHA mobile voucher holders did not find a unit

- MMH could also pair well with deeper downpayment assistance loan programs (like San Francisco’s), or with subsidies for mixed-income projects
MMH and the AHO complement one another

<table>
<thead>
<tr>
<th></th>
<th>Missing Middle Housing</th>
<th>100% Affordable Housing Overlay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small site</td>
<td>● Can be built by contractor or small property owner</td>
<td>● Limited staff capacity to manage acquisition / funding applications</td>
</tr>
<tr>
<td></td>
<td>● No need to apply to agencies for funding</td>
<td>● DHCD / LIHTC eligibility rules impede the use of funds on small projects</td>
</tr>
<tr>
<td>Large site</td>
<td>● Inclusionary zoning imposes significant costs at 10+ units</td>
<td>● Streamlined, non-discretionary approval process</td>
</tr>
<tr>
<td></td>
<td>● Development not allowed at 12+ units without special permit</td>
<td>● FAR of 2.0, 4-story limit allows more possibilities</td>
</tr>
<tr>
<td></td>
<td>● FAR of 1.25, 3-story limit not as attractive</td>
<td></td>
</tr>
</tbody>
</table>

- We have met with non-profit developers, who concur with us that MMH will not threaten AHO sites

[www.CambridgeMMH.org](http://www.CambridgeMMH.org)
MMH and Climate Resiliency Zoning

● CRZ Task Force recommendations can build on and strengthen MMH zoning
  ○ Particularly (3e) “Basement flood protection” and (4b) “Cooling in open space”
  ○ Ending residential parking minimums gives CRZ more open space to work with
  ○ Revising open space standards is an opportunity to require greater permeability

● New state climate legislation will allow Cambridge to opt into a net-zero code
  ○ Hopefully including strong building electrification provisions
MMH and Land Values

- We estimate full redevelopment of a site is only viable under MMH if land can be bought for under $250/sqft
- Few sales meet this criterion; those that do are quickly redeveloped
- Therefore, we don’t think MMH will increase land values significantly or encourage redevelopments not already planned
- MMH will hopefully encourage infill and improve the quality of already-planned redevelopments
Ending exclusionary neighborhood districts

Activating affordable homeownership programs

Creating more housing options at lower prices

Promoting greener, less car-dependent housing

Zoning for more units, rather than larger units

Reducing traffic congestion and carbon emissions
Thank You!

Cambridge Missing Middle Housing

CambridgeMMH.org
Appendix A

Land Value / Viability Analysis
Viability exploration: background / methodology

● What makes a redevelopment project viable under MMH?
● Assume profit maximizing effort:
  ○ 1.25 FAR without running out of room on the site (so must be a moderate sized site)
  ○ Developing more units, but fewer than 10 (IZ increases costs by 30%)
● What is the maximum viable acquisition cost?
  ○ Assume a 10k square foot lot
  ○ Building 9 units
  ○ Selling at $850/sqft (new construction/refurb sales price in most neighborhoods)
Cost/Value Estimate

- 9 unit, 5 2BR, 4 1BR, 11.5k square feet built area - $3.9M construction costs
- Construction financing: $500k interest
- Financing cost: $700k
- Net Project value: $7.6M proceeds
- Maximum land value:
  - $3.9M (construction cost) +
  - $700k (financing cost) +
  - $500k (loan interest) =
  - $5.1M total cost
  - $7.6M net proceeds
  - $2.5M maximum acquisition price
- Maximum viable acquisition cost/sqft: $250
Land Prices in Cambridge

- ~90% of sales in residential zones in Cambridge in 2019 are more than $250/sqft (198/225)
- Median sale price is $455/sqft
- No strong correlation between type of housing: instead, mostly driven by “is this recently redeveloped?”
  - Some of the most expensive per square foot of lot are large single detached lots!
Appendix B

Examples of Recent Down-conversions
9-11 Jackson St: Demolition and new construction. PB special permit.

BEFORE: 3 units
Purchase price: $550K/unit
Avg unit size: 471 sqft

AFTER: 2 units
Sale price: $1.6M/unit.
Avg unit size: 1425 sqft
46 Mt. Vernon St: Interior renovation. By right.

BEFORE: 6 units
Purchase price: $600k/unit
Avg unit size: 987 sqft

AFTER: 2 units
Sale price: $2.65M/unit
Avg unit size: 2470 sqft
27 Walden St: Interior renovation. By right.

BEFORE: 3 units
Purchase price: $800k/unit
Avg unit size: 1811 sqft

AFTER: 2 units
Sale price: $2.4M/unit
Avg unit size: 3464 sqft

www.CambridgeMMH.org
Appendix C

Impact of Parking on Car Ownership
Effects of Parking Provision on Driving

- A 2015 study of parking provision to automobile mode share shows strong correlation
- Study of 9 towns, including Cambridge, over 40 years
- Study determined “Parking provision in cities is a likely cause of increased driving among residents and employees”