

# VISION HAVERHILL —2035—→

Steering Committee Meeting  
July 31, 2019

# Agenda

## **Updates on outreach / engagement**

- Media announcements and survey counts

## **Existing conditions report**

- Outline and topics
- Template

## **Analysis updates**

- Maximum buildout under existing zoning (high level)

200 survey responses in total as of Tuesday (70 since Monday!)



# Existing Conditions Report



# Boston: accenting key takeaways, with supporting information

## The city is experiencing phenomenal growth.

No other major American city has made as dramatic a transition from post-industrial urban decline to significant job creation since 1980. Boston's vibrant neighborhoods, cultural assets, highly productive workers, innovative businesses and renowned hospitals and universities have spurred this era of rapid growth.

Between 2010 and 2014, our population grew by six percent, twice the rate of the nation.<sup>1</sup> By 2030, Boston will be home to at least 709,000 residents, an increase of eight percent from our current population and a number Boston has not seen since before 1960.<sup>2</sup> To house our growing population and reduce pressure on the housing market, we need to add at least 53,000 additional housing units.<sup>3</sup> These new units must reflect our shifting demographics: households are smaller, with many more young adults and Baby Boomers seeking suitable housing that meets their preferences and that they can afford.

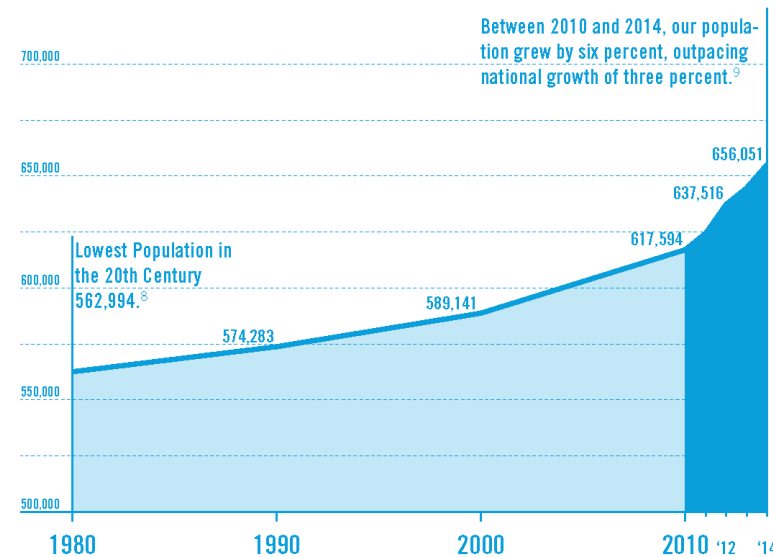
Alongside population growth, Boston added nearly 45,000 jobs between 2010 and 2014.<sup>4</sup> Strong growth in professional services, health care and education has fueled this seven

percent increase and created a highly productive economy.<sup>5</sup> Today, Boston workers are more productive than the average American worker, and their greater productivity adds \$24 billion in incremental productivity to the Boston economy every year.<sup>6</sup>

The commercial office sector has expanded apace, with 4.8 million square feet of new office space constructed between 2010 and 2015, a nearly 5 percent increase in the city's office stock, and another 4.2 million square feet of office space under construction or approved.<sup>7</sup> This recent and upcoming office construction is equivalent to adding over seven new Prudential Towers to the city.

As we build new housing and office space, we must invest in improvements that ensure growth is inclusive and enable us to attract new workers and businesses.

Boston's population has recovered from a mid-century decline, growing steadily between 1980 and 2010 and rapidly over the last five years.



## Example 2

# Salem: summary, bullets, and maps for each main topic area

Imagine Salem | Employment

## Employment

Salem has a full-fledged urban economy. The city is not a bedroom community. Instead, there are a roughly equal number of people who commute into Salem as there are residents who commute to elsewhere. Employment in the city and for Salem residents is concentrated in education, healthcare, retail, and foodservice—industries that pay low- and middle-incomes on average. Salem should work to create ladders of opportunity from low-barrier-to-entry jobs to higher wages, in part to ensure its community can keep up with rising costs of living.

Red's Sandwich Shop  
Photo: Wikimedia user Fletcher

imaginesalem.org

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Imagine Salem | Employment

### Location and density of jobs

Many of the jobs in Salem are found in a mix of large institutions, small consumer-facing businesses, and a few large national employers. These jobs tend to be found within nodes around the city—either as clusters of many organizations and businesses or large single-institution nodes.

- Salem's largest employers (as measured by the number of employees) are major institutions, including North Shore Medical Center, state government, and

Salem State University.<sup>1</sup>

- The city's largest 100 employers are located across the city; the largest concentration of those employers is in and around Downtown.<sup>2</sup> This concentration supports the everyday needs of Salem's residents and workers, undergirds the city's tourist industry, and creates a fun, active city center.

- The Hawthorne Square Shopping Center—a typical strip shopping center on Highland Avenue—is another node of large employers.<sup>3</sup>

Importantly, the city has a diverse collection of small businesses beyond its largest employers. These businesses include the city's large retail and foodservice sectors that are concentrated in Downtown.<sup>4</sup> This concentration supports the everyday needs of Salem's residents and workers, undergirds the city's tourist industry, and creates a fun, active city center.

1. Mass. Executive Office of Labor and Workforce Development, 2015.
2. BLS.
3. BLS.
4. Census Bureau, Longitudinal Employer-Household Dynamics program, 2015.

Washington Street  
Photo: Flickr user Hazzell

City of Salem

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Imagine Salem | Employment

### Location of Salem's top 100 employers, 2015 (Figure 29)

Salem's top employers are mostly concentrated in Salem's historic core and on large institutional campuses.

Source: Massachusetts Executive Office of Labor and Workforce Development, 2015

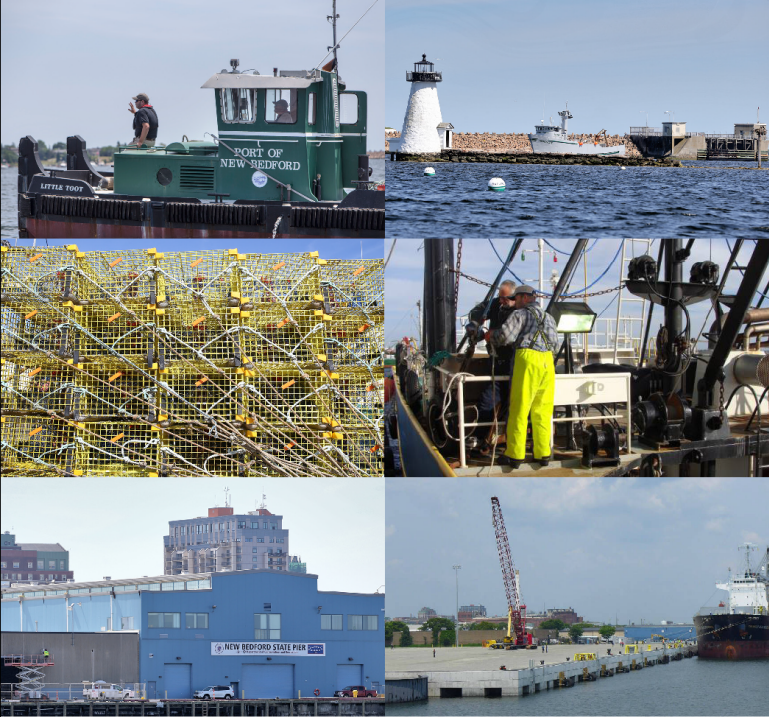
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# New Bedford: framing facts and statistics as a marketing tool

01. NEW BEDFORD: A PORT CITY


The Port of New Bedford



The Port of New Bedford is a self-sufficient international port with a full spectrum of marine services across industries, including fishing, fish processing, cargo, recreation, ferry service, marine tech, offshore wind, ship repair, and more. Located within a thriving regional maritime network, New Bedford has already positioned itself as the long-standing center of commercial fishing on the East Coast.

- » The Port of New Bedford is integral to the global seafood supply chain, home to 45+ seafood processors that collectively handled and processed 390 million pounds of domestic and foreign seafood in 2014, 35% of which was landed locally. All seafood that enters the port is distributed and consumed locally, regionally, nationally, and internationally.
- » While committed to its thriving commercial fishing industry, the City is experiencing an industrial revival on its waterfront, building off of its existing strengths to cultivate new businesses in new and emerging industries within the blue economy. These new opportunities leverage the city's existing assets through collaboration and innovation.
- » New Bedford is paving the way for new approaches in integrating traditional maritime industries with emerging marine sciences and technology, making new and existing businesses and operations more productive, more sustainable, and more profitable.
- » Initiatives like the New Bedford Ocean Cluster exemplify New Bedford's enthusiasm to enter new markets and industries outside of commercial fishing.

The Port is a self-sufficient international port with infrastructure in place to support current and future operations.




\$11.1 billion

of total economic value

\$3.8 billion | direct business revenue

\$6.9 billion | related output

\$ 477.0 million | re-spending of direct income and local purchases



40,928 jobs


generated by port activity

6,808 | direct jobs (91% from seafood industry)

4,207 | induced jobs (92% from seafood industry)

3,414 | indirect jobs (88% from seafood industry)

26,499 | related jobs



\$1.9 billion

of federal, state and local tax

\$174.0 million | direct, induced and indirect

\$412.5 million | direct, induced, and indirect federal

\$228.3 million | related taxes/local taxes

\$608.2 million | related federal taxes

Between 2015 and 2018, the total economic value of the Port of New Bedford grew by \$1.4 billion, a remarkable growth driven attributed to an increase in the seafood industry and the ship repair business.

2018 Port of New Bedford Economic Impact

Year after year, the port of New Bedford ranks as the number one commercial fishing port by value of catch in the United States with five times the annual landings of the next largest port. The fiscal impact of the Port of New Bedford is immense. A 2018 economic impact study found that New Bedford's maritime economy generates \$11.1 billion in annual economic value for the Commonwealth of Massachusetts, employing over 40,000 individuals and generating over \$1.9 billion in federal, state, and local taxes.

I. NEW BEDFORD Charting the Course in Marine Innovation

utile Ninigret | Partners

BYRNE MCKINNEY

NELSON NYGAARD

offshoots

Dan Bartman

City of Haverhill Master Plan Update

utiledesign.com

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# Haverhill's Existing Conditions Report

## Takeaways

- Boston: Agreeing upon narrative issues with steering committee will allow us to create a clearer and more concise report focused around these ideas
- Salem: We will want to cover all the general topic areas, but they don't all need to be treated with the same amount of space
- New Bedford: It is always a good idea to think about which audiences will be reading the report

## Recommendations

- The Haverhill report should incorporate some aspects of each of these approaches
- Because this report needs to be completed before our listening tour is complete, we will need to rely on the steering committee's perspective along with the surveys so far to guide our focus



# Existing Conditions Report

## Table of Contents

### Executive Summary

#### Introduction

- What is a Comprehensive Plan?
- Why Plan Now?
- Summary of Past Plans
- What is Included in a Master Plan Update?

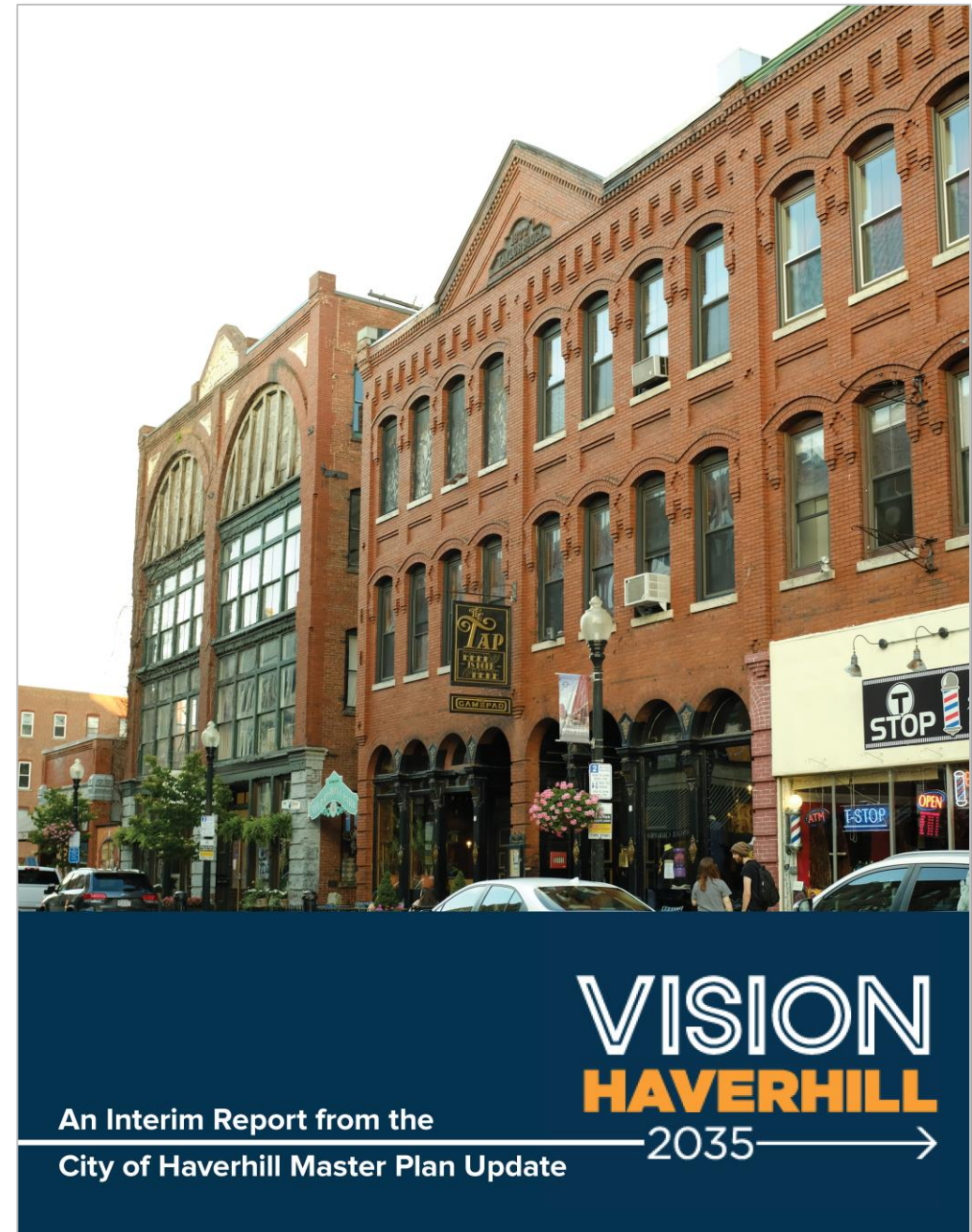
### Engagement Call to Action and Summary

#### Existing Conditions

- Population and Housing
- Land Use
- Economy
- Mobility
- Culture and Community
- Open Space

#### Where Do We Go from Here?

Approach to spatial and land use planning





# Introduction

Vision Haverhill 2035 is an initiative to update the City of Haverhill's master plan. Sponsored by the City of Haverhill and the Mayor's office, the planning process will craft a vision for the future of Haverhill as we address the issues and seize the opportunities presented to us in this century. The plan will emphasize the needs of our community and embracing our community's values.

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## What is a Comprehensive Plan?

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## Why Plan Now?

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Summary of Past Plans

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Housing Production Plan (2018)

In 2018, the City of Haverhill adopted a housing production plan for 2018–2021. The Merrimack Valley Planning Commission prepared the plan as part of a regional effort. The primary goal set out in the plan is to maintain and grow Haverhill’s housing stock at a pace consistent with projected population growth and to grow the deed-restricted affordable housing stock so that affordable housing is at or above 10% of the total housing in the City. (Haverhill just barely meets the minimum requirement of 10% affordable housing under MGL 40B. The plan states concern that Haverhill may drop below the 10% threshold after the 2020 US Census results are released.) Though not explicitly stated as goals, the plan also identifies housing needs that emerge from the analysis, including a rapidly growing senior citizen population and decreasing affordability of unrestricted (market rate) units.

The housing production plan gives 26 strategies for addressing these needs, broadly group under “Planning and Policies,” “Production,” and “Preservation.” Strategies included both broad mandates and specific measures. Broad strategies include encouraging market rate housing units, units affordable to low- and moderate-income households, and accessible units. Specific strategies included measures such as establishing Host Community Agreements, studying the conversion of municipal buildings into affordable housing, converting large single-family homes into small multifamily buildings, and offering supportive services for targeted demographics. Because this plan was adopted less than a year ago, implementation of the earliest actions is still underway.

Open Space and Recreation Plan (2016)

The City is currently implementing a 2016–2023 Open Space and Recreation Plan. The plan report provides existing conditions analysis, survey results, goals, objectives set to achieve those goals, and action items to advance those objectives. The plan is concerned not only with parks and recreational activities, but also private open spaces and agricultural land, some of which is preserved. The plan’s ten goals cover improved governance, partnerships, and education to support open space; improving existing open spaces, acquiring land for new open spaces; protecting and promoting historic resources; promoting agriculture preservation; and promoting sustainable development.

Now several years into the plan’s implementation, Haverhill must assess its progress on the plan. Many action items were slated for completion before Summer 2019. If those have not been completed, the City should identify roadblocks to their completion and reassess priorities and implementation schedules in light of those roadblocks.

Lower Acre Revitalization Strategy (2009)

In 2009, the Merrimack Valley Planning Commission prepared this report with funding from the Gateway Plus Action Grant program. The plan made detailed recommendations across several topics, including public transportation, housing, parks & recreation, crime & safety, streets & sidewalk, and career development. The plan’s biggest recommendations were for Lower Acre residents to form a neighborhood organization, for the City to create a “one stop” informational resource for residents, increase federal and state funding, concentrate the City’s revitalization on targeted areas within Lower Acre (similar to its focused efforts to improve Downtown), and revitalize the Winter Street corridor.

Gateway City Economic Snapshot (2018)

MassDevelopment published this study, which included analysis of Gateway City economies in general, as well as targeted analyses of Transformative Development Initiative districts, such as the Merrimack Street TDI district in Haverhill. The study noted the large amount of investment in the district from 2014–2016 (\$51.5 million in public funds and \$22.5 million in private funds). Nearly half of all built area in the TDI district is devoted to office space, and rents are low compared to those in Haverhill overall for both retail and residential uses. Commercial vacancies in the district are high.

Merrimack Valley Active Transportation Plan (2015)

The MVPC published this plan in 2015, laying out a regional approach to developing an Active Transportation Network in the Merrimack Valley. At least three the regionally significant existing or recommended active transportation routes identified in the plan (Route 125 / Main Street; Route 110; and the Merrimack River Trail). The report notes the development of the Riverwalk and Bradford Rail Trail and bike lanes on Water Street. The report also identifies pedestrian and bicycle safety concerns of the time, including Merrimack Street, Winter Street, Lafayette Square, and Washington Street. It also highlights the city’s wider streets, developed to accommodate trolleys, and gives examples of how those rights-of-way could be allocated to support active transportation. Active transportation priorities identified during the plans engagement process include an on-road bicycle network, sidewalks around Ward Hill, the Riverwalk and rail trails, bicycle parking downtown, safety concerns, and bike/ped improvements on Route 110.

What is included in a Master Plan Update?

A master plan, also known as a comprehensive plan, or general plan is a document that provides a roadmap for the future of a city, with an emphasis on the city’s physical development. A master plan includes an analysis of existing conditions, a community vision for the future, and set of policy recommendations to guide public policy, including the future of zoning and infrastructure investment. Most master plans address the physical, social, and cultural aspects of a community across a range of topics.



## We want to hear from you!

We anticipate this conversation and public engagement process will unfold over the rest of 2019. There will be a number of opportunities for feedback from you, the community. We want to hear from you!

1. Sign up on the website [visionhaverhill2035.org](http://visionhaverhill2035.org) to receive project updates
2. On social media, follow [@CityOfHaverhillMayorsOffice](https://twitter.com/CityOfHaverhillMayorsOffice)
3. Look for opportunities for engagement at **summer outreach events** and **upcoming public workshops**.

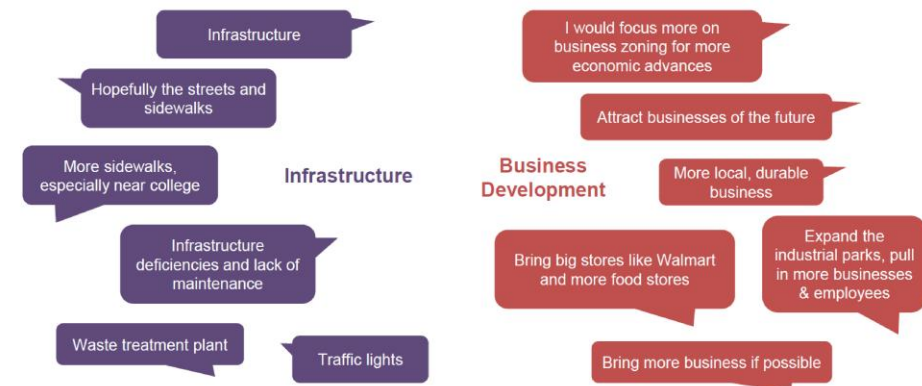


## What we heard at the public forum

What do you love about Haverhill?



What would you change about Haverhill?







# Existing Conditions

# Population and Housing

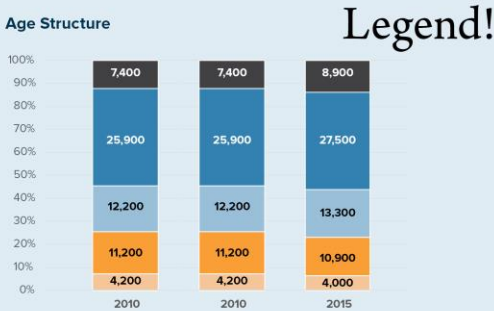
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**Haverhill has grown by approximately 7.1% since 2000, averaging approximately 0.4% growth per year.** The population growth in this period represents approximately 4,500 new Haverhill residents, including new births and people moving to the city.



Source: US Decennial Census, 2000 and 2010; Census Bureau Population Estimates Program for all other years.

**The number of seniors in Haverhill is expected to nearly double between 2015 and 2035.** This aging population will require new forms of housing and amenities to allow for healthy and active lives and remain in the community.



Source: US Decennial Census, 2010; American Community Survey, 2011–2015 5-year estimates; UMass. Donahue Institute, 2013.



### Number of housing units in building

The chart displays the percentage distribution of housing units by building type for ten towns. The building types are represented by different colors: Single-Family (orange), Multi-Family (yellow), Detached (dark blue), Attached (teal), Townhouse (light blue), and Other (grey). Haverhill is highlighted with a dashed box.

Town	Single-Family	Multi-Family	Detached	Attached	Townhouse	Other
<b>Haverhill</b>	40%	11%	25%	7%	11%	5%
Lawrence	18%	8%	45%	10%	12%	7%
Lowell	32%	5%	30%	10%	15%	8%
Methuen	58%	8%	15%	5%	12%	2%
Framingham	52%	5%	15%	5%	18%	1%
Salem	25%	10%	35%	8%	18%	4%
Taunton	45%	5%	30%	10%	8%	2%
Brockton	48%	2%	30%	8%	10%	2%
Fall River	22%	2%	45%	15%	12%	4%

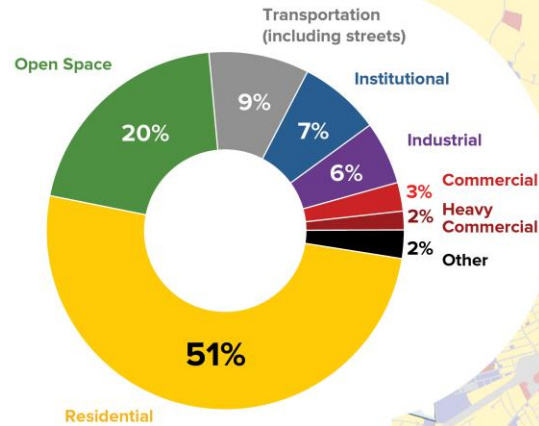
### Housing tenure

Town	Owner occupied (%)	Renter occupied (%)
Lawrence	28	72
Lowell	43	57
Methuen	71	29
Framingham	54	46
Salem	51	49
Taunton	63	37
Brockton	54	46
Fall River	37	63

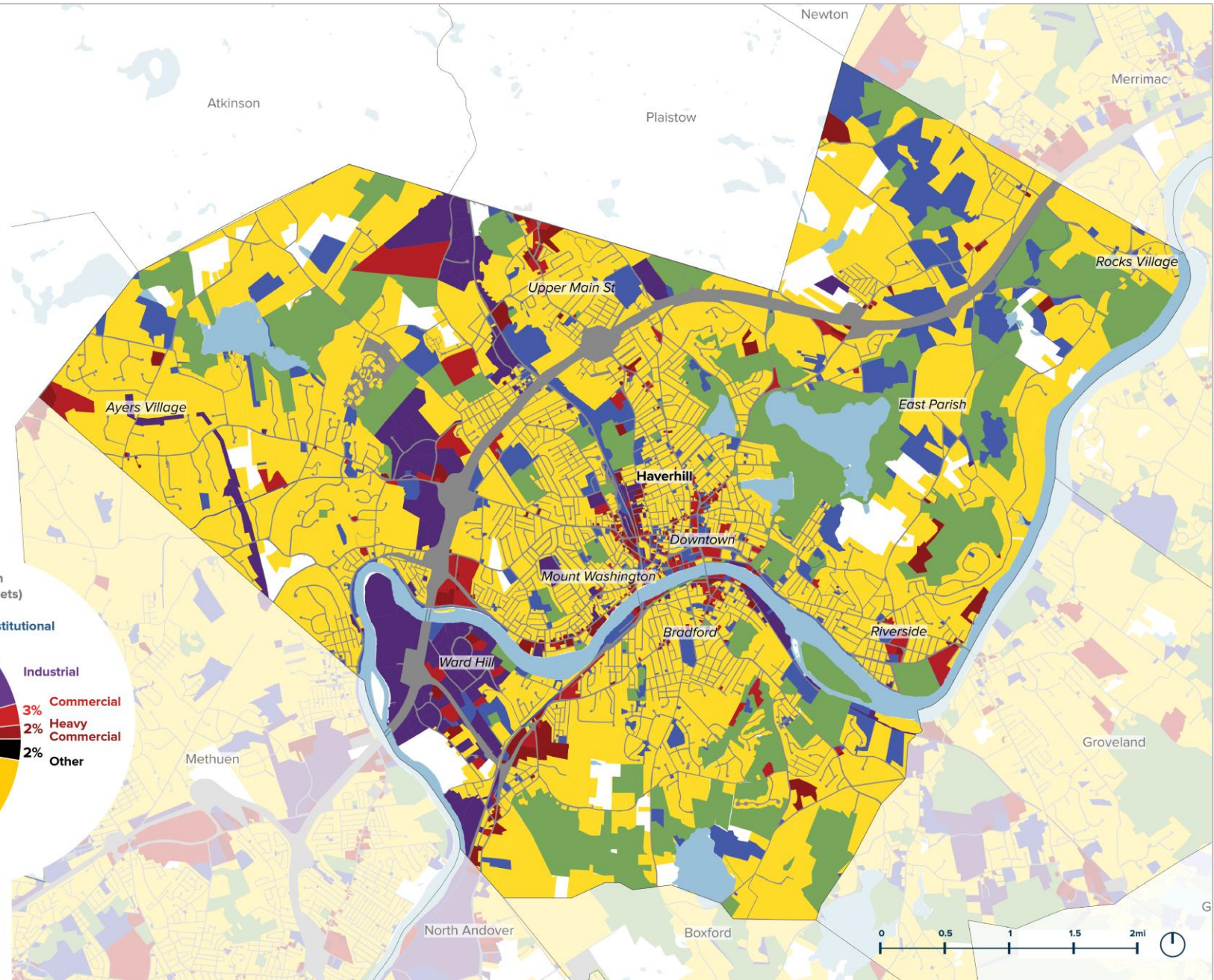


# Land Use

**Industrial uses occupy 6% of land in Haverhill.** This is greater than the percent of land occupied by commercial uses and “heavy commercial” uses—those that have intensive service commercial use of a non-retail nature, including automobile-oriented businesses or heavy equipment related businesses.



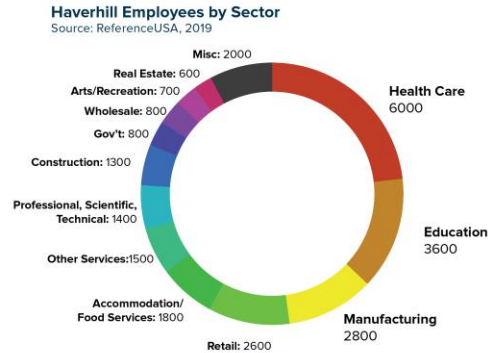
**Distribution of Land Uses by Land Area**  
Source: MAPC Land Parcel Database, 2018.



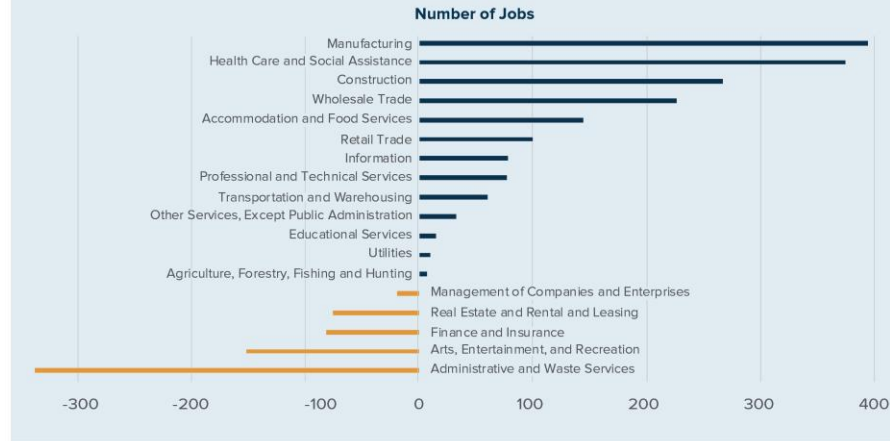


# Economy

Health care is Haverhill's top employment sector. Education and manufacturing are the next two largest employers in the city. While health care and education are commonly top employers in eastern Massachusetts, it is unusual for manufacturing to continue to play such an important role in the local economy.



Manufacturing has seen the largest amount of new jobs in Haverhill since emerging from the Great Recession. Health care, construction, wholesale trade and the hospitality industry have also added significant jobs during this period.

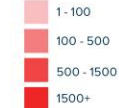


Of Haverhill's 31,000 workers, about 5,000 are Haverhill residents. The majority of people working in Haverhill live elsewhere.

They commute in from neighboring municipalities in the Merrimack Valley and beyond. Conversely, a large proportion of Haverhill residents work in the greater Boston metropolitan region, though many commute to jobs elsewhere in the Merrimack Valley, along the 495 and 128 corridors.

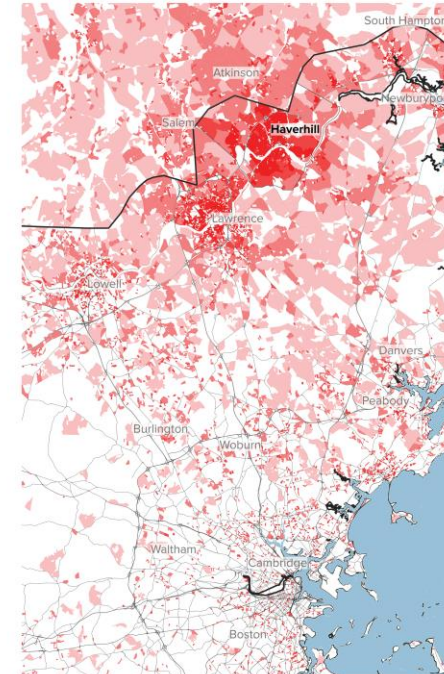


Number of workers per sq.mi

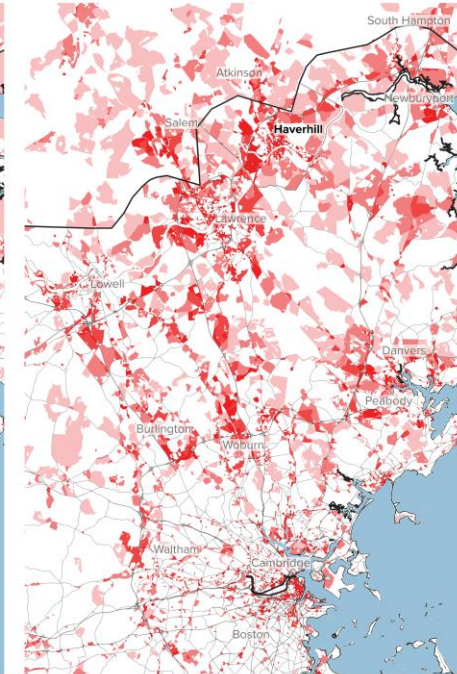


Source: US Census LEHD Database, 2015.

Home Location of People Who Work in Haverhill



Work Location of People Who Live in Haverhill



# High-Level Capacity Analysis

## What zoning constraints have we looked at so far?

- Minimum lot size (an X sqft lot is allowed to have up to Y units on it)
- Max building coverage (up to X% of the lot is allowed to have a building on it)
- Max stories (a building can be up to X feet tall)
- Minimum open space (at least X% of the lot must be reserved as open space)
- Maximum floor-area-ratio (gross floor area can be no more than (X \* total parcel size))
- Minimum unit size (to have X units, up to Y sqft must otherwise be allowable on the parcel)
- Special permit (is the owner allowed to build or do they need to go through a process first?)

# High-Level Capacity Analysis

## What zoning constraints have we not looked at yet?

- Setbacks and frontage (how does the specific geometric layout of the parcel affect the building?)
- Parking (can sufficient parking be placed on the site for that number of units?)
- Absorption and demand (a unit might legally fit, but is it something anyone would buy like that?)
- Topography and site suitability (is this a realistic place to build?)
- Variances (can relief be had from zoning?)

We do not think that these factors will change the overall picture, but it does mean that the capacities provided here are rough estimates and in reality would need to be revised down with these additional constraints.

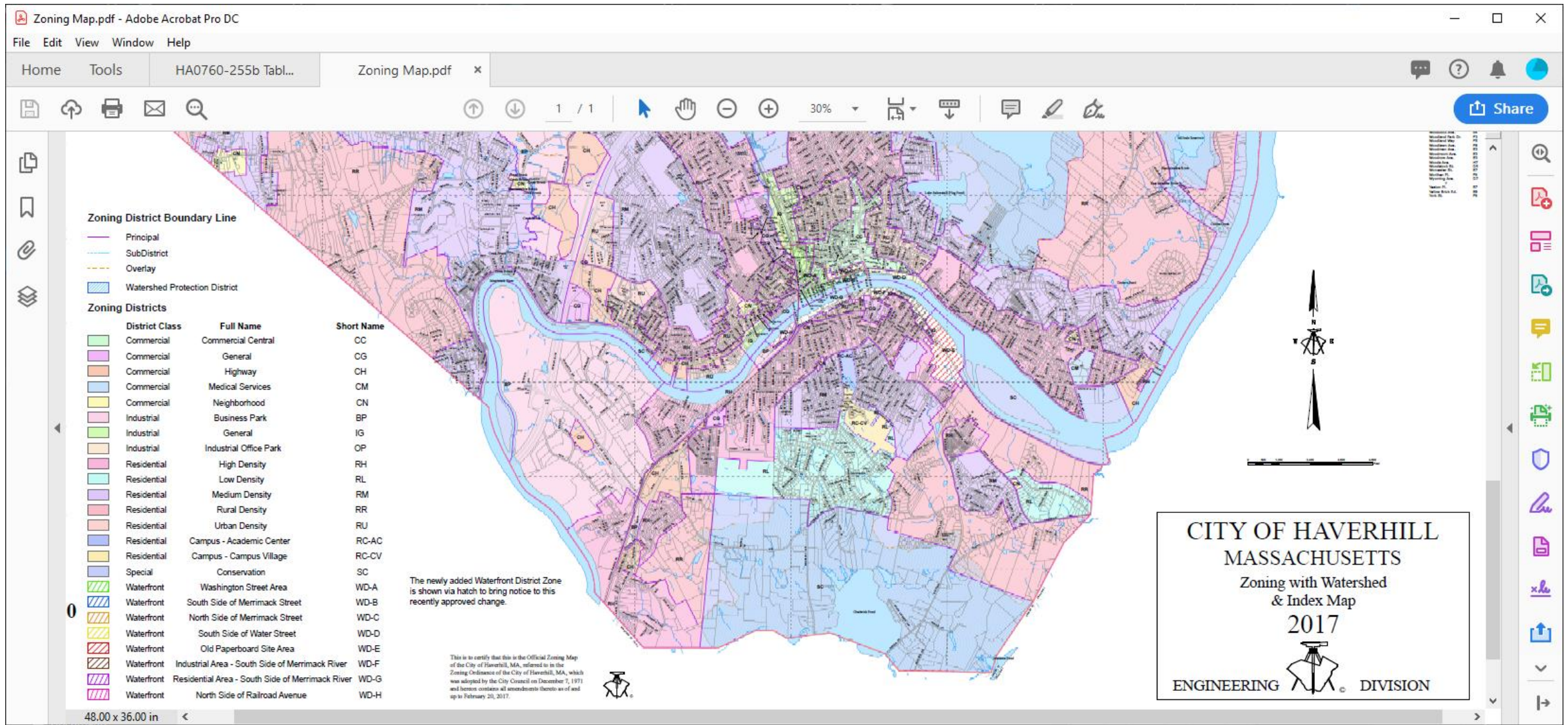
# High-Level Capacity Analysis

## Basic process

- First: based on lot size and zone, how many units are allowed on the site?
- Second: how does max coverage, min open space, or max FAR reduce that number?  
(Note: at least when using minimum unit square footages, it doesn't appear to matter)
- Third: how does this number compare to what is currently on the parcel?
- Do this comparison both using “by-right” rules as well as what might be allowed via “special permit.”



# Zoning Districts in Haverhill



# Dimensional and Density Regulations from Zoning Code

HA0760-255b Table 2 Table of Dimensional and Density Regs.pdf - Adobe Acrobat Pro DC

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Share

255 Attachment 2

**TABLE 2: TABLE OF DIMENSIONAL AND DENSITY REGULATIONS**

[Amended 8-14-1973 by Doc. 188; 9-17-1974 by Doc. 210-C; 10-12-1976 by Doc. 135-C; 6-6-1978 by Doc. 103-C; 6-10-1992 by Doc. 52-C; 3-12-1996 by Doc. 47; 10-27-1998 by Doc. 128-B; 6-27-2000 by Doc. 79-M; 8-14-2001 by Doc. 97-CC; 4-27-2004 by Doc. 42-B; 2-28-2006 by Doc. 19-BB]

District	Use	Minimum Lot Area (square feet)	Minimum Lot Area Required Per Dwelling Unit (square feet)	Minimum Lot Frontage <sup>9</sup> (feet)	Minimum Lot Depth (feet)	Front <sup>4,6,7</sup> (feet)	Side <sup>4,8,10</sup> (feet)	Rear <sup>6</sup> (feet)	Maximum Height <sup>4</sup> (feet)	Maximum Stories	Maximum Building Coverage (percent)	Maximum Floor Area Ratio (FAR)	Minimum Open Space (percent)
RR	Any permitted use <sup>11</sup>	80,000	NA	200	125	40	25	40	35	2.5	15	None	70
RL	Any permitted use <sup>11</sup>	40,000	NA	150	100	30	20	30	35	2.5	20	None	55
RM	Any permitted use <sup>11</sup>	20,000	NA	150	100	25	15	30	35	2.5	25	None	45
RH	1-family detached dwelling <sup>11</sup>	7,500	NA	75	100	20	10	30	35	2.5	25	NA	45
	2-family dwelling <sup>11</sup>	9,600	NA	80	100	20	10 <sup>1</sup>	30	35	2.5	25	NA	45
	3-family dwelling <sup>11</sup>	11,700	NA	80	100	20	10	30	35	3.5	30	NA	40
	All other multifamily dwellings <sup>11,13</sup>	40,000	NA	150	200	25	20 <sup>2,3</sup>	40	35	2.5	None	0.5	35
	First dwelling unit	40,000	10,000	150	200	25	20 <sup>2,3</sup>	40	35	2.5	None	0.5	35
	Each additional dwelling unit	3,000	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Any other permitted use	10,000	NA	100	100	25	15	40	35	2.5	25	None	35
RU	1-family detached dwelling <sup>11</sup>	7,500	NA	75	100	20	10	30	35	2.5	30	None	40
	2-family dwelling <sup>11</sup>	9,000	NA	80	100	20	10 <sup>1</sup>	30	35	2.5	25	None	45
	3-family dwelling	11,700	NA	80	100	20	10	30	35	3.5	30	NA	40
	All other multifamily dwellings <sup>11,13</sup>	25,000	NA	100	100	25	20 <sup>2,3</sup>	40	35 <sup>16</sup>	2.5 <sup>16</sup>	None	1.0	25
	First dwelling unit	7,500	7,500	100	100	25	20 <sup>2,3</sup>	40	80	6	None	1.0	25
	Each additional dwelling unit	2,000	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Any other permitted use	10,000	NA	100	100	25	15	40	35	2.5	None	2.0	25
CN	Any permitted use <sup>12</sup>	5,000	NA	50	100	20	15 <sup>5</sup>	30	35	2.5	None	0.50	10
CH	Any permitted use <sup>12</sup>	22,500	NA	175	100	30	15	20	40	3.5	None	0.50	25
CG	All other multifamily dwellings <sup>11,13</sup>	20,000	NA	100	100	None	20	20	74	6	None	2.0	None
	First dwelling unit	2,000	2,000	100	100	None	20	20	None	None	None	2.0	None
	Each additional dwelling unit	1,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# Translate constraints into systematic calculation, yielding:

```
(defn max-per-lot-area
  [parcel special-permits?]
  (let [land-area (land-area parcel)
        sp special-permits?]
    (case (zid (:properties parcel))
      "RR"
      ;; Only single-family permitted when land area >= 80k
      (if (>= land-area 80000)
        1
        0)
      "RL"
      (if (>= land-area 40000)
        1
        0)
      "RM"
      (if (>= land-area 20000)
        1
        0)
      "RH"
      (cond (and (>= land-area 40000) sp)
            (+ 1 (int (Math/floor (/ (- land-area 40000) 3000))))
            (and (>= land-area 11700) sp)
            (>= land-area 9600)
            (>= land-area 7500)
            1
            :else 0))
      "RU"
      (cond (and (>= land-area 25000) sp)
            (+ 1 (int (Math/floor (/ (- land-area 7500) 2000))))
            (and (>= land-area 11700) sp)
            (>= land-area 9000)
            (>= land-area 7500)
            1
            :else 0)
      "CN"
      0
      "CH"
      0
      "CG"
      (cond (and (>= land-area 20000) sp)
            (+ 1 (int (Math/floor (/ (- land-area 2000) 1000))))
            :else 0)
      "CC"
      (cond sp
        1
        :else 0)))
```

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```
(defn constraint-per-units
  [parcel current-units]
  (let [u (int current-units)
        gfa (fn [max-stories max-building-coverage far open-space]
              (gfa-limiter-catch
               parcel (land-area parcel) u max-stories
               max-building-coverage far open-space))]
    (case (zid (:properties parcel))
      "RR"
      (gfa 2.5 0.15 nil 0.7)
      "RL"
      (gfa 2.5 0.2 nil 0.55)
      "RM"
      (gfa 2.5 0.25 nil 0.45)
      "RH"
      (cond (>= u 4)
            (gfa 2.5 nil 0.5 0.35)
            (= u 3)
            (gfa 3.5 0.3 nil 0.4)
            (= u 2)
            (gfa 2.5 0.25 nil 0.45)
            (= u 1)
            (gfa 2.5 0.25 nil 0.45))
      "RU"
      (cond (>= u 4)
            (gfa 2.5 nil 1.0 0.25)
            (= u 3)
            (gfa 3.5 0.3 nil 0.4)
            (= u 2)
            (gfa 2.5 0.25 nil 0.45)
            (= u 1)
            (gfa 2.5 0.3 nil 0.4))
      "CN"
      0
      "CH"
      0
      "CG"
      (gfa 6 nil 2.0 nil)
      "CC"
      (gfa 6 0.6 2.0 nil)
      "CM"
      0
      "OP"
      0
      "IG"
      0
      0)))
```

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```
(remaining-units-sp 0,
remaining-units-by-right 0)
{:zd "RR",
 :units_est 1.0,
 :max-per-lot-area-sp 0,
 :max-per-lot-area-by-right 0,
 :max-w-gfa-sp 0,
 :max-w-gfa-by-right 0,
 :remaining-units-sp 0,
 :remaining-units-by-right 0}
{:zd "RL",
 :units_est 2.0,
 :max-per-lot-area-sp 4,
 :max-per-lot-area-by-right 0,
 :max-w-gfa-sp 4,
 :max-w-gfa-by-right 0,
 :remaining-units-sp 2.0,
 :remaining-units-by-right 0}
{:zd "RM",
 :units_est 1.0,
 :max-per-lot-area-sp 0,
 :max-per-lot-area-by-right 0,
 :max-w-gfa-sp 0,
 :max-w-gfa-by-right 0,
 :remaining-units-sp 0,
 :remaining-units-by-right 0}
{:zd "RH",
 :units_est 2.0,
 :max-per-lot-area-sp 0,
 :max-per-lot-area-by-right 0,
 :max-w-gfa-sp 0,
 :max-w-gfa-by-right 0,
 :remaining-units-sp 0,
 :remaining-units-by-right 0}
{:zd "RU",
 :units_est 1.0,
 :max-per-lot-area-sp 0,
 :max-per-lot-area-by-right 1,
 :max-w-gfa-sp 1,
 :max-w-gfa-by-right 1,
 :remaining-units-sp 0,
 :remaining-units-by-right 0}
```

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# High-Level Capacity Analysis

Initial findings for housing: estimates based on min lot size, max building coverage, min open space, max FAR, max stories, min unit size)

Zone	Current Units	Max By Right	Remaining By Right	Already Built By Right	Max Special Permit	Remaining Special Permit	Already Built Special Permit
RH (High Density)	9500	5500	1400	85%	15000	9500	50%
CC (Commercial Central)	1000	0	0	100%	4000	3000	25%
CG (General)	600	0	0	100%	3000	3000	20%
RU (Urban Density)	3500	800	150	95%	2500	1500	60%
RM (Medium Density)	6500	1500	0	100%	1500	0	100%
RR (Rural Density)	2000	400	0	100%	400	0	100%
RL (Low Density)	600	100	0	100%	100	0	100%
Other	-	-	-	-	-	-	-



# High-Level Capacity Analysis

## Overall Observations

- Given the constraints we haven't yet analyzed, it is likely that very little can still realistically be built as-of-right
- Those constraints will likely reduce the large number of potential units that currently appear to be allowable with a special permit
- The discrepancies between the number of existing units and maximum allowed by these calculations shows that a very large number of buildings are already non-conforming and exceed what zoning says can be on-site

# Discussion

- Do these estimates seem on track to the committee?
- Should discussions of growth go into the existing conditions report?

## **Preparing for next steps:**

- How to begin engagement around these substantive topic areas?
- Looking more closely at the role of special permits, and areas of capacity and nonconformities