Agenda

• Zoning Ideas Generated from the Envision Cambridge Process
• 100% Affordable Citywide Overlay Analysis
Hundreds of new policy and program ideas were generated from a wide-reaching engagement process

- Advisory committee and working groups
- Public workshops
- Street team events
- Focus groups
- Youth workshops
- Online and paper surveys
- Digital engagement
- Walking tours
We want to test the effectiveness of priority zoning-related ideas

- Some recommendations have a large-scale, measurable effect on development and its outcomes across all planning topics.

- Additional analysis is needed to understand range of impacts.

**Ideas to test include:**
- 100% affordable housing overlay
- “Super-inclusionary” housing program
- Environmental performance incentive

Members of the public discussed proposed recommendations at a public meeting in July.
Analysis of Working Groups’ New Policy Ideas

What is a 100% Affordable Housing Citywide Overlay?

Goals:

• Foster equitable distribution of affordable housing citywide by expanding affordable housing's viability in areas where it's been more difficult to create new affordable units
• Makes it easier and quicker to permit 100% affordable developments
• Help reduce cost of producing affordable housing through expediated permitting process

Zoning policy for 100% affordable housing developments only:

• Offer density bonuses and relief from dimensional standards (height, setbacks, open space) and parking where necessary (varies by zoning district)
• Allow for as-of-right approvals with required design review and community input instead of discretionary permitting approvals
What is a “super-inclusionary” housing program?

- Current inclusionary zoning requirements:
  - Requires that 20% of new residential development is dedicated to affordable housing.
  - Gives a 30% density bonus

- Super-Inclusionary would be a voluntary program that provides a larger density bonus in exchange for additional affordable housing beyond the city’s current requirements
  - Like the existing policy, it would only apply to new residential buildings or conversions which create 10 or more new units or more than 10,000 square feet of residential space
What is an environmental performance incentive policy?

- A voluntary program that provides a density bonus in exchange for improved environmental building performance, such as:
  - Net zero construction ahead of the requirements set forth by the Net Zero Action Plan
  - Net positive construction after net zero construction is required
  - District energy
  - Resiliency measures

Current Net Zero Action Plan requirements by use:

<table>
<thead>
<tr>
<th>Type:</th>
<th>Municipal</th>
<th>Small Residential (1-4 units)</th>
<th>Multifamily</th>
<th>Commercial</th>
<th>Institutional</th>
<th>Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Year:</td>
<td>2020</td>
<td>2022</td>
<td>2025</td>
<td>2025</td>
<td>2025</td>
<td>2030</td>
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Cambridge's 2015 *Getting to Net Zero Framework* is an action plan to get all buildings to net zero GHG emissions by mid-century.
100% Affordable Citywide Overlay Analysis
Why study a 100% Affordable Housing Citywide Overlay?

**Advances Envision Cambridge shared community goals:**
- Foster neighborhoods of opportunity and equitable distribution of affordable housing citywide.
- Provide a variety of housing options for people of different socioeconomic levels, life stages, and physical needs.
- Expand affordable rental and homeownership opportunities to enable Cambridge to thrive as a mixed-income community.
- Provide access to opportunities for all people regardless of differences.
- Work toward addressing race-based disparities and racial equity.
- Maintain the existing patterns of the city through a mix of preservation and complementary infill development.
Why study a 100% Affordable Housing Citywide Overlay?

- Challenges to building affordable housing:
  - High land costs and competition from market-rate developers
  - Appeal of discretionary approvals can add significant cost, long delays, and significant risk to affordable housing developers.
  - More difficult to build affordable housing in some areas of the city given zoning limitations (i.e. density is limited in Residence A and B districts, where high land costs make development infeasible for affordable housing developments without discretionary approvals and significant zoning relief)

- 100% Affordable Housing Citywide Overlay would:
  - Remove permitting uncertainty and subsequent additional costs, delays, and risks to make it easier to complete 100% affordable housing
  - Enable affordable housing developers to better compete with market-rate developers
  - Expand affordable housing's viability in areas where it's been more difficult to create new affordable units
  - Help reduce costs for affordable housing development by balancing land costs with the number of units needed to make projects feasible and lowering soft costs through an expedited approval process
Analysis of Working Groups’ New Policy Ideas

Number of Affordable Units by Census Block
100% Affordable Housing Citywide Overlay: Background

• The City already partners with affordable housing developers (usually local nonprofits).
  – Development is subsidized by federal, state, and city government.
  – “Affordable” housing is income-restricted where housing costs are affordable to low-, moderate, and middle-income people
  – City-funded affordable housing is created through acquisition of existing multi-family housing and new construction
  – FY19 funding for Affordable Housing Trust totals $13.6 million in City funds
  – Two or three projects are typically completed each year (approx. 50-60 affordable units)

• The overlay does not change the number of units produced because affordable housing production is determined by the availability of funding.

• Main objectives are to:
  – Expand affordable housing's viability in areas where it's been more difficult to create new affordable units
  – Enable affordable housing developers to better compete with market-rate developers in growth areas
What would the 100% Affordable Housing Citywide Overlay entail?

For 100% affordable housing developments only:

- Offer density bonuses and relief from dimensional standards (height, setbacks, open space) and parking where necessary (varies by zoning district)
- Allow for as-of-right approvals with required Planning Board design review and community input instead of discretionary permitting approvals
- Allow affordable multi-family and townhouse developments in all districts (e.g. not currently an allowed use in Residence A and B districts);
- Allow for conversion of any existing structure to affordable multi-family housing
- A design review process would ensure good design without creating uncertainty about a project’s fundamental viability

Huron Ave. at Vassal Ln. has different densities together in close proximity.
100% Affordable Housing Overlay Ideas for Discussion

- The 100% Affordable Housing Overlay could apply to the entire city
  - In higher-density areas such as Mass Ave, Cambridge Street, and areas of potential change, affordable developments would need 2.5 times the density allowed by current base zoning to be competitive in the market
  - In residential neighborhoods and other areas, affordable developments would need an FAR of 2.0 to be financially feasible in most locations
Commercial Corridors and Areas of Potential Change Analysis

- HR&A analyzed recent property transactions for properties with land area of at least 7,500 square feet that occurred within 500-feet of Mass Ave, Cambridge Street, and the areas of potential change.

- Based on the land value, HR&A calculated the number of affordable units and FAR that would be needed to make 100% affordable development competitive with market-rate development.

- A 2.5x density bonus above base zoning made affordable housing feasible in most locations.
Analysis of Working Groups’ New Policy Ideas

Urban Form Comparison – Existing Built Density

Not all parcels in these areas will be redeveloped.

Floor Area Ratio

- 0.0 - 2.0
- 2.1 - 4.0
- 4.1 - 6.0
- 6.1 +

FAR is one of many urban form rules. FAR and rules about height, lot coverage, historic preservation, and design guidelines combine to manage the form of a building.
Not all parcels in these areas will be redeveloped.

Floor Area Ratio
- 0.0 - 2.0
- 2.1 - 4.0
- 4.1 - 6.0
- 6.1 +

FAR is one of many urban form rules. FAR and rules about height, lot coverage, historic preservation, and design guidelines combine to manage the form of a building.
Urban Form Comparison – Max. Density under 100% Affordable Overlay

Not all parcels in these areas will be redeveloped.

Floor Area Ratio Precedents
- 1.6
- 2.4
- 3.9
- 4.3
- 5.0
- 7.9

FAR is one of many urban form rules. FAR and rules about height, lot coverage, historic preservation, and design guidelines combine to manage the form of a building.
Residential Overlay Analysis

- CDD analyzed recent property transactions in Residential A & B zoning districts, and calculated the number of units and floor area ratio (FAR) that would be required to make an affordable housing development feasible in different areas.

- An FAR of 2.0 made affordable housing feasible in most locations.

- These neighborhoods’ historic urban fabric includes some parcels with relatively dense development, but current zoning does not allow most existing buildings to be built today.

- The present analysis asks: How can a contemporary building meet that density requirement while complementing the surrounding neighborhood?

- Methodology: “test-fit” analysis
  - Test-fits take a real or hypothetical parcel condition and quickly test how a real building would fit on that parcel, given other constraints
Finding a generic parcel condition in residential areas

- Representative Size: Three land area size-classes
  - A: Less than 5,000 sf
  - B: 5,000-10,000 sf
  - C: Greater than 10,000 sf
- Representative Context: Mixed Density
- Representative Shape: Rectangular
Other Test-Fit Assumptions

- Approximately 1,000 square feet of gross floor area for each housing unit (this represents an average point between larger family sized units and smaller units for smaller households).
- Maintain the front setback typical of the surrounding context.
- Test development at both three stories (33 feet) and four stories (44 feet).
- Vary setbacks, open space, and parking requirements as necessary to fit the development.
- Include at-grade ground-floor unit entrances and/or ramps to accommodate people of all ages and abilities.
What would the 100% Affordable Citywide Overlay look like in residential neighborhoods?

100% Affordable Housing developments in residential zoning districts would take the form of mid-rise multifamily buildings, consistent with the historic mix of densities found throughout Cambridge.

Examples of hypothetical buildout on small parcels (<5,000sf): Res. A or B Prototypical Neighborhood

Maximum allowed under current zoning (many existing buildings are non-compliant)
2 units, 2 stories

Example of buildout under 100% Affordable Citywide Overlay
7 units, 3 stories

Example of buildout under 100% Affordable Citywide Overlay
8 units, 4 stories

Analysis of Working Groups' New Policy Ideas

69% of existing buildings in residential neighborhoods are not zoning compliant, due to height, density, or both.
What would the 100% Affordable Citywide Overlay look like in residential neighborhoods?

100% Affordable Housing developments in residential zoning districts would take the form of mid-rise multifamily buildings, consistent with the historic mix of densities found throughout Cambridge.

Examples of hypothetical buildout on medium-sized parcels (5,000sf – 10,000sf): Res. A or B Prototypical Neighborhood

Maximum allowed under current zoning (many existing buildings are non-compliant)
2 units, 2 stories

Example of buildout under 100% Affordable Citywide Overlay
10 units, 3 stories

Example of buildout under 100% Affordable Citywide Overlay
12 units, 4 stories

69% of existing buildings in residential neighborhoods are not zoning compliant, due to height, density, or both.
What would the 100% Affordable Citywide Overlay look like in residential neighborhoods?

100% Affordable Housing developments in residential zoning districts would take the form of mid-rise multifamily buildings, consistent with the historic mix of densities found throughout Cambridge.

Examples of hypothetical buildout on large parcels (>10,000sf): Res. A Prototypical Neighborhood

- **Maximum allowed under current zoning** (many existing buildings are non-compliant)
  - 1 unit, 2 stories

- **Example of buildout under 100% Affordable Citywide Overlay**
  - 17 units, 3 stories

- **Example of buildout under 100% Affordable Citywide Overlay**
  - 23 units, 4 stories

69% of existing buildings in residential neighborhoods are not zoning compliant, due to height, density, or both.
Examples of recent infill development in Cambridge

In these examples, the new developments are at a higher density than the surrounding buildings.
### Test-fits Comparison

<table>
<thead>
<tr>
<th>Size Class</th>
<th>Parcel Area</th>
<th>Floors*</th>
<th>Area per Floor</th>
<th>GFA</th>
<th>Leasable Area</th>
<th>FAR</th>
<th>Units**</th>
<th>Open Space**</th>
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<tbody>
<tr>
<td>&lt;5,000 sf</td>
<td>3,971</td>
<td>3</td>
<td>2,500</td>
<td>7,500</td>
<td>6,100</td>
<td>1.89</td>
<td>7</td>
<td>37%</td>
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<tr>
<td></td>
<td></td>
<td>4</td>
<td>1,980</td>
<td>7,920</td>
<td>6,080</td>
<td>2</td>
<td>8</td>
<td>50%</td>
</tr>
<tr>
<td>5,000-10,000 sf</td>
<td>6,025</td>
<td>3</td>
<td>3,580</td>
<td>10,740</td>
<td>9,140</td>
<td>1.78</td>
<td>10</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>3,000</td>
<td>12,000</td>
<td>9,875</td>
<td>2</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>&gt;10,000 sf</td>
<td>11,650</td>
<td>3</td>
<td>5,790</td>
<td>17,370</td>
<td>15,660</td>
<td>1.49</td>
<td>17</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>5,790</td>
<td>23,160</td>
<td>20,905</td>
<td>2</td>
<td>23</td>
<td>50%</td>
</tr>
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3 floors = 33 ft.
4 floors = 44 ft.
*typical older triple decker is 35 - 40 ft. tall

** Average Unit GFA = 1,000 sf.
Unit count = Building GFA / Average Unit GFA
Open space percentage assumes all non-building space is used for open space

### Setbacks

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Side</th>
<th>Side</th>
<th>Rear</th>
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<tbody>
<tr>
<td>&lt;5,000 sf</td>
<td>11 ft</td>
<td>5'</td>
<td>6'</td>
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<tr>
<td>&gt;10,000 sf</td>
<td>20 ft</td>
<td>5'</td>
<td>12'</td>
<td>9'</td>
</tr>
<tr>
<td>5,000-10,000 sf</td>
<td>20 ft</td>
<td>5'</td>
<td>6'</td>
<td>6'</td>
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## Zoning Constraints

<table>
<thead>
<tr>
<th>District</th>
<th>Max FAR</th>
<th>Min Lot Area / DU</th>
<th>Min Front Setback</th>
<th>Min Side Setback</th>
<th>Min Rear Setback</th>
<th>Max Height</th>
<th>Min OS Ratio</th>
<th>Parking Ratio</th>
<th>Multifamily Allowed?</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>1 per DU</td>
<td>No</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>1 per DU</td>
<td>No</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>1 per DU</td>
<td>No</td>
</tr>
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</table>

Zoning rules in red would need relief for 100% affordable housing developments.
Other Considerations

- Height considerations:
  - Tested at 3 and 4 stories, 33 and 44 feet respectively
  - An additional 5-7 feet would allow for pitched roofs, a raised first floor for stoop, flood protection, and/or tuck-under parking.

- Parking considerations:
  - At-grade spaces require compromise with open space requirements; tuck-under parking is also a possibility, but raises cost of development.
  - Parking ratios like 0–0.5 spaces per unit are more typical in affordable developments.
  - Existing homes in some districts have driveways, putting less pressure onto on-street parking compared to other parts of the city.

- Open space requirements require compromise with height requirements (in order to achieve the optimal density), as well as parking requirements. Green roofs and stormwater management infrastructure can mitigate the impacts of less open space.
Design Considerations

- Though an affordable overlay should provide for an easier process of development approval, 100% affordable development should still be subject to design review, to ensure the best viable outcomes for open space siting, maintenance of existing trees, and complementary designs.

- Cambridge can build on the design innovation currently underway in similar cities that manage infill development to achieve their housing goals.