



**CITY OF
CAMBRIDGE**

Housing, Zoning, and their Impacts on Cambridge Services and the Economy



Economic Development and University Relations Committee

October 31, 2024

Executive summary

- As a reminder, we are pursuing increased density through citywide multifamily zoning because it's a stated community priority that will have many positive results.
- We set a goal to create 12,500 new housing units by 2030 in the Envision Cambridge plan, which was crafted with careful consideration to the impacts on the City's economy, infrastructure, and public services—and the overall quality of life in Cambridge.
- To meet that goal, we've looked to rezone several areas, like Central Square, Cambridge Street, Alewife, and Mass Ave, while also pursuing multifamily zoning citywide.
- After accounting for the combined development potential of these rezoning initiatives, if adopted, the latest projections suggest housing production will remain within the bounds of what was planned for in Envision Cambridge.
- Furthermore, there are several trends we're seeing that reinforce our confidence that the City can manage the impacts of planned growth:
 - 1 Municipal finance: proposed zoning changes could lead to modest new growth, but impacts on the tax rate shift and residential valuations is not feasible to predict
 - 2 Infrastructure and utilities: After accounting for population growth from the proposed rezoning, expected water demand remains within the Safe Yield at the Treatment Plant, but localized capacity constraints may still arise
 - 3 Tree canopy: While there will be some impacts on the tree canopy in residential neighborhoods, the Tree Protection Ordinance helps curb loss of trees on private property and has a track record of encouraging replanting when trees are removed
 - 4 Schools and human services: Impacts on the schools and human services will depend on the number of new school-aged children, which has not been consistent with population growth
 - 5 Transportation: Increasing density could lead to more pedestrian traffic, and current and future efforts—both regionally and locally—will help enhance public transit services in parallel over time
- Accordingly, we believe the proposed zoning changes will have manageable impacts that we are committed to monitoring going forward.
- Upcoming hearings at the Planning Board and the Ordinance Committee are the next steps to advancing multifamily housing in the City.

The City Council is considering rezoning to increase multifamily housing

What is multifamily housing?

- 3+ units in a building
- Many different sizes, types, styles, ages
- Historically, provides diverse housing options in our urban environment

Why consider expanding multifamily housing in Cambridge?

- Most Cambridge residents already live in multifamily buildings
- Such buildings are not permitted in many parts of the city
- More housing in Cambridge puts homes near jobs
- More people in walkable, bikeable areas, near subway and buses means everyone doesn't need to drive
- Multifamily homes are typically smaller and require less energy to heat and cool
- More homes in Cambridge means more people to support our retail and small businesses



Envision Cambridge set aggressive housing targets

+12,500
units by 2030

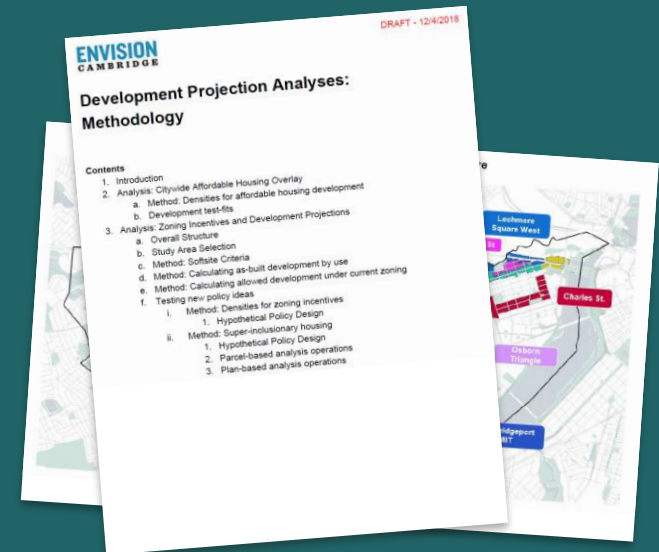
+3,175
affordable units

What has been built since Envision?

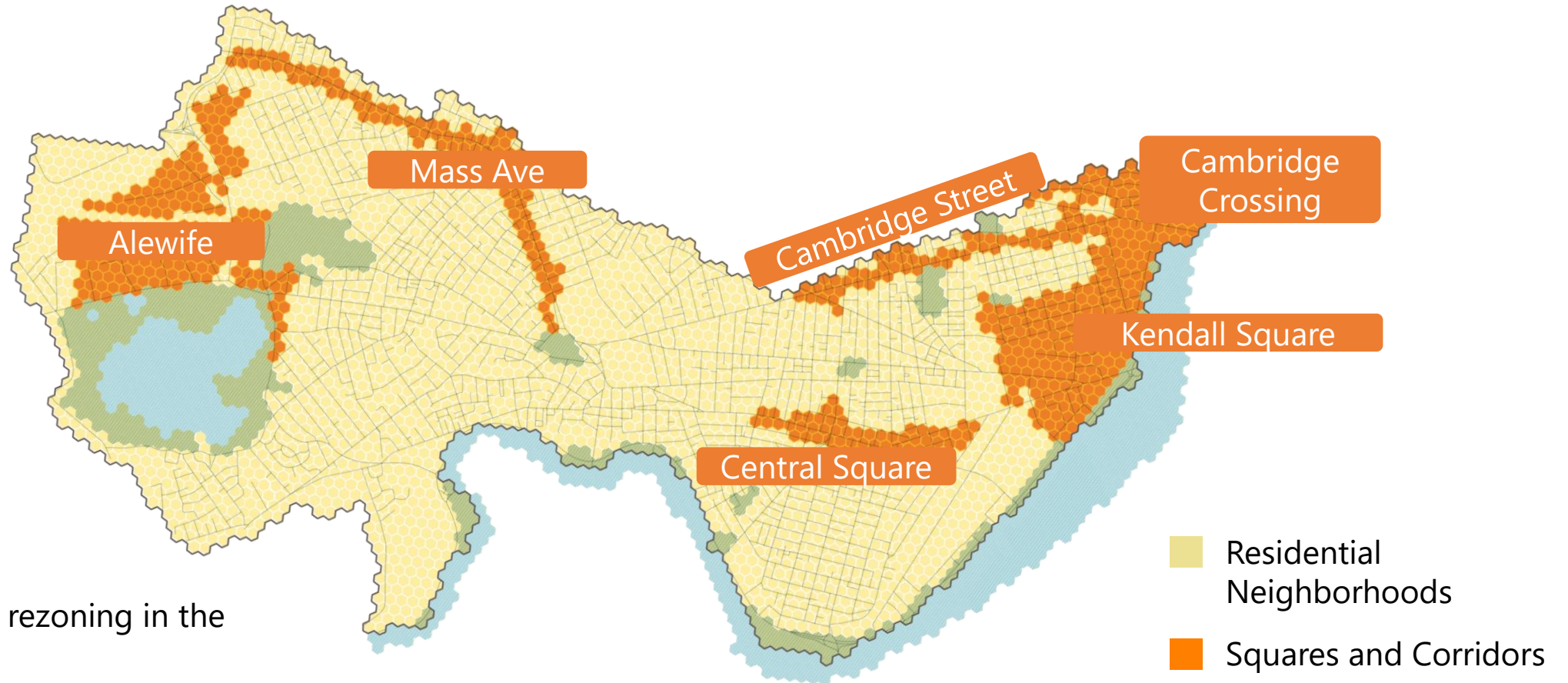


Envision Cambridge Projections (2019)

As part of the Envision Cambridge process, the City studied impacts of future development under different policy scenarios.



... And to meet these targets, we're updating our zoning in residential neighborhoods and in several squares and corridors



Projections* assume rezoning in the following areas:

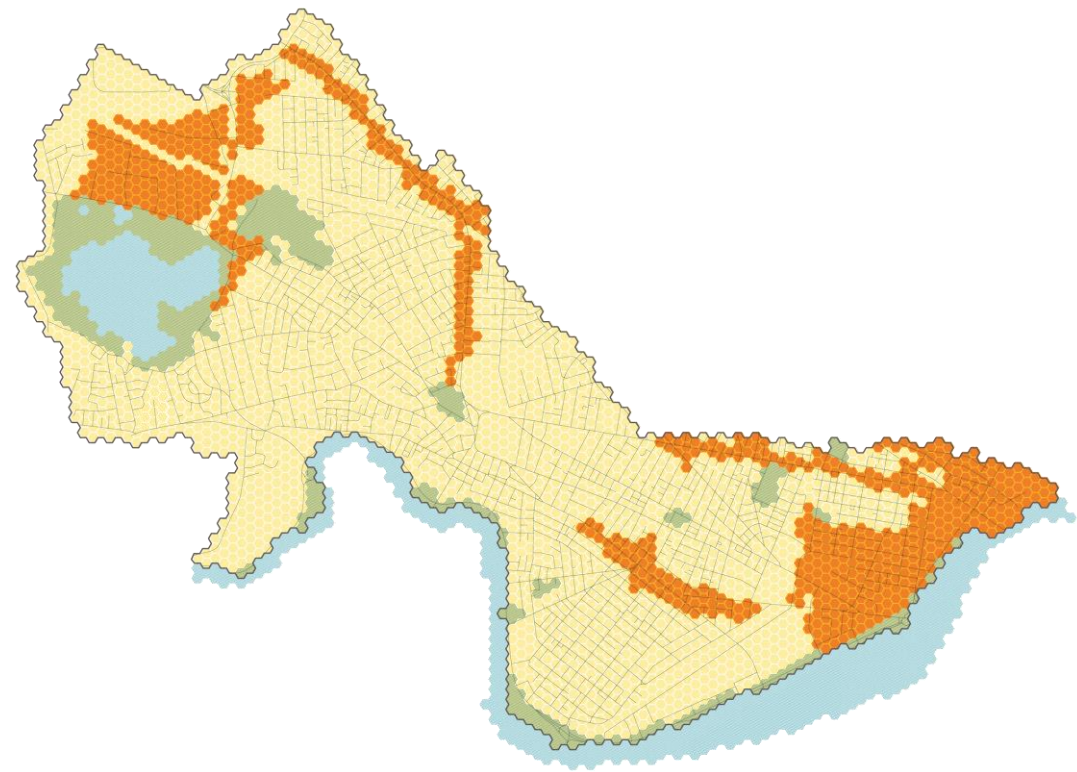
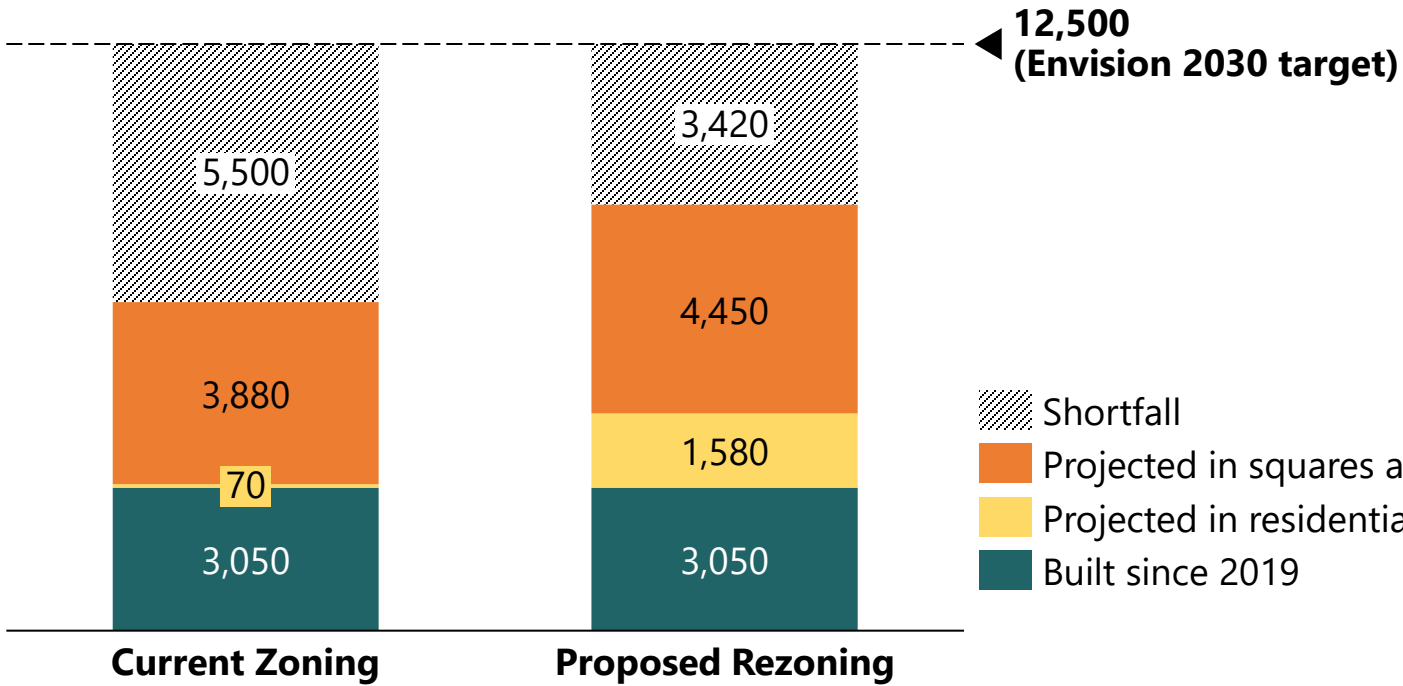
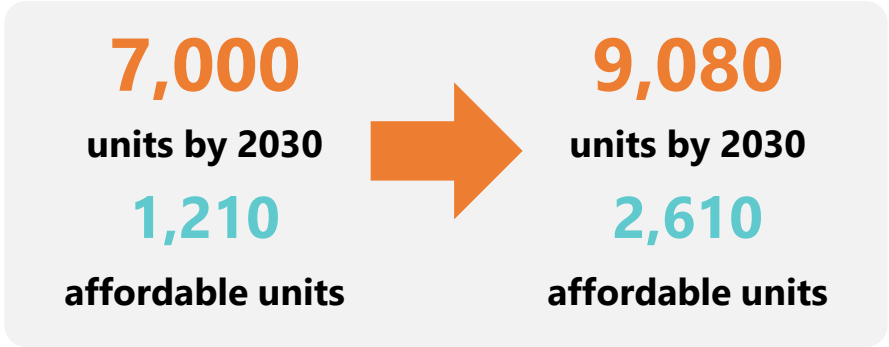
1. Multifamily Zoning
2. Cambridge Street
3. Mass Ave (Harvard to Arlington)
4. Central Square
5. Alewife Triangle & Shopping Center**

*More refined analysis underway.

**Projections based on assumptions similar to Quad rezoning.

By 2030, the City is expected to fall short of its housing target under both current and proposed zoning

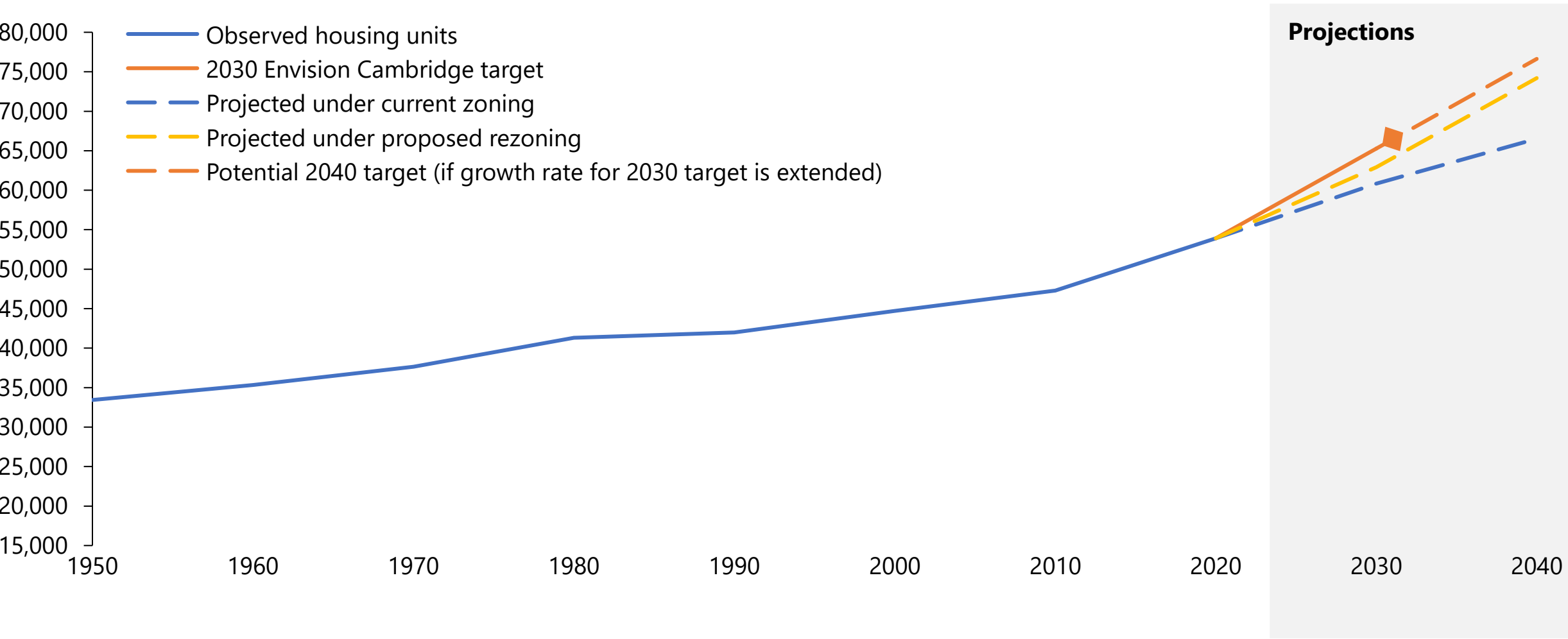
2030 Housing Projections



- Shortfall
- Projected in squares and corridors
- Projected in residential neighborhoods
- Built since 2019

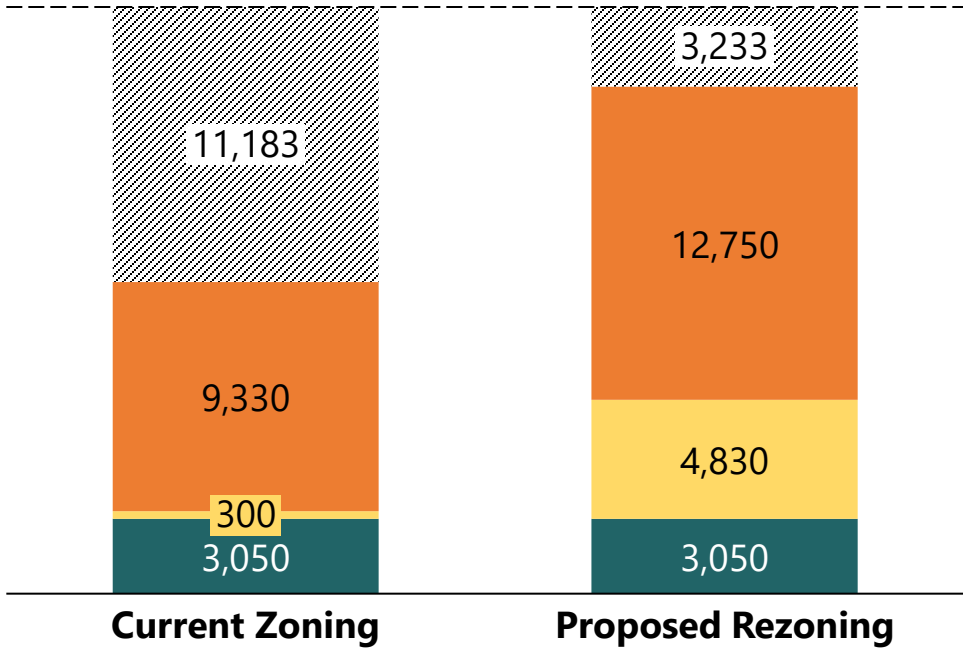
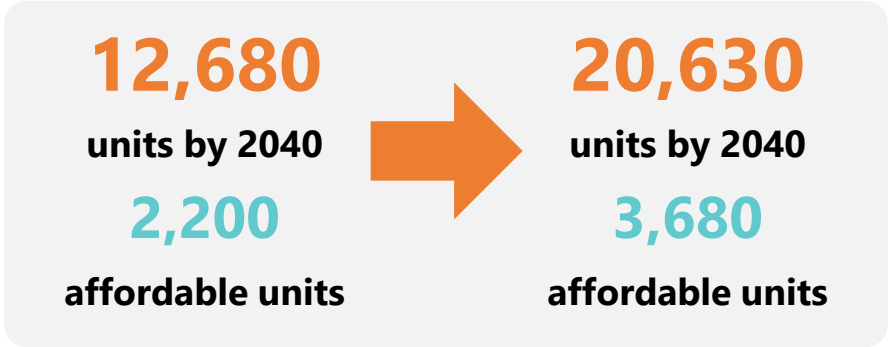
If we extended the growth rate needed to meet the 2030 Envision Cambridge target by another 10 years, would need to add 23,863 new units from 2019-2040

Cambridge housing units over time, 1950-2040 (units)



By 2040, even with the proposed rezoning, the City will not keep pace with the annual growth in new housing units supported by Envision Cambridge

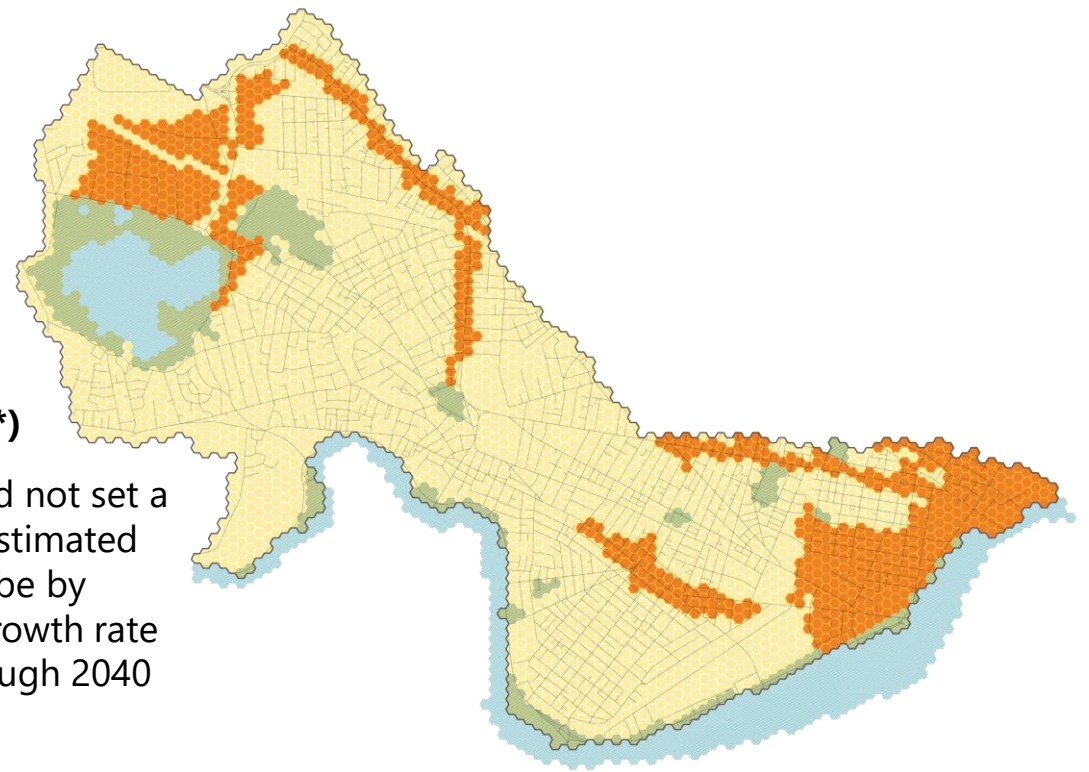
2040 Housing Projections



23,863
(assumed 2040 target*)

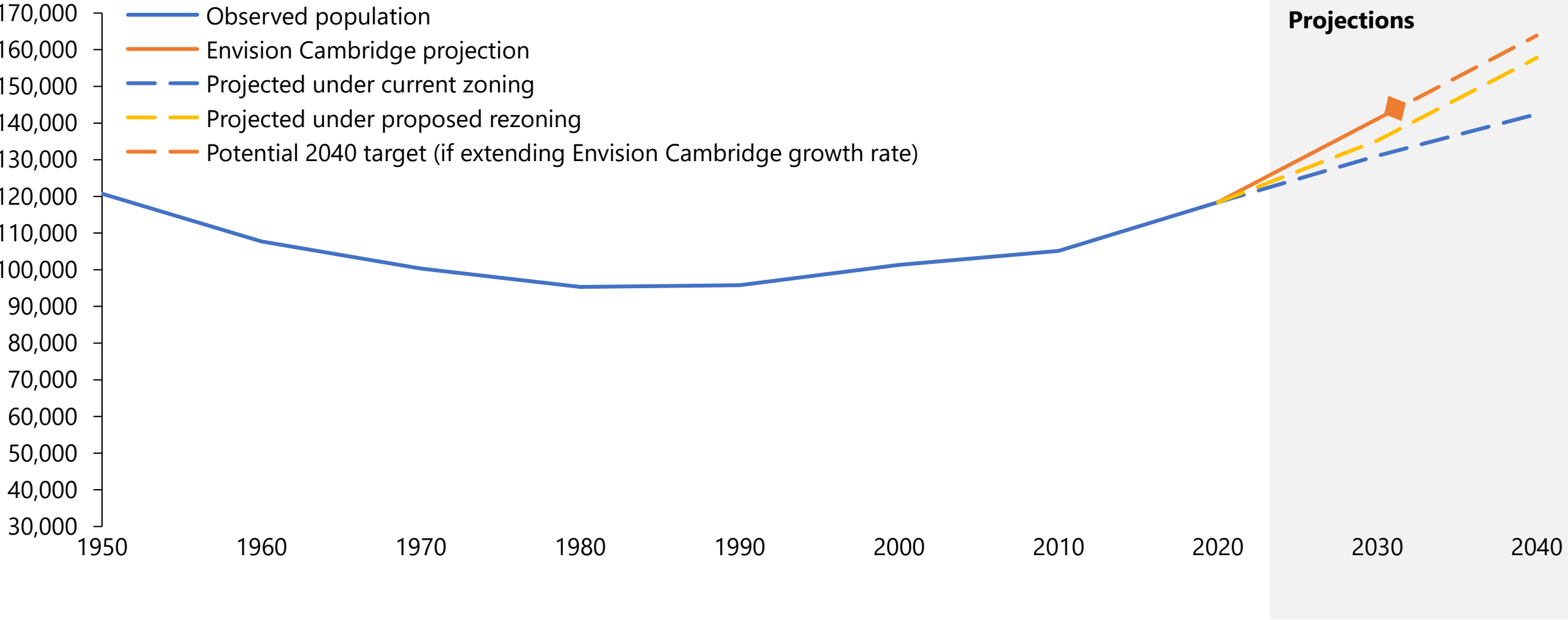
*Envision Cambridge did not set a target for 2040: we've estimated what that target would be by extending the annual growth rate for the 2030 target through 2040

- Shortfall
- Projected in squares and corridors
- Projected in residential neighborhoods
- Built since 2019



These projections also translate to lower population growth rates through 2040 compared to what we'd expect from extending the Envision Cambridge target for 2030

Cambridge population over time, 1950-2040



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The proposed zoning changes could lead to modest new growth, but impacts on the tax rate shift and residential valuations is not feasible to predict

Impact on the residential/commercial shift:

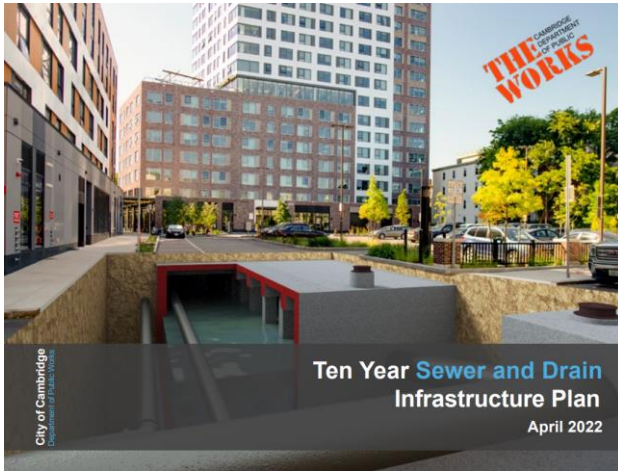
The property tax shift limits enacted by state law are based on the total values of residential and commercial property classes, including new development growth and market value changes in the existing properties

- If adopted, the new zoning rules would lead to a modest increase in new growth over the next twenty years.
- Any effect on the shift between classes would depend on the relative impact of growth plus price appreciation in both residential and commercial sectors and is not something we can predict

Impact on the residential valuations: increase or decrease?

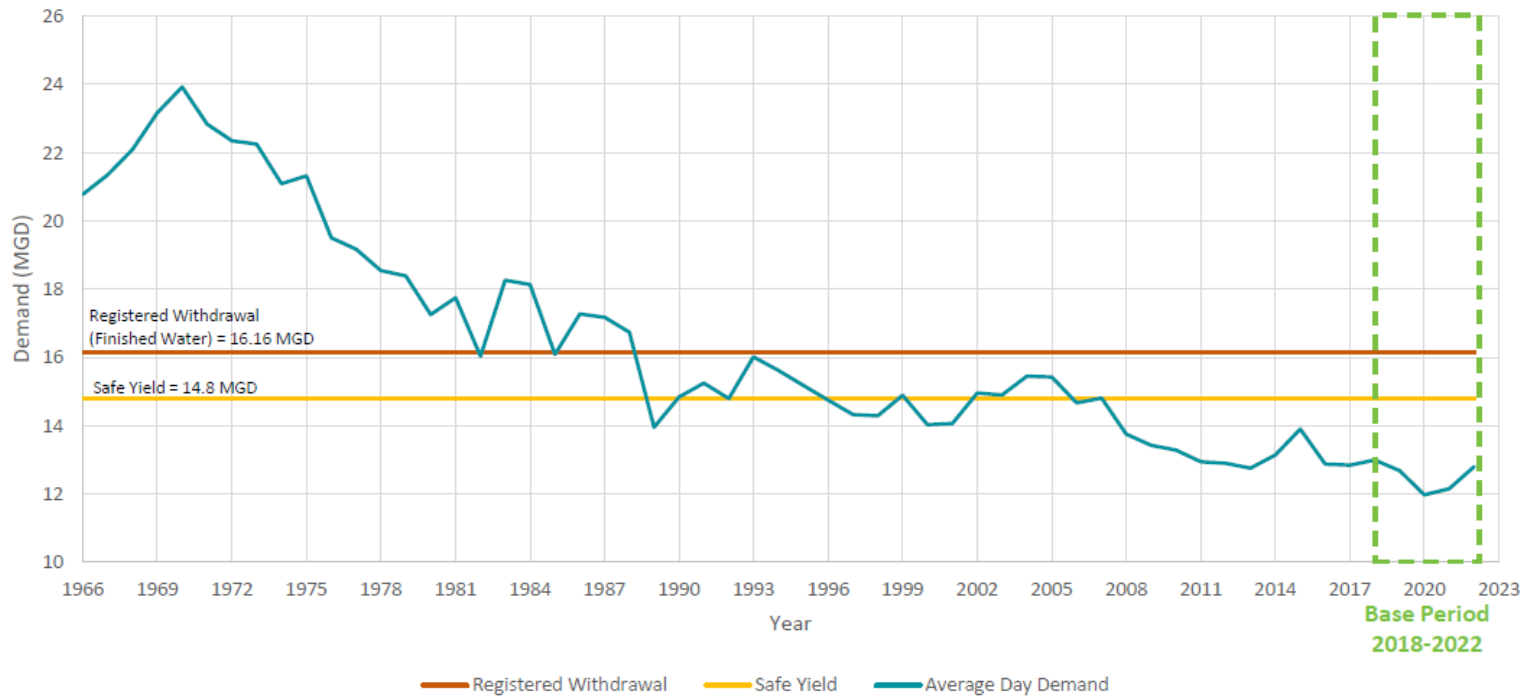
- Assessed valuations reflect the market as of the Assessment Date based on market activity the prior year.
- Any zoning changes would need to impact actual market activity before there is a change in assessed values either up or down.

The DPW and the Water Department (CWD) operate, maintain, and plan infrastructure for future conditions to ensure acceptable levels of service



- A** Anticipated population growth from proposed rezoning **can generally be supported** by City and MWRA infrastructure
- B** That said, **localized capacity constraints could arise** depending on the age, condition, and size of existing infrastructure
- C** Reviewing proposals for new development through **formal permitting processes will remain critical** for the City to actively plan for and support new development

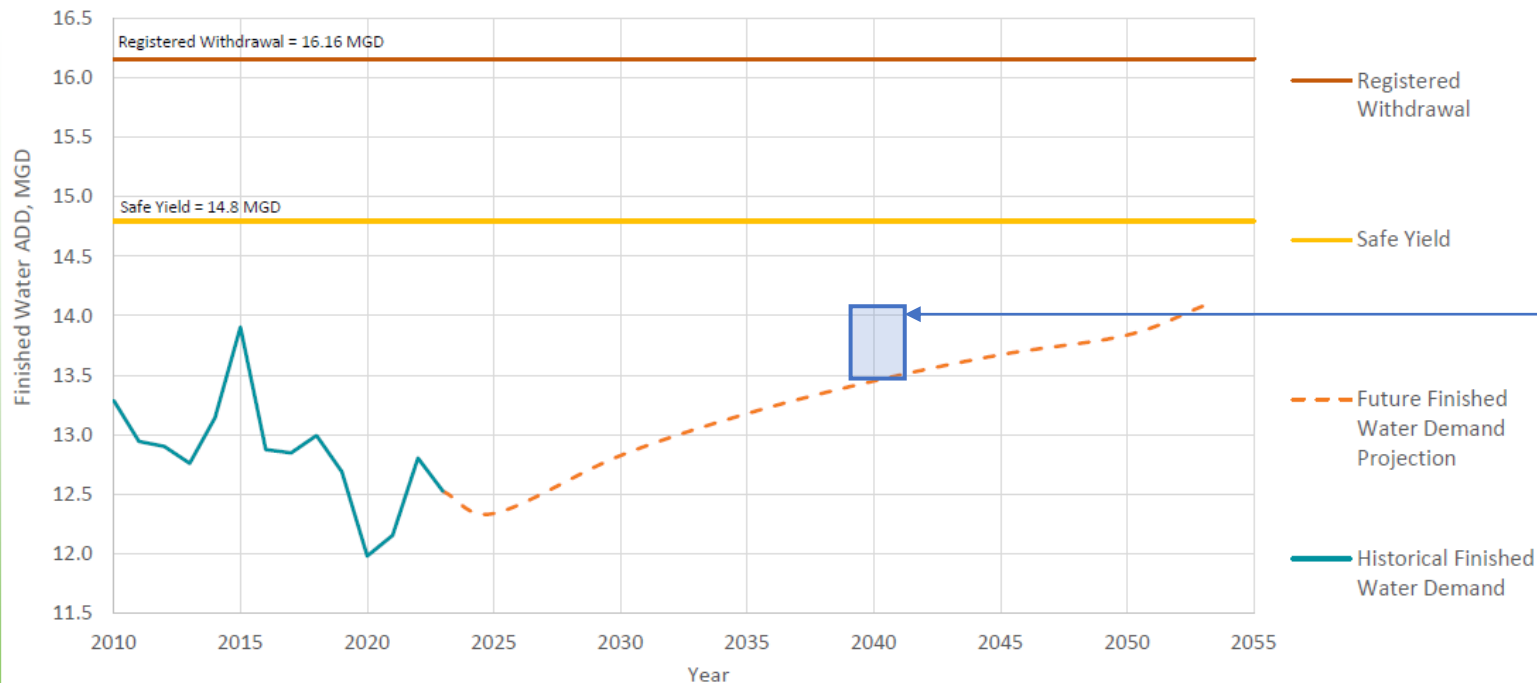
Historical Average Day Demands



- Despite increased population, average daily water demand has decreased over time
- We believe this trend is due to conservation efforts and more efficient building systems, like plumbing fixtures, which has reduced demand

After accounting for population growth from the proposed rezoning, expected water demand remains within the Safe Yield at the Treatment Plant

Finished Water Demand Projections



- Projected population increases has the City growing by approximately 23,000-37,000 people by 2040
- Potential increase in water demand of 0.95-1.53 MGD, which is within the Safe Yield of the Treatment Plant
- Max Daily Demand (peak flows) will continue to be anticipated and managed by CWD

That said, localized capacity constraints could arise due to project size and location, so it's critical the City continue to review all projects—large and small

Project size

- Large projects hit regulatory thresholds that trigger mitigation of their impacts to City and Regional stormwater and sewer infrastructure.
- Small projects, through engineering review of a building permit, can provide some mitigation of impacts.

Project location

- Localized capacity constraints in water, sewer and drainage infrastructure can be an issue due to pipe sizes and pipe conditions.
- Consistent with review of development proposals today, engineering review of any projects local impact on infrastructure needs to be considered.

Development Review: For reasons noted above, engineering review of all projects is critical to allow CWD and the DPW to understand and plan for any development impacts on City Infrastructure as well as the project's consistency with broader City goals (e.g., Combined Sewer Overflow planning, resiliency planning)

For stormwater, the DPW already reviews projects large and small to mitigate stormwater quantity and quality

- **For large projects:** Manage stormwater impacts through **Stormwater Control Permit**
- **For medium and small projects:** The DPW is actively reviewing regulations to ensure appropriate mitigation of stormwater impacts

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PROGRAMS | PERMITTING

The City requires a **Stormwater Control Permit** for larger projects (among other permits) for construction, development, and redevelopment projects in the City. This permit ensures measures are taken throughout the project to address erosion, nonpoint source pollution, flood control, and future climate projections.

The City provides guidance documents to support the permit application process so that projects:

- **Protect City infrastructure**
- **Protect natural water resources**
- **Comply with regulatory requirements**

The City's requirement for development and redevelopment projects to provide on-site detention storage for the stormwater volume difference between the **2070 2-year 24-hour** and the **2070 25-year 24-hour** storm event hydrographs enables the stormwater system to be resilient against larger storm events.

The permitting process ensures current and future development projects complement the City's stormwater management goals.



Permitting ensures construction sites, like this one, include measures to protect our physical and natural resources.

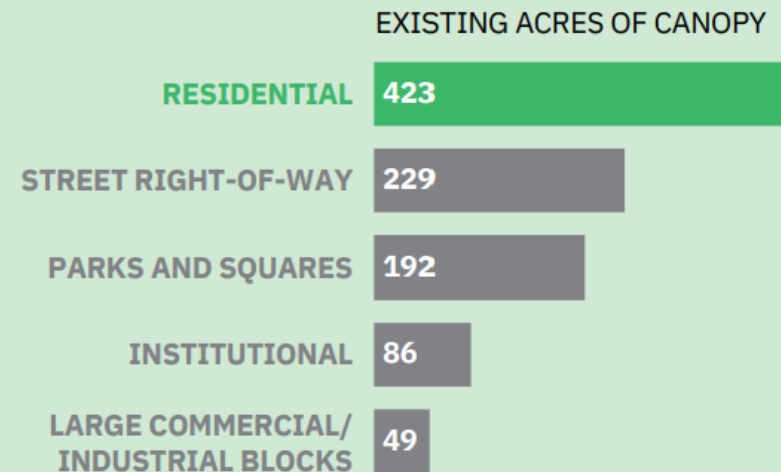
A healthy tree canopy is a vital part of our Urban Forest Master Plan, and the Tree Protection Ordinance helps curb loss of trees on private property

From the Urban Forest Master Plan:

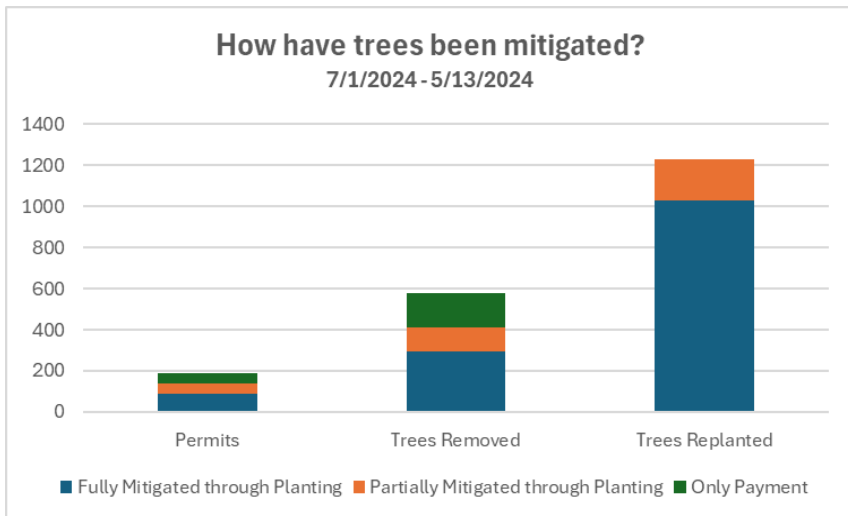
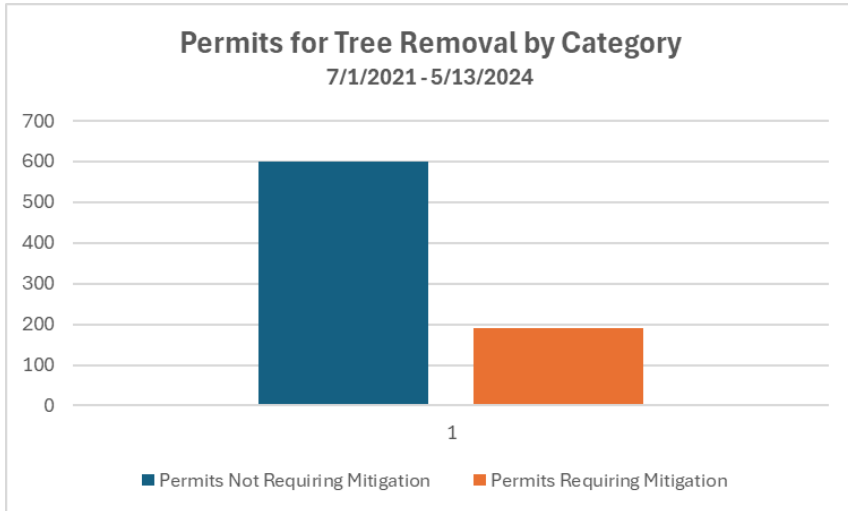
- A healthy forest is a **vital part of a healthy city**, and we all **share a responsibility** to care for our urban forest.
- Tree Canopy on **Residential Properties** represents the largest portion of our existing canopy.
- Trees are **removed for a variety of reasons**—new construction, renovation and site improvements, and natural mortality from age.
- **Tree Protection Ordinance** was established to help curb the loss of trees on private property and incentivize replanting.



Healthy
Forest
↓
Healthy
City



... And the Tree Protection Ordinance has a track record of encouraging replanting when trees are removed



The Tree Protection Ordinance is encouraging replanting when trees are removed.

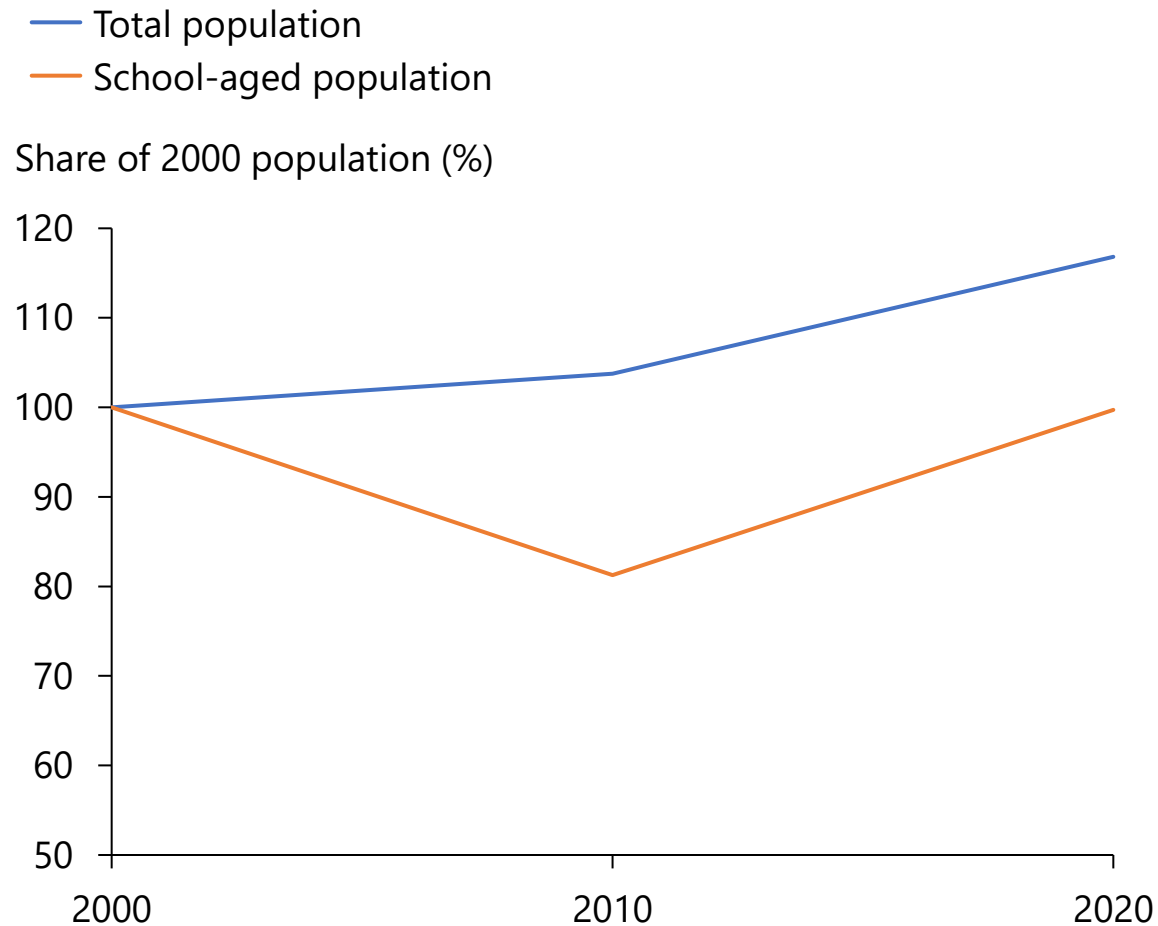
- Trees replanted for mitigation are **protected for 10 years**.

Maintaining **10' front setbacks in residential zoning** is beneficial to street trees.

- 32% of street trees located in areas with 0' setbacks were in good conditions.
- 69% of street trees located in areas with >5' setback were in good condition.

Impacts on the schools and human services will depend on the number of new school-aged children, which has not been consistent with population growth

Change in population over time, 2000-2020 (normalized)



Source: CDD

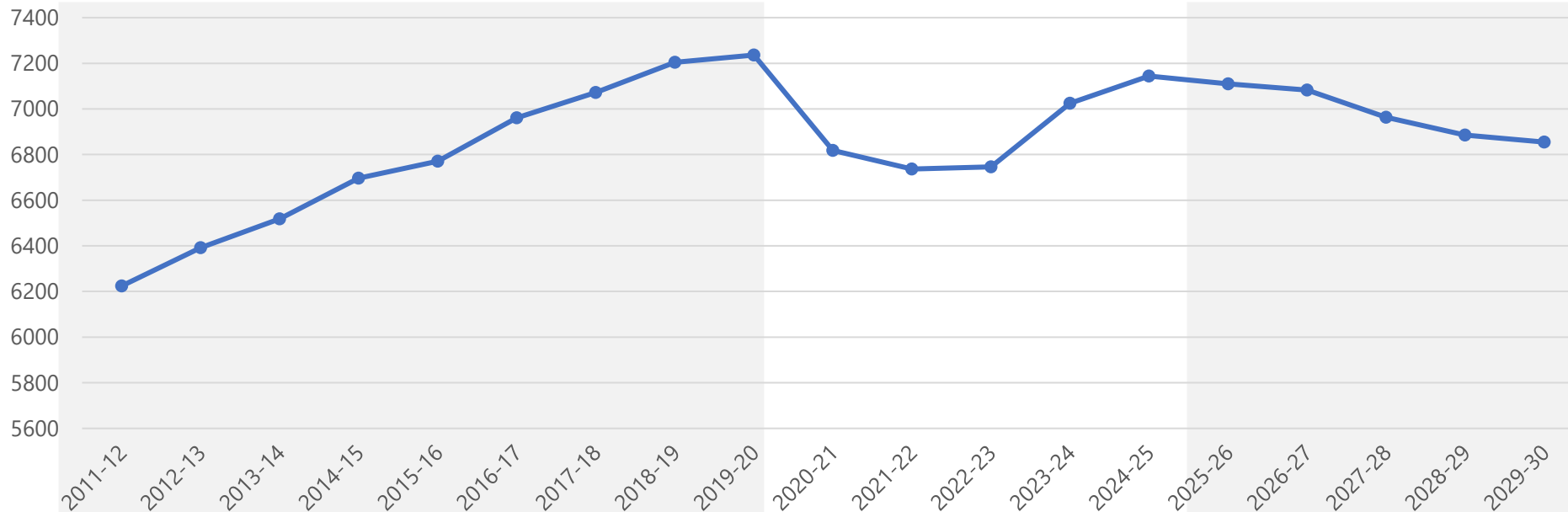
- Projecting the impact of new housing on future enrollment is difficult without knowing the unit size (i.e., # of bedrooms) that will be developed
- In Metro Boston, approximately 40% of families with children living in 3+ bedroom units have children under 18 compared to 25% for families in 2-bedroom¹
- The Metropolitan Area Planning Commission (MAPC) also projects that the number of school-age students will decline by 8% in Metro Boston between 2010 and 2040, even as total population grows by 13%²

1. Schuster, Luc, *Is new housing a school budget buster? What does the research say?*, Boston Indicators/ Upzone Update, Oct.2024

2. *The Waning Influence of Housing Production on Public School Enrollment in Massachusetts*, Prepared by MAPC, October 2017

Current projections, both locally and across the region, anticipate a continued decline in school enrollment

Cambridge Public Schools (CPS) Enrollment
SY 2010/11 - SY 2029/30



Between 2010 and 2019, CPS enrollment grew nearly 17%, before declining in SY2020.

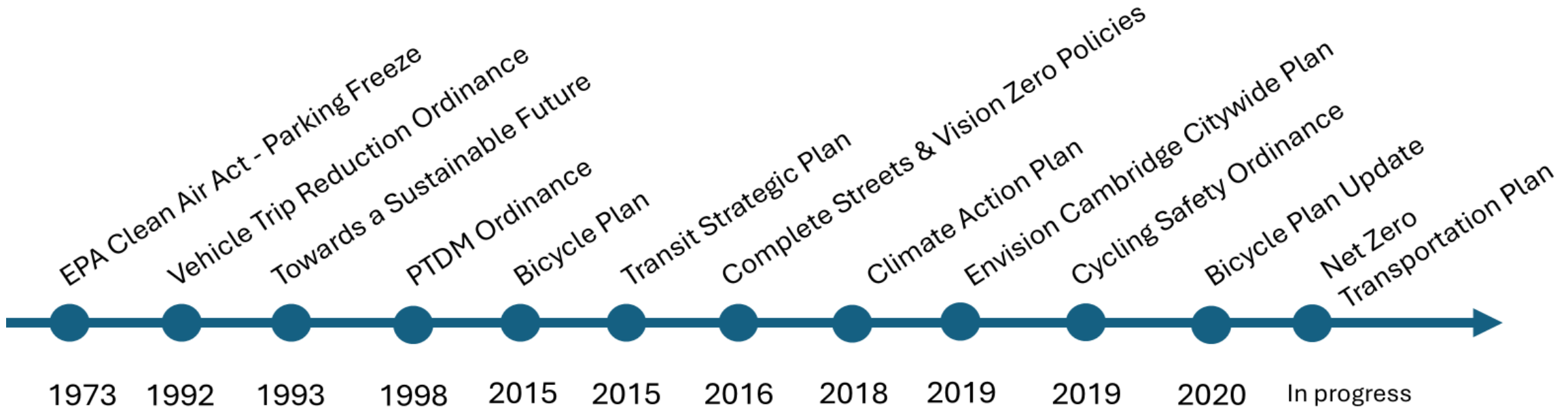
These increases were absorbed by the district incrementally each year

Current projections through 2029 indicate flat/declining enrollment, remaining below 2019 levels.

- A 2017 study by the MAPC, found "there has been no statistically significant link between new housing production and overall enrollment growth."¹
- Enrollment declines are driven by persistent demographic trends, including Baby Boomers having aged out of child-bearing years, and younger generations having fewer children, later in life.¹

The City has a long history of setting transportation policy that focuses on moving people rather than cars

Cambridge Transportation Policy and Plans

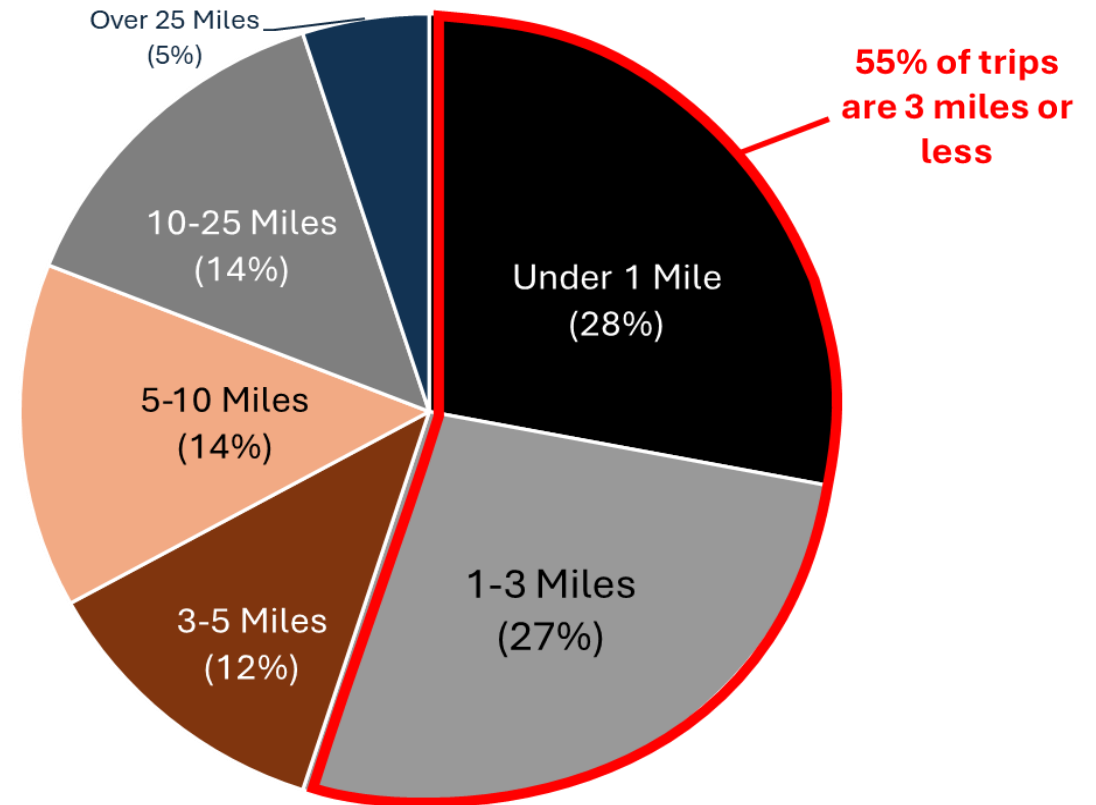


The goal is to create strong communities, reduce traffic congestion, and fight climate change

Increasing density could lead to more people walking, which many community members asked for in the Net Zero Transportation Planning (NZTP) process

- Increasing housing in the city would allow more people to live closer to work and other things they do in life.
 - We've heard through NZTP comments from community members wanting more local businesses supported throughout Cambridge to make it easier to walk to do business.
 - Increased density would better support retail, restaurant, and other businesses, as well as support more frequent buses.
 - Existing policies and plans that make the city more walkable, bikeable, and amenable to public transit will also allow us to grow comfortably.
 - People will have more transportation options, so the streets can support more people getting around than if they were all in cars.
- Research shows that more mixed land uses and higher density leads to reduced GHG emissions from transportation.¹

Trip Distance, Middlesex County, 2023



More than 50% of trips are 3 miles or less, and these trips might be made by bike and by walking if facilities are comfortable and efficient

1. https://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf

Public Transit: MBTA's ongoing and future planning, in addition to local efforts, will help improve public transportation service

MBTA's current efforts

- MBTA's ongoing work on its subway state of good repair and hiring needs have already resulted in improvements in subway travel times and "dropped" bus trips
 - Red Line is as fast as pre-pandemic and unscheduled missed local bus trips are as low as ever
 - Bus reliability is challenged by congestion and lack of bus priority measures

MBTA plans in the coming 5-10 years

- Green Line Extension: New travel patterns and expanded capacity in eastern Cambridge and Somerville/Medford
- Bus Network Redesign: Expansion of frequent bus routes serving Harvard, Central, and Kendall stations
- Red Line Transformation: Signal and vehicle upgrades to allow trains to arrive often as every 3 minutes
- Regional Rail (RailVision): Fitchburg Line upgrades for trains to arrive at least every 30 minutes all day

City/local efforts in the coming years

- Door2Door shuttles for seniors and people with disabilities or other community transportation
- Alewife Transportation Management Association (TMA), Charles River TMA seeking grants to expand service for the locations and organizations that they serve (i.e., shuttles in the Alewife Quadrangle and eastern Cambridge to North Station)

MBTA plans in the coming 10 to 25 years

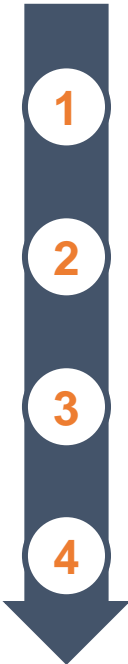
- Program for Mass Transit / Focus40 Update: Opportunity for the City to advocate for additional transit expansions, infill stations, and improvements
- Next version of the Program for Mass Transit expected to begin in 2025 and continue for 1-2 years

Parking: City policies to reduce parking demand, together with investments in sustainable transportation, can help reduce potential strain on parking

- Alternative to car ownership:
 - Continued improvements in our pedestrian environment, our bicycle network, and transit options will make it easier for many residents to opt out of car ownership.
- Using policy to reduce parking demand:
 - A Planning Board Special Permit would be required for residential development over 75,000 gross square feet.
 - This is an increase from 50,000 gross square feet under current zoning.
 - Transportation Demand Management measures, which encourage residents to use sustainable modes of transportation instead of driving alone, would continue to be part of Special Permit requirements.
 - PTDM Program has successfully reduced driving at commercial properties. We're now starting to think about what would work at residential properties.
- Where will people park if developers don't build parking?
 - It's unlikely that property owners will build zero parking because there will be some demand for spaces.
 - Self-selection is likely--people who drive less might choose to live in buildings with less parking more than people who need more parking.
 - The new flexible parking corridors make it possible to use existing parking.

Next steps in the effort to advance multifamily housing in the City:

Upcoming public hearings at the Planning Board and Ordinance Committee:

- 
- 1 November 12, 6:30pm:** Planning Board hearing
 - 2 November 19, 2:00pm:** Ordinance Committee hearing
 - 3 December 4, 2:30pm:** Ordinance Committee hearing
 - 4 December 19, 5:30pm:** Ordinance Committee hearing

Learn more on the City's website at the following URL: cambridgema.gov/multifamilyzoning