

Technical Memorandum:

Economic Development Component of Inventory and Assessment for Groton Master Plan: Assuring a Fiscally Adequate and Sustainable Economic Base

From: FXM Associates

To: Barret Planning Group

Date: May 2024

Introduction

Groton, located in the eastern part of the North Central Massachusetts region, is one of the communities forming the western edge of Boston's outer ring of suburbs. Groton is also a member of the Montachusett Regional Planning Commission. It sits in the northeastern most corner of the region, the "affluent east," according to the Montachusett Region Comprehensive Economic Development Strategy (CEDS) (2019-2024). In some ways, Groton's economy is more closely linked to Boston's than to these regions. Its higher home values and incomes in part reflect that position.

Strengthening Groton's economic base is necessary to meet increasing Town finance pressures but requires sensitivity to the Town's character and its citizens' degree of desire for change. In 2016, the Town Economic Development Committee presented its vision for the town's future:

To enhance the character, culture and commerce of Groton Massachusetts as a destination community supporting the quintessential "New England" experience through such activities as outdoor recreation, music, arts and education for the enjoyment of residents and visitors alike.

The Committee proposed to fulfill that vision by making Groton a destination for ecotourism, recreation, education, and the town's many other cultural opportunities. Its mission, moreover, was to encourage the development of the town's tax base by expanding its local businesses and attracting new ones, primarily for the benefits a strong economic and financial base would offer both town residents and visitors. This has meant paying attention to the types of development that fit within the town's existing character, which is so important to its residents, and which is the attraction to visitors and tourists.

This section of the Master Plan involves examining several components of a sustainable economic base: the existing demographic and economic characteristics of the town, trends in key industries, Groton's characteristics and competitive position compared with those of surrounding towns, and potential economic development opportunities that are well situated within the town's goals and objectives to ensure that growth maintains the town's character.

The sections following the Summary Findings present the results of the analyses for these components. The surrounding towns used as comparators are Ayer, Dunstable, Littleton, Pepperell, Shirley, Townsend, Tyngsborough, and Westford.

Summary Findings

- Groton and the surrounding towns are affluent communities. They resemble each other demographically and economically. From the data analyzed, Groton is on a sound competitive footing with those communities, but to compete for economic development opportunities, it needs to act.
- According to persons interviewed in the course of this work, including local business people, Groton continues to suffer from its image as a town that is not business-friendly, whether to businesses seeking to locate in the area, or to existing businesses in the town. Changing this perception will require a stronger effort to promote and support businesses in the town and sectors, such as agriculture, arts & recreation, that the town wants to retain, as well as other acceptable commercial uses that can expand the tax base and provide local employment opportunities. It will require re-zoning of some land for commercial use and for small-scale multi-family residential development in neighborhood centers. It will require extension of infrastructure to commercial land with development potential.
- Groton's median age of 42 is only slightly higher than the average of all communities, but these medians are high. Worker shortages are already happening in some sectors and are likely to continue. The competitive position of towns and cities in attracting workers will determine how well they are able to adjust to workforce changes.
- Groton's ageing workforce, coupled with a projected lack of long-term growth in population and households, is a concern for the sustainability of its fiscal base. Yet there are also positive demographic signs for economic growth: Groton has considerable resources on which to draw for economic development: a well-educated, affluent population, with younger (<25) residents and households with children providing both potential additions to the labor force and demand for a well-balanced economic base that offers opportunities for young people to remain in the community, assuming sound growth policies and strategies are implemented.
- Interviews with Groton residents and officials, while not a representative sample, produced some common themes. The town wants businesses that fit within Groton's unique characteristics: its rural character, small-town feel, dramatic landscapes, and educational and cultural resources. Large-scale development, whether residential or commercial, is not welcome. Residents have also expressed a desire for more diversity in housing choices, which are now almost entirely single-family owner-occupied units. That would require changes in zoning and other regulations that the town so far has not been willing to make.
- The business sectors in Groton are led by Health Care and Education. Both employ the largest numbers of workers in the town. Manufacturing and Accommodation and Food Services (mostly restaurants) come in third and fourth, respectively. Its largest businesses fall into these sectors plus Retail Trade. Manufacturing has a surprisingly high share of overall business sales and employment in Groton. Given this historical strength, the skilled labor required to support it, and reports of recent new niche manufacturing business, it should not be ruled out as a potential growth sector that can add to the commercial tax base, even as it has not been cited in the town's economic development vision and goals to date. Education and Health Care

represent historically strong concentrations in Groton, with potentially significant growth opportunities supported by projected growth regionally. Restaurants are reportedly doing well and the market would support growth in this sector.

- According to the Donahue Institute's long-term projections, Groton is projected to lose total employment in the decades between 2020-2030 and 2030-2040. Losses are also projected to be suffered by the surrounding communities. Within certain sectors, however, growth is expected to happen through 2028: Health Care and Social Assistance, Manufacturing, and Accommodation and Food Services are the three top sectors for growth in Groton based on historical employment trends, while Groton could capture a greater share of projected regional growth in Finance and Insurance and Professional and Technical Services.
- Historical data on the supply of office space shows steady absorption and increased vacancy rates for office space in Groton since the pandemic, which had a large impact throughout the region. Near-term projections of recovery, however, are that Groton's historically low vacancy rate for office space will return. Demand for office space, fueled by projected growth in officeusing industries regionally will offer at least limited opportunities for small-scale new development, particularly if done in combination with a mixed-use residential/retail/recreation project.
- The results of a retail opportunity gap/surplus analysis estimate that, based on business sales and consumer expenditures, Groton could capture enough demand to support at least 12 new or expanded stores, generating demand for at least 37,000 square feet of retail and restaurant space and possibly much more. Jewelry stores, art dealers, garden centers, and restaurants are among those that could be attracted if the town is willing to support them: this might be via recruiting new businesses or encouraging expansion of existing businesses. This means increasing the supply of commercially zoned land and promoting local businesses. Contrary to popular perception, brick and mortar retailing still accounts for more than 75% of retail sales and regional employment is projected to increase.
- Rental housing can be an important element of economic development. It can attract private investment to suitable areas and can serve as an attraction for labor, a source of customers for local businesses, and a source of tax revenues for town finances. There are needs for both affordable and market rate housing and the attraction of private investment can accomplish that end. Results from the *Housing Demand Model* show that Groton could support up to 33 units of market rate rental housing a year over the next five years. It could support at least 21 units a year of rental housing priced from \$2,000 to \$3,000 a month. These are conservative estimates as they are based in part on Groton's existing share of multifamily rental housing in the local region, which is minor.
- The lack of land zoned for commercial development hinders growth of Groton's economic and fiscal base. The opportunities described in the analyses conducted for this Master Plan cannot be realized without changes that may be difficult for the town to make.
- Another way in which the town can affect economic development is in its fiscal policies. Tax rates and tax policies are competitive factors for both business and resident location decisions. Groton's residential and commercial tax rates are close to average for the surrounding towns, offering little competitive advantage. Groton derives 94% of its tax revenues from residential properties. Its average single-family tax bill is higher than any surrounding town except Wesford, although its tax bills, as in all the towns, have not kept pace with property value increases.

Demographics

Population and Households

Population and household growth are factors in economic development. The household is the basic unit of consumption and demand, and forecasts of their increase or decrease are important to an understanding of what is happening to the market for development. There are different forecasting methods, however, and they cover different time periods, but if general trends are borne out by these different methods, they gain credibility and may indicate areas of concern.

The following two tables show Groton's historic population and household trends as compared to those of surrounding towns over the period 2010 to 2023. In numbers of people, Groton is slightly larger than the average of all towns, but it did not gain as much population as neighboring towns over the 2010-2020 census period. Groton's population is estimated to have decreased between the 2020 Census and the current year, close to the average loss across the towns.

Table 1

Population Growth in Groton and Surrounding Towns, 2000-2023

Town	Census 2000	Census 2010	% Δ 2000-2010	Census 2020	% Δ 2010-2020	2023 Estimate	% Δ 2020-2023
Groton			11.5%		6%		-0.8%
	9,547	10,646		11,315		11,226	
Ayer			2%		14%		0.4%
	7,287	7,427		8,479		8,511	
Dunstable			12%		6%		-2%
	2,829	3,179		3,358		3,306	
Littleton			9%		14%		1%
	8,184	8,924		10,141		10,201	
Pepperell			3%		1%		-2%
	11,142	11,497		11,604		11,421	
Shirley			13%		3%		-1%
	6,373	7,211		7,431		7,359	
Townsend			-3%		2%		-1%
	9,198	8,926		9,127		8,994	
Tyngsborough			2%		10%		-1%
	11,081	11,292		12,380		12,247	
Westford			6%		12%		0.1%
	20,754	21,951		24,643		24,674	
Average			6.2%		0.1		-0.7%
	9,599	10,117		10,942		10,882	
Groton % of Average	99%	105%	185%	103%	83%	103%	112%

Source: University of Massachusetts, Donahue Institute; Environics Analytics, Claritas Spotlight Reports; FXM Associates

Changes in the number of households follow a similar trend, with the 2020-2023 loss estimates about the same as that of the population, except that in this case, Groton's loss was much smaller than the average. That small decline in households from 2020 might raise concerns regarding the direcon of change in households and therefore to Groton's future development, so an examinaon of its longerterm prospects is warranted. Tables 3 and 4 below present those data.

Table 2

Town	Census 2000	Census 2010	% Δ 2000/2010	Census 2020	% Δ 2010/2020	2023 Estimate	% Δ 2020/2023
Groton	3,268	3,753	15%	3,972	6%	3,937	-1%
Ayer	2,982	3,118	5%	3,405	9%	3,581	5%
Dunstable	923	1,063	15%	1,200	13%	1,111	-7%
Littleton	2,960	3,297	11%	4,165	26%	3,772	-9%
Pepperell	3,847	4,197	9%	5,136	22%	4,362	-15%
Shirley	2,067	2,264	10%	2,433	7%	2,452	1%
Townsend	3,110	3,240	4%	3,659	13%	3,410	-7%
Tyngsborough	3,731	3,999	7%	5,020	26%	4,481	-11%
Westford	6,808	7,498	10%	9,042	21%	8,570	-5%
Average	3,300	3,603	9%	4,226	16%	3,964	-6%
Groton % of Average	99%	104%	161%	94%	37%	99%	16%

Source: University of Massachusetts, Donahue institute; Environics Analytics, Claritas Spotlight Reports; FXM Associates

These tables display both historical data and projecons for populaon and households spanning 2000 to 2040. The projecons were conducted by the Donahue Instute. In almost all cases, the population projections for 2020 to 2030 are considerably more positive than those in the 2020-2023 estimates in the table above. The Donohue Institute projects 7% growth over the longer period. The same holds true for households, where Groton households are projected to grow by 16% over the decade 2020-2030 and 6% over 2030 to 2040. In both projected population and households, the long-term projections show Groton exceeding the percentage growth projections of surrounding communities. These projections are a positive indicator for Groton's future development, but they are by no means definitive, as will be seen in the *Business Profiles and Trends* section below. Figures 1 and 2 are simplified graphics of the more detailed data shown in Tables 3 and 4.

Table 3

Historic and Projected Population

TOWN	Census 2000	Census 2010	% Δ 2000- 2010	Census 2020	% Δ 2010- 2020	Projected 2030	% Δ 2020- 2030	Projected 2040	% Δ 2030- 2040
Groton	9,547	10,646	12%	11,315	6%	12,063	7%	12,745	6%
Ayer	7,287	7,427	2%	8,479	14%	8,629	2%	8,553	-1%
Dunstable	2,829	3,179	12%	3,358	6%	3,480	4%	3,612	4%
Littleton	8,184	8,924	9%	10,141	14%	10,498	4%	10,422	-1%
Pepperell	11,142	11,497	3%	11,604	1%	11,660	0%	11,642	0%
Shirley	6,373	7,211	13%	7,431	3%	7,562	2%	7,495	-1%
Townsend	9,198	8,926	-3%	9,127	2%	8,757	-4%	8,496	-3%
Tyngsborough	11,081	11,292	2%	12,380	10%	12,514	1%	12,274	-2%
Westford	20,754	21,951	6%	24,643	12%	24,710	0%	23,769	-4%

Source: University of Massachusetts, Donahue Institute, 2023 Projections; US Census; FXM Associates

Table 4

Historic and Projected Households

TOWN	Census 2000	Census 2010	% Δ 2000- 2010	Census 2020	% Δ 2010- 2020	Projected 2030	% Δ 2020- 2030	Projected 2040	% Δ 2030- 2040
Groton	3,268	3,753	15%	3,972	6%	4,608	16%	5,081	10%
Ayer	2,982	3,118	5%	3,405	9%	3,918	15%	4,110	5%
Dunstable	923	1,063	15%	1,200	13%	1,241	3%	1,333	7%
Littleton	2,960	3,297	11%	4,165	26%	3,883	-7%	3,977	2%
Pepperell	3,847	4,197	9%	5,136	22%	4,935	-4%	5,153	4%
Shirley	2,067	2,264	10%	2,433	7%	2,786	15%	2,919	5%
Townsend	3,110	3,240	4%	3,659	13%	3,568	-2%	3,583	0.4%
Tyngsborough	3,731	3,999	7%	5,020	26%	4,931	-2%	5,036	2%
Westford	6,808	7,498	10%	9,042	21%	9,192	2%	8,980	-2%

Source: University of Massachusetts, Donahue Institute, 2023 Projections; US Census; FXM Associates

Figure 1

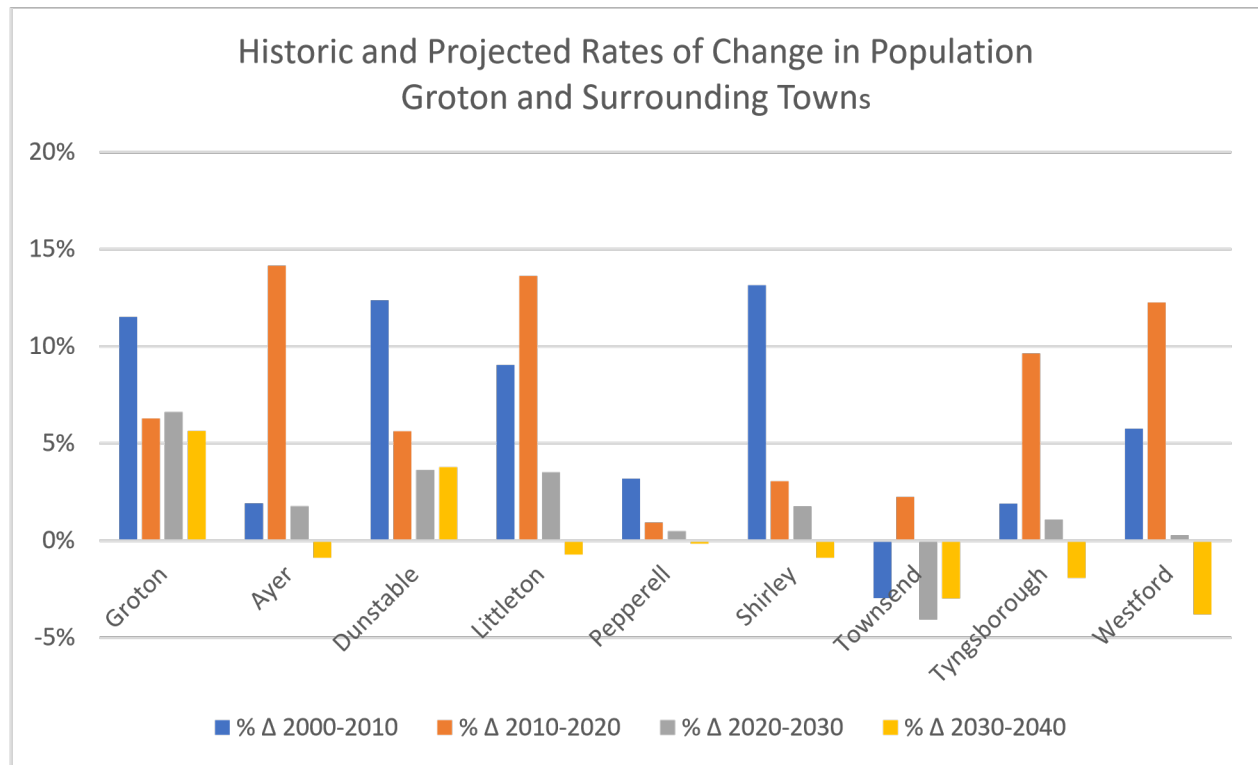
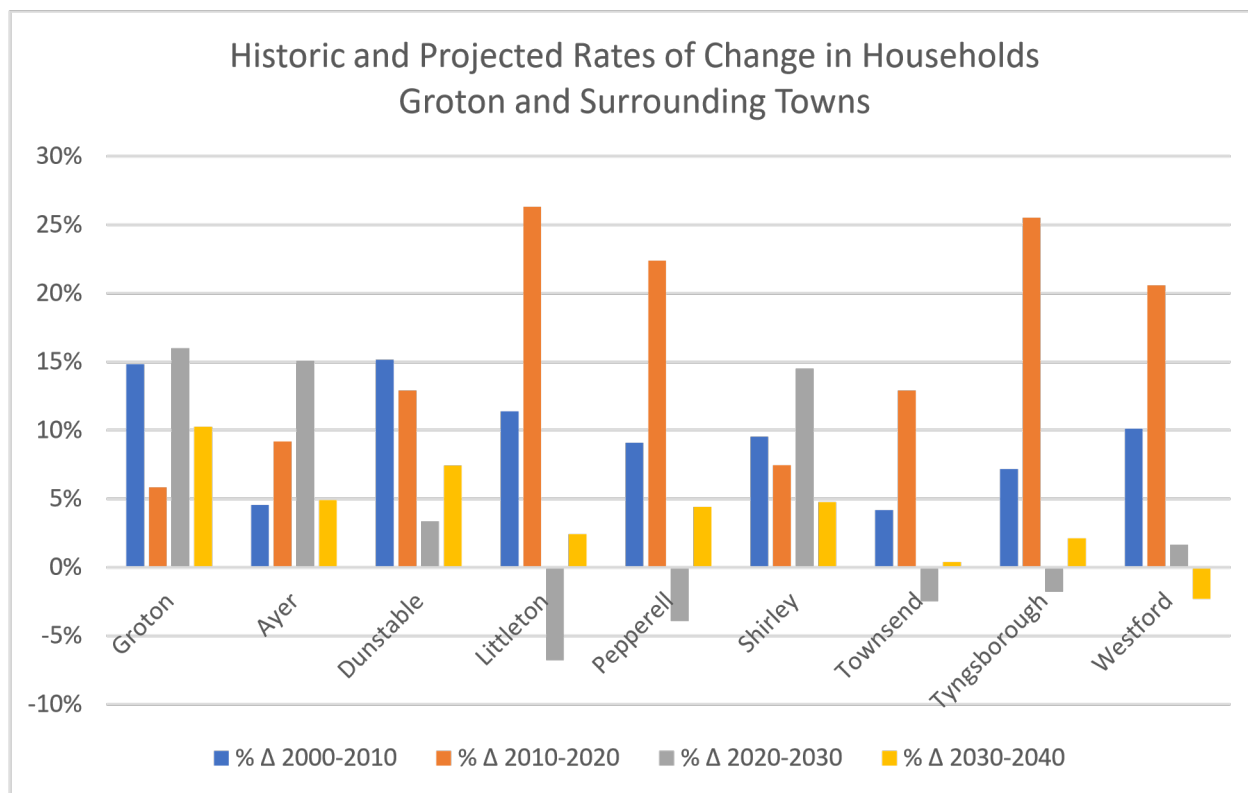


Figure 2



Demographic Profiles Compared

By most demographic measures, Groton has considerable resources on which to draw for economic development: a well-educated, affluent population, with younger (<25) residents and households with children providing both potential additions to the labor force and demand for a well-balanced economic base that offers opportunities for young people to remain in the community, assuming sound growth policies and strategies are implemented.

In the age categories, the towns are very close in median age, except for Shirley, the only town in which the median age is under 40. The median age in Massachusetts is 39.6 years. Groton has more residents over 65 than the all-towns average, and more households with children under 18. It has fewer residents in the age 25 to 44 cohort, a group that is in the family and career building years, but slightly more than average in the peak earning years of 45 to 64.

The aging of the workforce is a factor shared by the state of Massachusetts and, indeed, the entire US. It is driven by the aging of the boomer and echo-boomer generations. Groton's median age of 42 is only slightly higher than the average of all communities, but these medians are high. The Comprehensive Economic Development Strategy (CEDS) for the region notes the aging of the workforce as a threat to future economic development.¹ Worker shortages are already happening in some sectors and are likely to continue. The competitive position of towns and cities in attracting workers will determine how well

¹ Montachusett Regional Planning Commission, *Comprehensive Economic Development Strategy*, 2019-2024.

they are able to adjust to workforce changes. Housing prices, quality of education, and accessibility to jobs are the most important but by no means the only features that will bring workers to communities.

The following tables compare Groton to surrounding communities regarding key demographic characteristics. Groton's relevant demographics exceed the average of those of its neighbors in almost every category, as shown in the tables below. Averages are shown in Table 5B.

By single race classification, all the towns are majority White. Groton has well-below average minority populations compared to the average of all towns.

By either median or average measure, Groton's incomes are higher than average; only Dunstable has a higher median income than does Groton. Groton's poverty rate is also among the lowest. Figure 3 compares median and average household incomes graphically.

The education level of residents, a key variable for local workforce capacity, is another category in which Groton exceeds the average formal schooling completed, by a substantial margin.

Table 5A

Key Demographic Characteristics of Groton and Surrounding Towns (A)

	Groton	Ayer	Dunstable	Littleton	Pepperell	Shirley
Demographic Characteristics						
Age (%)						
< 25 (Gen Z)	29%	30%	28%	31%	27%	24%
25-44 (Millennials)	24%	27%	25%	22%	27%	35%
45-64	30%	27%	30%	29%	29%	27%
65 and over	17%	16%	18%	18%	17%	15%
Households with children <18	42%	31%	44%	39%	38%	33%
median (years)	42	40	42	41	42	38
Single Race (%) Classification						
White	84%	75%	85%	82%	87%	74%
African American	1.4%	5%	1%	2%	1.5%	8%
Hispanic or Latino	4%	7%	4%	4%	4%	11%
Asian	6%	5%	5%	9%	2%	3%
Income (\$)						
median - all	\$ 168,329	\$ 119,497	\$ 173,475	\$ 144,025	\$ 121,675	\$ 106,542
average -all	\$ 218,842	\$ 155,667	\$ 223,193	\$ 194,475	\$ 142,413	\$ 134,688
poverty rate (%)	2%	2%	1%	4%	3%	1%
Education (%)						
high school diploma	17%	21%	16%	20%	25%	35%
Bachelor's degree or higher	64%	48%	57%	56%	40%	31%

Source: EnvironicsAnalytics, Spotlight Reports, 2023 estimates; FXM Associates

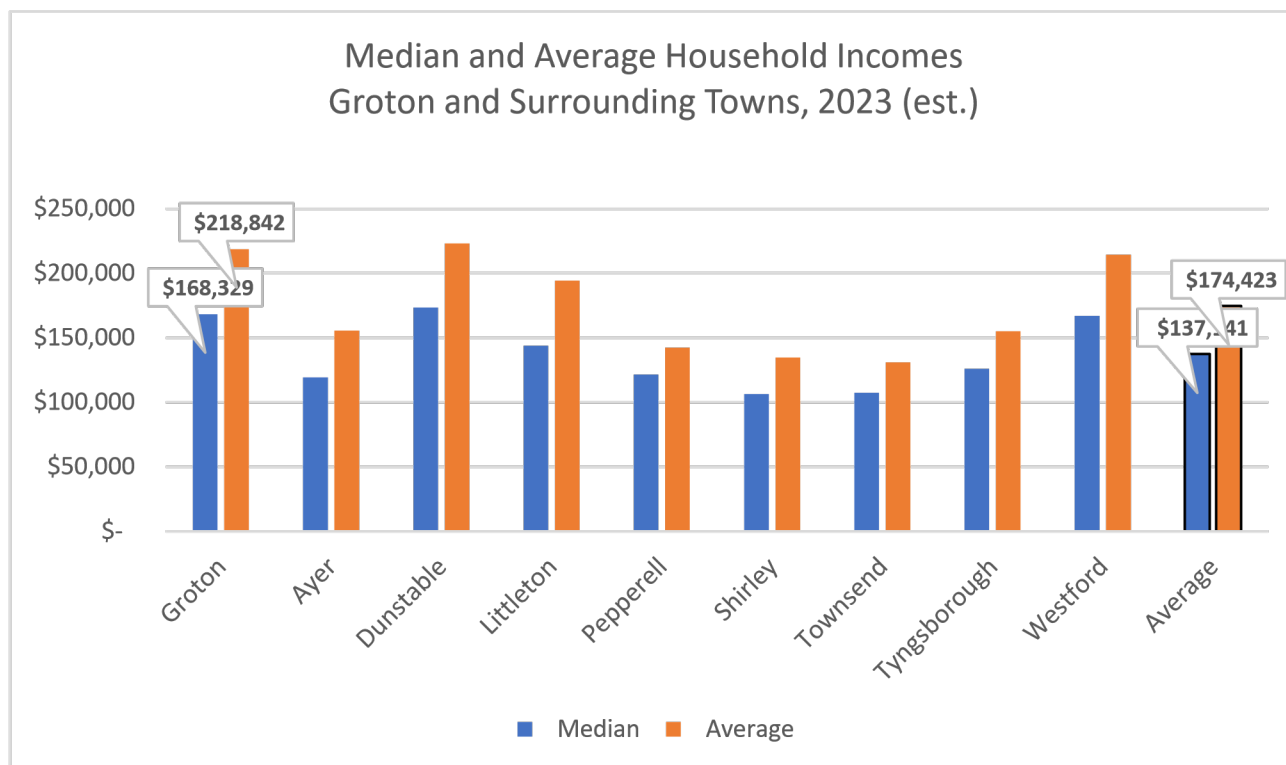
Table 5B

Key Demographic Characteristics of Groton and Surrounding Towns (B)

	Groton	Townsend	Tyngsborough	Westford		Average of All Towns	Groton % of Average
Age (%)							
< 25 (Gen Z)	29%	26%	27%	31%		28%	103%
25-44 (Millennials)	24%	27%	28%	23%		26%	91%
45-64	30%	29%	29%	30%		29%	104%
65 and over	17%	17%	16%	17%		17%	101%
Households with children <18	42%	37%	39%	46%		39%	108%
median (years)	42	42	41	41		41	102%
Single Race (%) Classification							
White	84%	88%	70%	69%		79%	106%
African American	1.4%	1%	3%	1%		3%	53%
Hispanic or Latino	4%	5%	5%	3%		5%	77%
Asian	6%	1%	9%	23%		7%	86%
Income (\$)							
median - all	\$ 168,329	\$ 107,579	\$ 126,167	\$ 166,978		\$ 137,141	123%
average -all	\$ 218,842	\$ 130,984	\$ 155,113	\$ 214,429		\$ 174,423	125%
poverty rate (%)	2%	3%	4%	2%		2%	63%
Education (%) high school diploma	17%	27%	26%	13%		22%	77%
Bachelor's degree or higher	64%	38%	44%	69%		50%	129%

Source: EnvironicsAnalytics, Spotlight Reports, 2023 estimates; FXM Associates

Figure 3



The next table compares Groton's data on housing, employment, and modes of transportation to work with those of surrounding communities. Again, data are broken into two tables for readability.

Most housing in all communities is owner-occupied, with Groton having more than average ownership. Renters in Groton tend to be longer-term than average, eleven years compared to an average of eight. Groton's home values are higher than average. Dunstable, Littleton, and Westford's are also high. These high values can be an asset for owners and for the town revenues or an obstacle for attracting or retaining workers.

Most employment is white collar, and Groton has a slightly larger proportion than average. The pattern of occupations across the towns is similar: a plurality of occupations is in Management and in Office/Administrative Support. Sales and Related are third. Because of the large number of categories in the data, individual shares are quite small. The occupations in which Groton has a higher-than-average share include Management; Legal; Life/Physical/Social Science; Arts/Design/Entertainment/ Sports Media; Computer/Mathematical; Food Preparation/Serving Related. The very low numbers of Farming/Fishing/ Forestry occupations across all towns in this rural area of Massachusetts, and Groton's share of them is questionable. This might be due to data collection or classification issues since Groton and the region are home to a wealth of farm stands as well as several farms. This is an area which some Groton residents have identified as an important feature of the town's character and one which they would like to see grow.

Travel times to work across the towns are similar: an average of 38 minutes compared to Groton's 39. Five percent of Groton households have no vehicle, higher than the 3% average. Not as many Groton

workers rely on driving alone to get to work as do workers in other towns: they carpool, take public transportation, and walk (or work at home) more frequently than the average.

Table 6A

Housing, Employment, Occupations, and Transportation to Work in Groton and Surrounding Towns (A)

	Groton	Ayer	Dunstable	Littleton	Pepperell	Shirley
Housing						
tenure (%)						
own	89%	68%	94%	88%	80%	80%
rent	11%	32%	6%	12%	20%	20%
length of residence (years)						
own	17	15	19	17	18	16
rent	11	7	6	8	8	13
median value owner occupied units	\$ 647,058	\$ 455,445	\$ 673,625	\$ 651,843	\$ 477,897	\$ 425,033
structure built 2000 or later (%)	20%	18%	17%	17%	11%	22%
Employment (%)						
white collar	77%	75%	71%	77%	69%	70%
blue collar	12%	14%	17%	13%	18%	16%
service and farming	10%	10%	11%	10%	13%	13%
Occupations (%)						
Architecture/Engineering	6%	4%	5%	6%	5%	5%
Arts/Design/Entertainment/Sports/Media	3%	3%	1%	2%	1%	4%
Building/Grounds Cleaning/Maintenance	2%	1%	1%	1%	3%	4%
Business/Financial Operations	7%	5%	6%	6%	7%	7%
Community/Social Services	1%	2%	1%	2%	1%	2%
Computer/Mathematical	9%	7%	6%	7%	8%	7%
Construction/Extraction	4%	5%	7%	3%	4%	5%
Education/Training/Library	9%	9%	8%	7%	6%	4%
Farming/Fishing/Forestry	0.02%	0%	0%	0%	0%	0%
Food Preparation/Serving Related	4%	5%	4%	2%	3%	3%
Healthcare Practitioner/Technician	6%	8%	7%	5%	8%	5%
Healthcare Support	1%	0%	2%	1%	3%	2%
Installation/Maintenance/Repair	2%	1%	3%	2%	4%	3%
Legal	2%	0%	2%	1%	1%	0.1%
Life/Physical/Social Science	3%	2%	1%	5%	1%	2%
Management	15%	11%	16%	20%	11%	13%
Office/Administrative Support	8%	13%	9%	8%	11%	12%
Production	3%	8%	2%	2%	4%	4%
Protective Services	2%	1%	3%	2%	2%	0.4%
Sales/Related	9%	11%	9%	10%	9%	9%
Personal Care/Service	2%	3%	2%	3%	2%	4%
Transportation/Material Moving	3%	1%	5%	5%	6%	5%
Transportation to work						
travel time to work (minutes)	39	38	35	40	40	37
households with no vehicle (%)	5%	3%	1%	2%	4%	1%

means of transport to work (%)						
drove alone	78%	87%	87%	78%	87%	85%
carpooled	8%	4%	5%	6%	4%	3%
public transport	3%	3%	0.50%	4%	1%	3%
walked or worked at home	11%	6%	7%	13%	7%	8%
bicycle	0%	0.02%	0%	0	0.02%	0
other	0.03%	0.69%	0.05%	0.02%	0.40%	0.60%

Source: EnvironicsAnalytics, Spotlight Reports, 2023 estimates; FXM Associates

Table 6B

Housing, Employment, Occupations, and Transportation to Work in Groton and Surrounding Towns (B)

	Groton	Townsend	Tyngsborough	Westford		Average of All Towns	Groton % of Average
Housing							
tenure (%)							
own	89%	86%	81%	88%		84%	106%
rent	11%	14%	19%	12%		16%	68%
length of residence (years)							
own	17	18	19	17		17	98%
rent	11	7	7	6		8	136%
median value owner occupied units	\$ 647,058	\$ 375,363	\$ 548,224	\$ 727,580		\$ 553,563	117%
structure built 2000 or later (%)	20%	13%	22%	19%		18%	113%
Employment (%)							
white collar	77%	66%	68%	82%		73%	106%
blue collar	12%	20%	18%	9%		15%	79%
service and farming	10%	14%	14%	9%		12%	87%
Occupations (%)							
Architecture/Engineering	6%	5%	3%	7%		5%	112%
Arts/Design/Entertainment/Sports/Media	3%	2%	1%	4%		2%	129%
Building/Grounds Cleaning/Maintenance	2%	4%	2%	1%		2%	90%
Business/Financial Operations	7%	4%	7%	7%		6%	117%
Community/Social Services	1%	2%	1%	1%		2%	47%
Computer/Mathematical	9%	3%	8%	11%		7%	126%
Construction/Extraction	4%	7%	5%	3%		5%	85%
Education/Training/Library	9%	7%	6%	11%		7%	124%
Farming/Fishing/Forestry	0.02%	0.02%	0.01%	0.2%		0.1%	39%

FXM Associates

Food Preparation/Serving Related	4%	3%	4%	2%	3%	131%
Healthcare Practitioner/Technician	6%	5%	5%	6%	6%	94%
Healthcare Support	1%	3%	4%	2%	2%	47%
Installation/Maintenance/Repair	2%	4%	3%	1%	3%	77%
Legal	2%	0.2%	1%	1%	1%	200%
Life/Physical/Social Science	3%	1%	1%	3%	2%	162%
Management	15%	15%	14%	16%	14%	102%
Office/Administrative Support	8%	15%	10%	7%	10%	75%
Production	3%	4%	5%	2%	4%	88%
Protective Services	2%	2%	2%	1%	2%	93%
Sales/Related	9%	7%	12%	8%	9%	96%
Personal Care/Service	2%	2%	3%	2%	3%	67%
Transportation/Material Moving	3%	5%	5%	3%	4%	66%
Transportation to work						
travel time to work (minutes)	39	44	32	38	38	102%
households with no vehicle (%)	5%	3%	3%	2%	3%	186%
means of transport to work (%)						
drove alone	78%	87%	81%	81%	83%	93%
carpooled	8%	4%	11%	4%	5%	147%
public transport	3%	1%	1%	4%	2%	132%
walked or worked at home	11%	7%	6%	10%	8%	132%
bicycle	0%	0.02%	0	0.03%	0%	0%
other	0.03%	0.50%	0.04%	0.18%	0%	11%

Economics

Business Profiles and Trends

The following table provides basic information on Groton's businesses by sector: number of establishments, number of employees, and sales. The Health Care and Social Assistance sector is the largest employer, with Educational Service in second place, followed by Manufacturing. Most jobs in the Health Care and Social Assistance sector are in Health Care: offices of physicians and dentists and skilled nursing facilities. Employment in the Manufacturing sector is dominated by pulp and paper mills and

industrial machinery manufacturing. Most of the employment in Accommodation and Food Services is in food services and drinking places.

The Retail Sector is an important component of a vibrant local economy, even if it is not the largest. In Groton, the sector employs 315 people, ranking it fifth among sectors, but it generates almost \$68 million in sales. Most of the employees are in supermarkets and other grocery stores and in recreation retailers. Growth opportunities in this sector are explored in the section below in the Retail Opportunity Gap/Surplus section.

In the Construction sector, which produces the third largest volume of sales, most of the employment is in residential construction, followed by specialty trade contractors, such as building equipment and finishing contractors.

The number of establishments and jobs in Agriculture is questionable: local data on the number of farms show 15 farms in Groton itself. These are shown in the section on Agriculture. Other sources have data missing in Agriculture jobs and sales, possibly because of under-reporting or data suppression.

The number of Manufacturing jobs has been questioned as being too high. The number shown here conflicts with lower employment numbers in the section, *Trends in Employment and Demand for Commercial Space*, but the r^2 value of the projections is so low that the trend cannot be relied upon.. (The data sources are further identified in the *Trends* section.)

The number of jobs in Arts, Entertainment, and Recreation seems too low to local officials. Data in the ES202 reports from the Massachusetts Department of Economic Research show even lower numbers (but do not include self-employment jobs, as discussed in the *Trends* section below). Some of the jobs in arts and culture could be classified in the education sector. Short of detailed inventories which are beyond the scope of this report, data inconsistencies can only be noted. They are a constant plague on analysis efforts.

Table 7

Groton Business Profile Major Sectors

Sectors	Number of Establishments	Number of Jobs	Sales
11: Agriculture, Forestry, Fishing and Hunting	3	24	\$ 2,365,000
22: Utilities	4	23	\$ 13,582,000
23: Construction	39	268	\$ 93,654,000
31-33: Manufacturing	13	579	\$ 163,009,000
42: Wholesale Trade	4	15	\$ 17,420,000

FXM Associates

44-45: Retail Trade	33	315	\$	
				67,753,094
48-49: Transportation and Warehousing	7	47	\$	
				9,537,595
51: Information	9	80	\$	
				30,123,000
52: Finance and Insurance	25	45	\$	
				13,600,000
53: Real Estate and Rental and Leasing	16	68	\$	
				8,993,000
54: Professional, Scientific, and Technical Services	44	164	\$	
				26,094,908
56: Administrative and Support and Waste Management	17	75	\$	
				9,639,000
61: Educational Services	18	737	\$	
				7,691,133
62: Health Care and Social Assistance	95	885	\$	
				116,958,582
71: Arts, Entertainment, and Recreation	7	60	\$	
				4,423,000
72: Accommodation and Food Services	21	519	\$	
				31,782,000
81: Other Services (except Public Administration)	38	163	\$	
				13,033,877
Totals	393	4,067	\$	
				629,659,189

Source: EnvironicsAnalytics Claritas Spotlight reports, 2023, and FXM Associates

The table below lists Groton's largest employers. The town's largest employers are in the Manufacturing, Retail Trade, Educational Services, Healthcare and Social Assistance, and Accommodations and Food Services sectors.

Table 8

Company name	# Employees	Sector
Hollingsworth & Vose	250-499	Manufacturing
MKS Instruments	100-249	Manufacturing
Shaw's Supermarket	100-249	Retail Trade
Groton School	100-249	Educational Services
Lawrence Academy	100-249	Educational Services
Seven Hills Pediatric Center	100-249	Healthcare & Social Assistance
Barn At Gibbet Hill	100-249	Accommodations & Food Services
Platt Builders	20-49	Construction
INSCO Corporation	20-49	Manufacturing
Campbell-Kibler Association	20-49	Educational Services
Groton Medical Associates	20-49	Healthcare & Social Assistance
Groton Country Club	20-49	Arts, Entertainment, & Recreation
Groton Inn	20-49	Accommodations & Food Services
Johnson's Drive-In	20-49	Accommodations & Food Services
Atlantic Builders & Design	50-99	Construction
River Court Residences	50-99	Healthcare & Social Assistance
Grotonwood Baptist Camp	50-99	Accommodations & Food Services
Gibbet Hill Grill	50-99	Accommodations & Food Services

Source: Data Axle via MA Executive Office of Labor and Workforce Development

Agriculture

An important sector not included in the data analyses because of data limitations is Agriculture. The 2011 Master Plan devoted considerable attention to the agriculture sector, its farms and farm stands, which continue to form an important part of Groton's character. Current agricultural employment/selfemployment data for Groton unfortunately are missing from ES202 reports, as adjusted

by the more complete REIS numbers. This may be because of reporting gaps or because of the informal nature of some of the activities, such as farm stands. The number of employees in the sector is relatively low, but its contribution to the town's rural character and land use give it an importance unrelated to employment numbers. The following graphic was provided by Groton's Sustainability Commission and is the most complete inventory available.²

SUPPORT OUR LOCAL FARMS & ORCHARDS!

<u>In GROTON:</u>	
Autumn Hills Orchards, 495 Chicopee Row	Gilson Farm / Herb Lyceum, 368 Main Street
Blood Farm, 94 West Main Street	Groton Farm School, 65 Common Street
Spiczka Farm / Kirk Farm, 21 Wyman Rd	Luina Greine Farm 65 Common Street
Common View Farm, 13 Common Street	Maple Shade Farm, 284 Old Ayer Road
Council on Aging Gardens, 163 W. Maine Street	Shattuck Farm, 134 Maple Avenue
Excalibur Farm, 150 Mill Street	Top Secret Orchard, 100 Whitman Road
Fairview Orchard, 9 Higley St	Winn Gardens, 28 Chestnut Hill Road
Gibbet Hill Farm, 61 Lowell Road	
<u>In NEIGHBORING TOWNS:</u>	
Theo's Market Gardens, Littleton	McGovern Dairy Farm, Dunstable
Tully Dairy Farm, Dunstable	Meadowbrook Orchards, Sterling
Bear Hill Farm, Tyngsborough	Meridian Farm, Littleton
Carlson Orchards, Harvard	Old Frog Pond Farm - Harvard
Conant's Custom Cuts, Dunstable	Patenaude Farm, Dunstable
Doe Orchards, Harvard	Parlee Farm, Tyngsboro
Gary's Farm & Gary's Too, Littleton & Townsend	R. Wilkins Farm Stand, Pepperell
Green Family Farms, Dunstable	Spring Brook Farms, Littleton & Shirley
Griffin Hall Farms, Microgreens, Townsend	William Park Farm, Harvard
Johnny Putt Farm, Salad Greens, Littleton	Wool & Withers Farm, Littleton
Littleton Community Farm, Littleton	Westward Orchards, Harvard



SUSTAINABLE GROTON

BROUGHT TO YOU BY THE GROTON SUSTAINABILITY COMMISSION

The Agricultural Commission is responsible for promoting agricultural interests and had a major role in making Groton a Right-to-Farm community in 2007. Interviewees, however, noted that the Commission was no longer active. The Commission's site on the town website lists three members, but no meeting notes have been posted since 2019. This lack of a basic agricultural support organization calls into question the degree of support the sector is getting. Other recommendations in the earlier plan, such as the adoption of agricultural policies and a more systematic approach to promoting the sector, also have not been developed. Respondents in team interviews saw agritourism as important to increasing business activity while not degrading the resource underlying it. Without a major change in Town policies and support mechanisms, this potential is unlikely to be realized. Action by farm businesses to organize and promote their role in agritourism is also essential but not happening.

To try to drill down into the sector absent data points, interviews were also conducted with farmers in Groton. Although we reached out to several farms currently operating, only two responded. Those interviews, however, provided important information on the sector, particularly on issues which both farmers raised. One thing that was clear was the farmers needed more than one farm operation to survive: it is not enough to grow hay or produce. Farms are also involved in distributing animal feed; using

² Add to farms In Neighboring Towns, Upswing Farm in Pepperell

farm facilities such as greenhouses for events such as weddings and parties; restaurant businesses; farm machinery and equipment repair; mowing fields of other farmers; and animal feed sales. Another common point was that they don't use town programs and don't see a need for them.

Farm employment is low if the farmers interviewed are typical. Both use part-time and temporary workers, in addition to their own labor. This would account for the low and missing numbers in official reports.

Both farmers sell directly to their customers. They don't do marketing in the conventional sense. Instead, they rely on branding their products and selling directly to their customers. Most of these are in the Groton area. Farmers' markets are not a major route for sales, some because the local markets lack good visibility, access, and parking. One larger farm supplies a wholesale buyer with small plants in pots. The other does not work with wholesalers.

The Groton Business Association has a Farm-to-Table program, but neither farm participates, one because his product doesn't fit the program, the other because he says, "the economics don't work," i.e., the restaurants don't want to pay what the farmers need to make. Making small scale farming profitable is difficult generally.

More broadly, town support for agriculture seems to be mixed. On one hand, there is "feel good agriculture" that people like because it contributes to the town's character. On the other hand, some in town object to the working aspects of farming that inconvenience them: roadways blocked temporarily by farm equipment, crop spraying and fertilizing. The Agriculture Commission has tried to mediate such conflicts in the past but is no longer active. It could be an alternative to expensive legal help by resolving some issues quickly.

Regarding land use and zoning, one interviewee cited the need for more agricultural land, but the other saw no problems. Land is mostly zoned residential/agricultural, and therefore more widely available than commercially zoned land. Putting land into Chapter 61 or putting on a conservation restriction would reduce the tax burden but makes it less desirable when the time comes to sell. Taxes generally are a major issue, according to one farmer. He thinks that town spending is too high, and the town has lost sight of the long-term consequences. As it is, some town workers can't afford to live in Groton. Others come for the "character" of the town but are driven out by high costs.

He sees Groton becoming more and more a bedroom community for Boston and that increasing commercialization will be to the town's detriment. If agritourism is to grow, it needs a professional association to organize it, otherwise people don't know how to do it. Expanding agritourism will require a deliberate effort on the part of the town or other entity interested in promoting it.

The takeaway from these two interviews, an admittedly very small sample from which much generalization cannot be made, is that these farms do reasonably well on their own, but that that requires undertaking other activities besides strictly farming. They don't work together in any organized fashion, for marketing or any other purpose. There are no Town programs that are particularly useful, but neither do they see a need for them. The major issue seems to be taxes, according to one farmer.

Employment Comparisons

Another way to look at Groton's economic picture is to compare its historic employment with that of the other towns. The following table shows Donahue Institute historic and projected total employment from 2000 through 2040. There was major growth in employment in Groton, Dunstable, and Pepperell between 2000 and 2010, while other communities lost jobs. Groton's job growth slowed in the next decade, while that of Littleton, Tyngsborough, and Westford surged. Projections are almost all negative for all towns for the 2020 to 2030 and 2030 to 2040 decades, in contrast to projections of population and household growth (Tables 3 and 4 above). Figure 4 is a graphic of historical and projected rates of change.

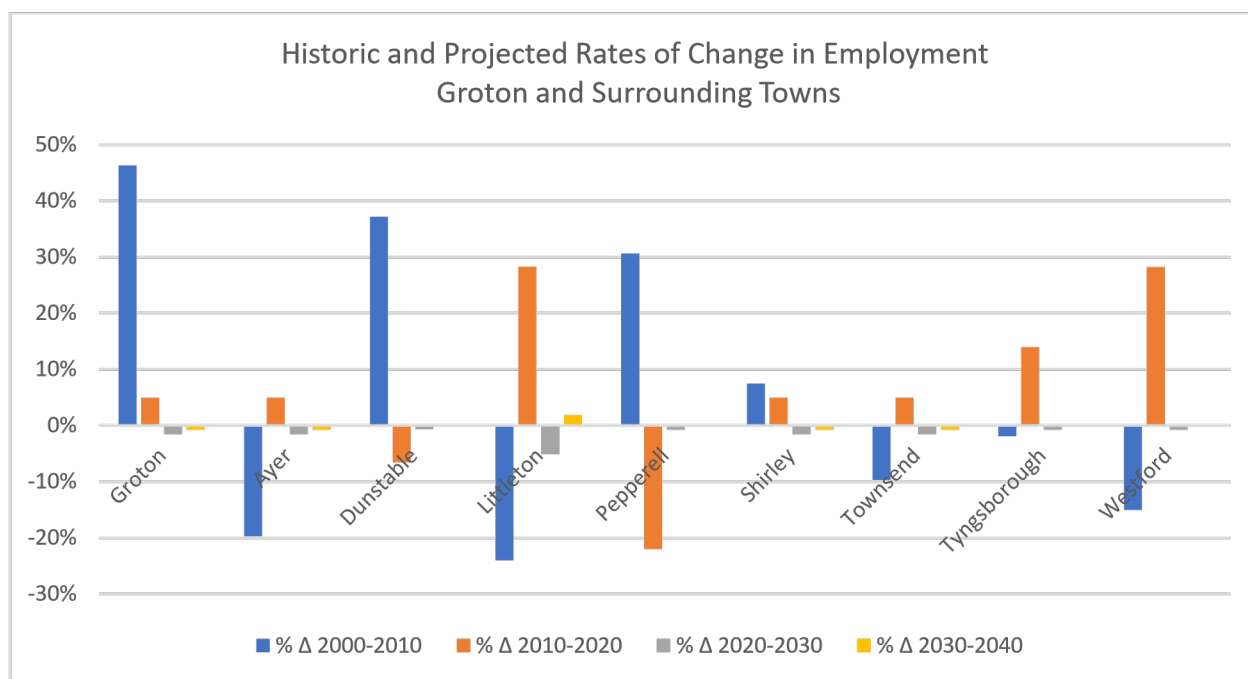
Table 9

Historic and Projected Employment

TOWN	Census 2000	Census 2010	% Δ 2000- 2010	Census 2020	% Δ 2010-2020	Projected % Δ 2020- 2030	Projected 2040	% Δ 2030- 2040
Groton	2,988	4,371	46%	4,586	5%	4,514	4,479	-1%
Ayer	6,006	4,821	-20%	5,058	5%	4,979	4,940	-1%
Dunstable	234	321	37%	300	-7%	298	298	0%
Littleton	6,094	4,632	-24%	5,942	28%	5,639	5,742	2%
Pepperell	1,571	2,052	31%	1,600	-22%	1,588	1,587	-0.1%
Shirley	2,114	2,271	7%	2,383	5%	2,345	2,327	-1%
Townsend	2,249	2,030	-10%	2,130	5%	2,096	2,080	-1%
Tyngsborough	4,293	4,212	-2%	4,800	14%	4,762	4,760	-0.04%
Westford	11,485	9,759	-15%	12,515	28%	12,416	12,411	-0.04%

Source: University of Massachusetts, Donahue Institute, 2023 Projections; US Census; FXM Associates

Figure 4



Looking at gross employment figures, however, masks what is happening within business sectors. Groton, Ayer, and Tyngsborough have similar-sized labor pools, both historic and projected. Comparing employment sectors across these selected communities over the last 20 years, Groton stands out as having had the largest growth, 51% overall, while Ayer and Tyngsborough have lost small amounts of total employment. Within sectors, however, growth has been varied. Groton's Professional, Scientific, and Technical Services; Health Care and Social Assistance; Accommodation and Food Services; and Other Services all showed substantial growth over the last 20 years and make up large shares of total employment. All other sectors showed either minor growth or losses. The loss of jobs in Transportation and Warehousing and in Administration and Support was the greatest. Both sectors represent a relatively small share of total employment, however.

In Ayer, there were no sectors experiencing much growth over ten years, and large losses in Art, Entertainment, and Recreation and in Other Services. Manufacturing lost a third of its jobs.

Tyngsborough experienced a large gain in employment in the Health Care and Social Assistance sector, but losses or only small gains in most others. Tyngsborough's largest losses were in Retail Trade and Information Services. Its largest gains were in Construction and Finance and Insurance.

Here again there are inconsistencies and missing data, and, as noted above, the ES202 reports do not include self-employment, but the point of the table is to show comparative changes across the selected communities, all using the same data source.

Table 10
Comparative Growth in Jobs, Groton and Selected Communities, 2002-2022

	Groton		% Change	Ayer		% Change	Tyngsborough		% Change
	2002	2022		2002	2022		2002	2022	
11: Agriculture, Forestry, Fishing and Hunting	28								
23: Construction	155						610		
31-33: Manufacturing	311	180	16%	175	189	8% -	464	309	
42: Wholesale Trade	30	314	1%	2,085	1,407	33%	246	246	
44-45: Retail Trade	172	34	13%	321	406	26%	206	123	31%
48-49: Transportation and Warehousing	35	219	27%	377	282	-25%	340	71	26%
51: Information	39	23	-34%	366	430	17%	66	56	19%
52: Finance and Insurance	35	33	-15%	63	80	27%	102	41	-64%
53: Real Estate and Rental and Leasing		37	6%	87	50	-43%	60		8% -
54: Professional, Scientific, and Technical Services	63	18		29	25	-14%	35	33	45%
56: Administrative and Support and Waste Mgt	93	136	116%	261	229	-12%	125	157	-32% -
61: Educational Services	629	69	-26%		187		776	564	6% 26%
62: Health Care and Social Assistance		672	7%	310	382	23%	777	882	-27%
71: Arts, Entertainment, and Recreation	367	866	136%	886	1,140	29%	77	274	14%
72: Accommodation and Food Services	19	37	95%	68	25	-63%	169	190	256%
81: Other Services (except Public Administration)	154	547	255%	295	291	-1%	686	529	12% -
	36	76	111%	161	64	-60%	135	156	23% 16%
Total, all industries	2,166	3,261	51%	5,484	5,187	-5%	4,264	4,241	-1%

Source: Mass. Dept of Economic Research, ES202 reports, 2002 and 2022.

From Groton's perspective, it is doing well compared to communities with similar numbers of jobs. Its performance in its larger sectors, particularly Health Care and Social Assistance and Accommodation and Food Services, suggests areas for potential future growth. That potential will be more fully explored in the following section on trends.

Trends in Employment and Demand for Commercial Space

The measure most used for commercial market trends analyses is employment because jobs are a good indicator of the status and future direction of a given industry. Increasing employment indicates industries that are growing, whether through expansion of existing businesses or opening of new ones. Also, reasonably reliable historic data are readily available and can be used to project employment trends from annual data. The sources used here for all the employment trends graphs are the US Department of Commerce, Bureau of Economic Analysis, *Regional Economic Information System* (REIS) and the ES202 reports from the Massachusetts Department of Economic Research.³ 2021 is the most recent year for which actual jobs data are available.

The ES202 data do not include self-employment, so they are adjusted by factors derived from REIS county data, which do include self-employed persons.

³ These include estimated full and part time jobs with wages and salaries plus self-employment. REIS data are not available below the county level and the Massachusetts Department of Economic Research ES202 data – the only publicly available source of jobs at the community level—do not include jobs held by self-employed persons. To estimate total jobs at the community level, we compared jobs overall and by sector at the county level and, using ratios between the more inclusive REIS data and ES202 county data, apply those ratios to ES202- community level employment. We recognize this involves simplified assumptions, but it is a technique that FXM has used on many projects including federal EISs and other peer reviewed analyses. Another feature of REIS is that it is the only available source of employment based on actual tax filings with the IRS and is generally considered by economic professionals to be the most reliable data source at the county level.

When using historical data to produce future projecons, such as the least squares linear regression technique used here, it is important to consider the reliability of a given dataset. A stasc commonly used for this purpose is called the R^2 calculaon and is presented alongside each projecon given below. The closer the R^2 value is to 1, the beter the predicve value of past performance. A limiting factor on 2026 projecons is the influence of the 2020-2021 pandemic, which is sll being felt in some sectors and which may also affect the R^2 values for employment projecons. For example, a sector might have been showing strong growth since 2010 but the volatility introduced by the pandemic-related job losses could pull down the sector's projected growth and lower the R^2 value of the projecon. *Note that, where only a small number of jobs exist in Groton, or where there have been wide swings in employment, the predictive value of history may be weak across all sectors.*

The following graphs show trends from 2010 to 2021, projected to 2028, by sector.

The first graph shows total employment trends in Groton and Middlesex County. In both, employment is projected to increase over the next five years. The reliability of the county projection is higher than that of Groton, but both indicate a strong prospect for overall growth in employment.

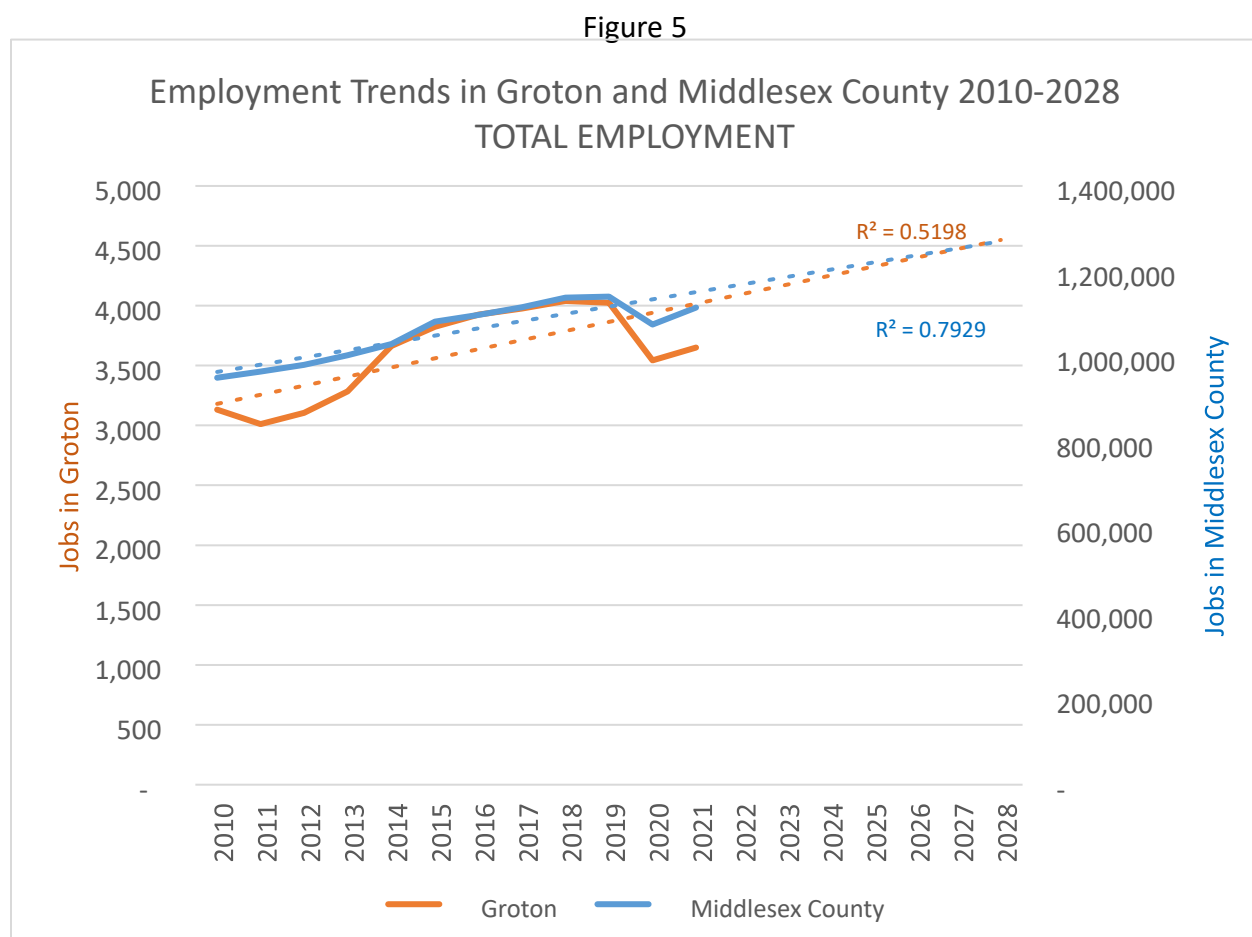
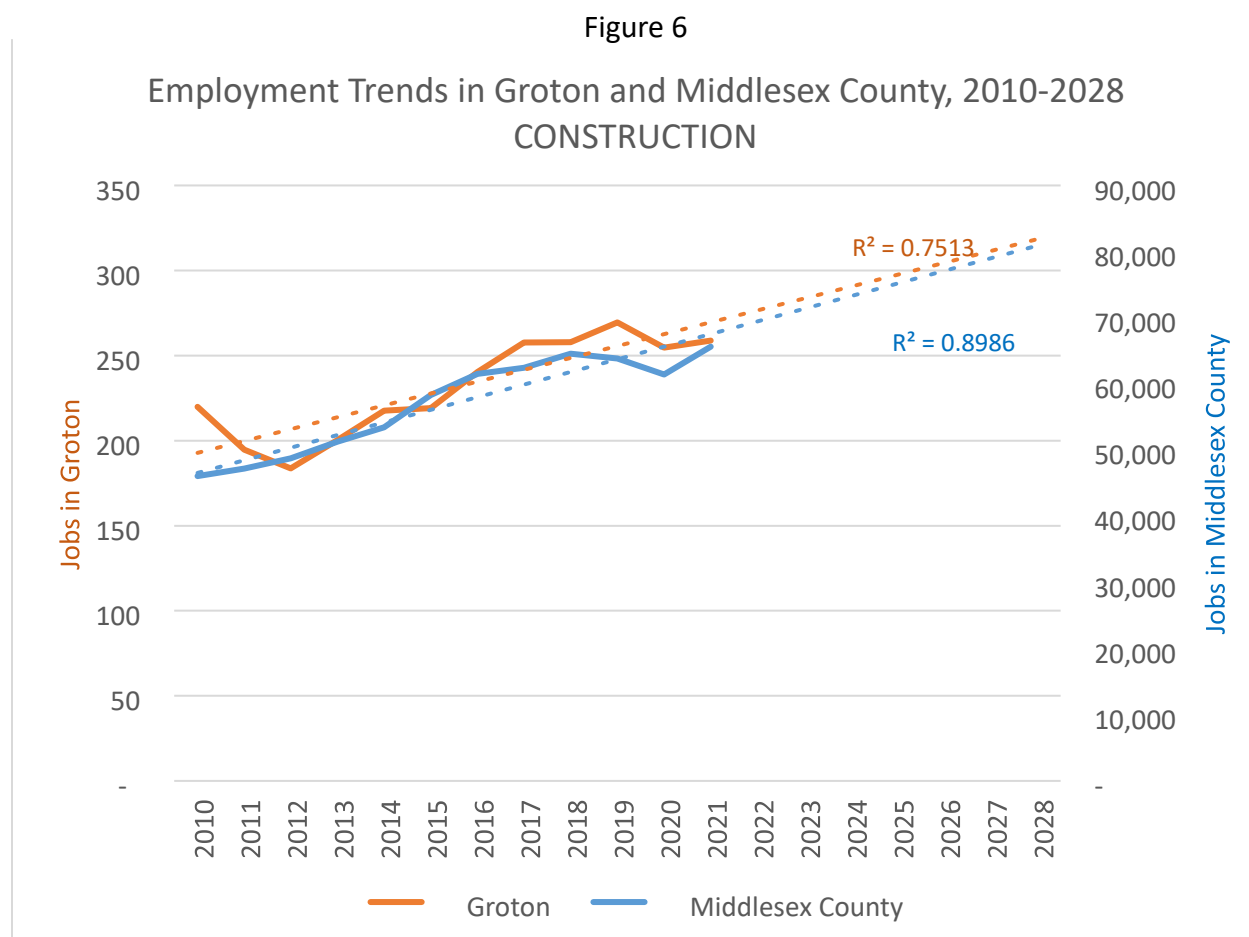
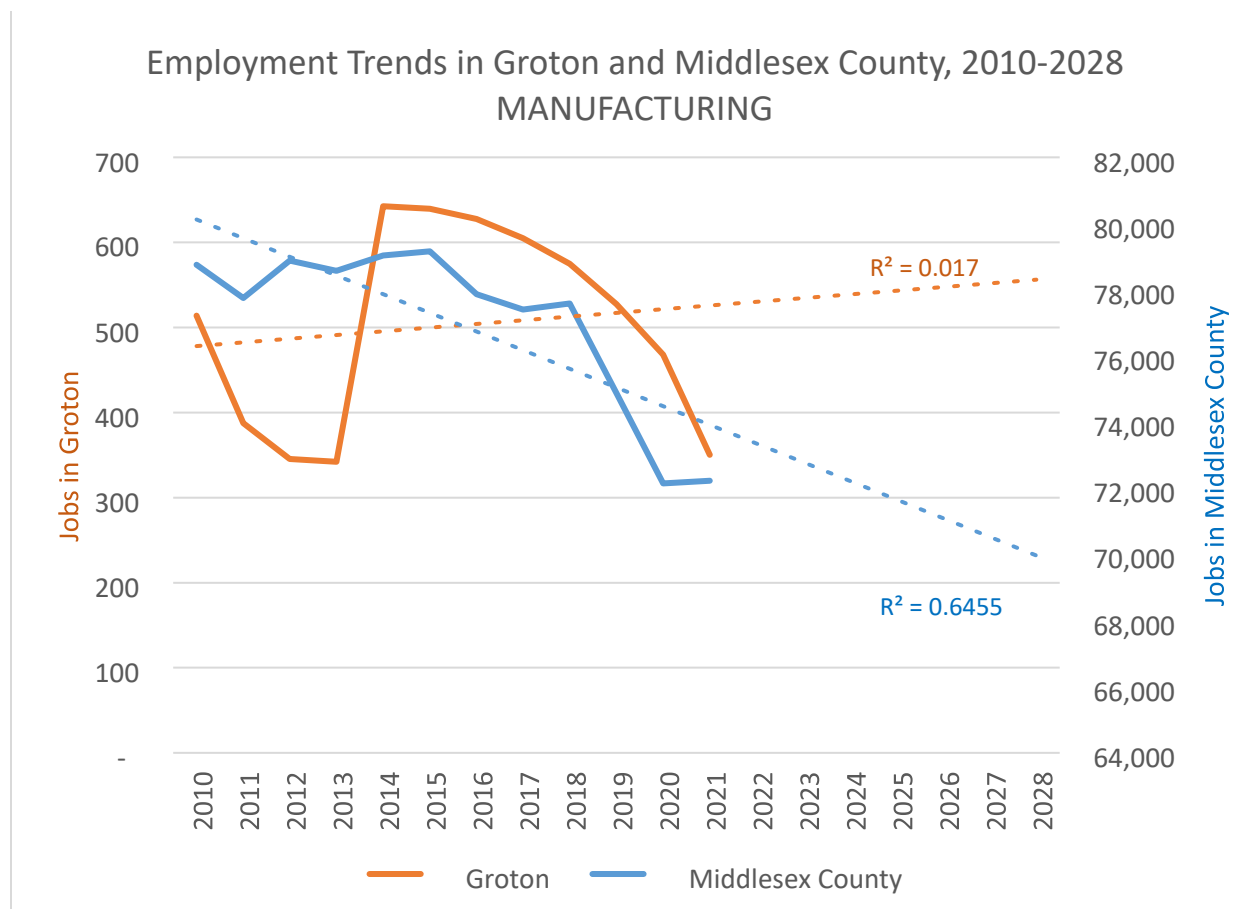


Figure 6 shows the Construction sector, where historic job increases are expected to continue, at high levels of reliability. The sector, while ranking sixth in employment, is the third largest in value of sales for Groton. Most of the employment in Construction is in construction of residential buildings.



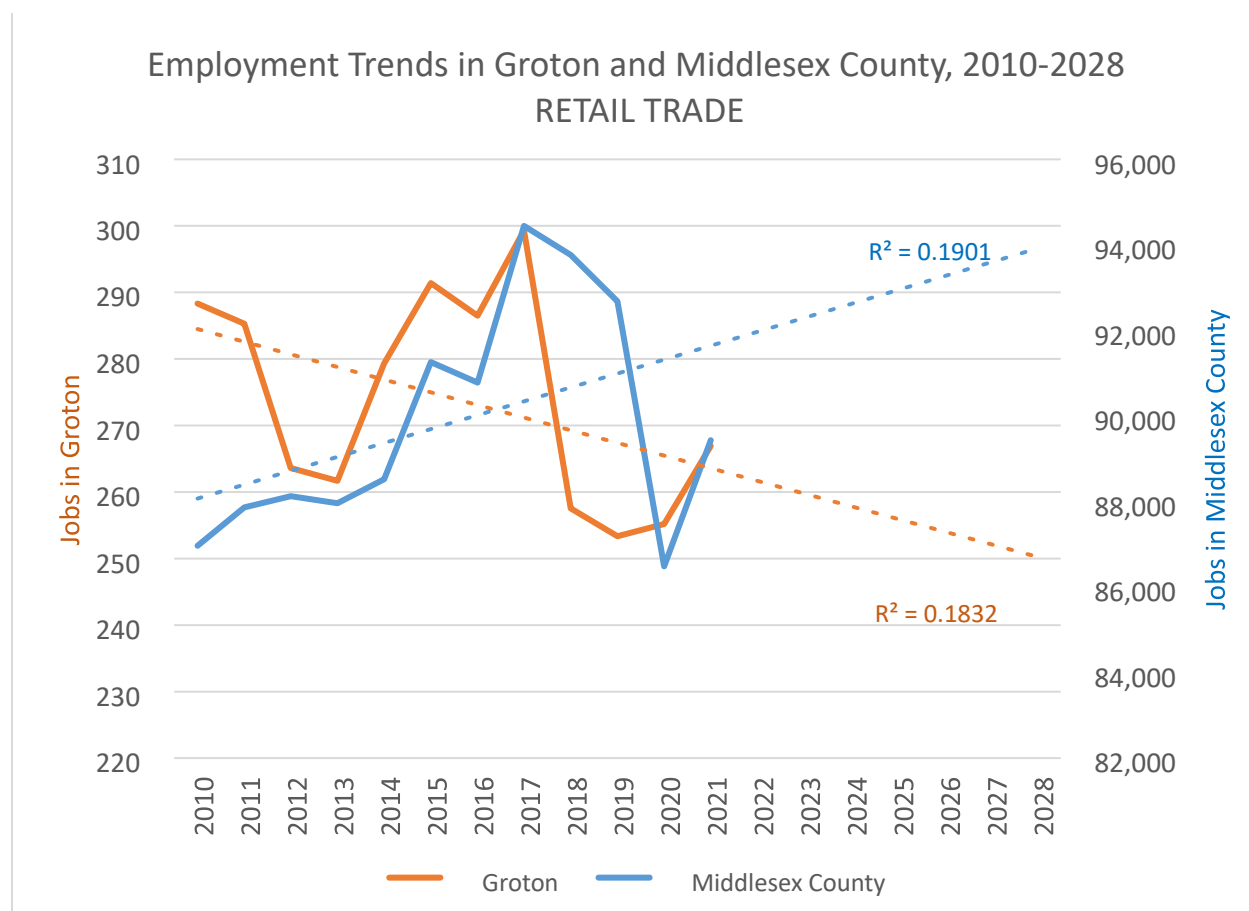
The Manufacturing sector employs the third largest number of workers in Groton, and accounts for the largest value of sales. Most of the workers in this sector are in paper manufacturing and machinery manufacturing. Unfortunately, its historic performance in the town has been so erratic that projecting future behavior is almost impossible, hence the very low R^2 value even though the projection is slightly positive. In Middlesex County, however, its decline is likely, based on past performance and a solid R^2 .

Figure 7



Retail Trade is an important sector for Groton, as it is for many towns. Not only does it generate jobs and sales, but retail establishments in town centers add activity and attract both residents and visitors. The types of retail activity are also important. In Groton, most of the employment in this sector comes from food and beverage stores and recreation retailers. Performance in this sector has been up-and-down in both town and county, with resulting trends being very weak. In fact, it is hard to see at first glance why the overall trend should be upwards in the county and downwards in the town, but that is likely because of the huge difference in the two vertical axes. The downward trend in Groton began before the pandemic, with sharp drops in 2012 and 2017, so even the uptick after 2020 may not indicate potential for improvement in the future.

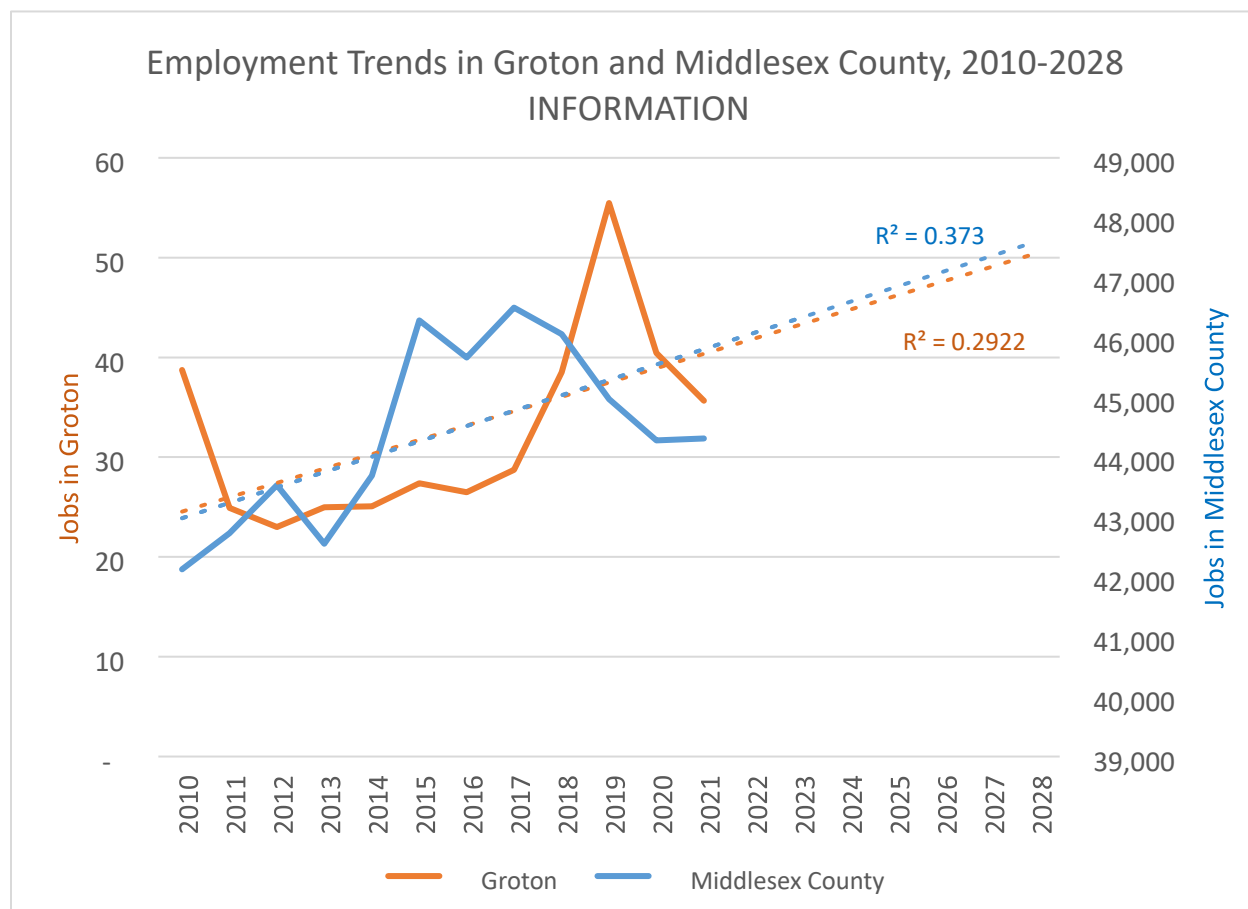
Figure 8



The next group of charts comprise the office-using sector: Information; Finance & Insurance; Real Estate and Rental & Leasing; Professional, Scientific and Technical Services; and Administrative Support. For most of these sectors, the trend is downward, which may have implications for new construction of office space.

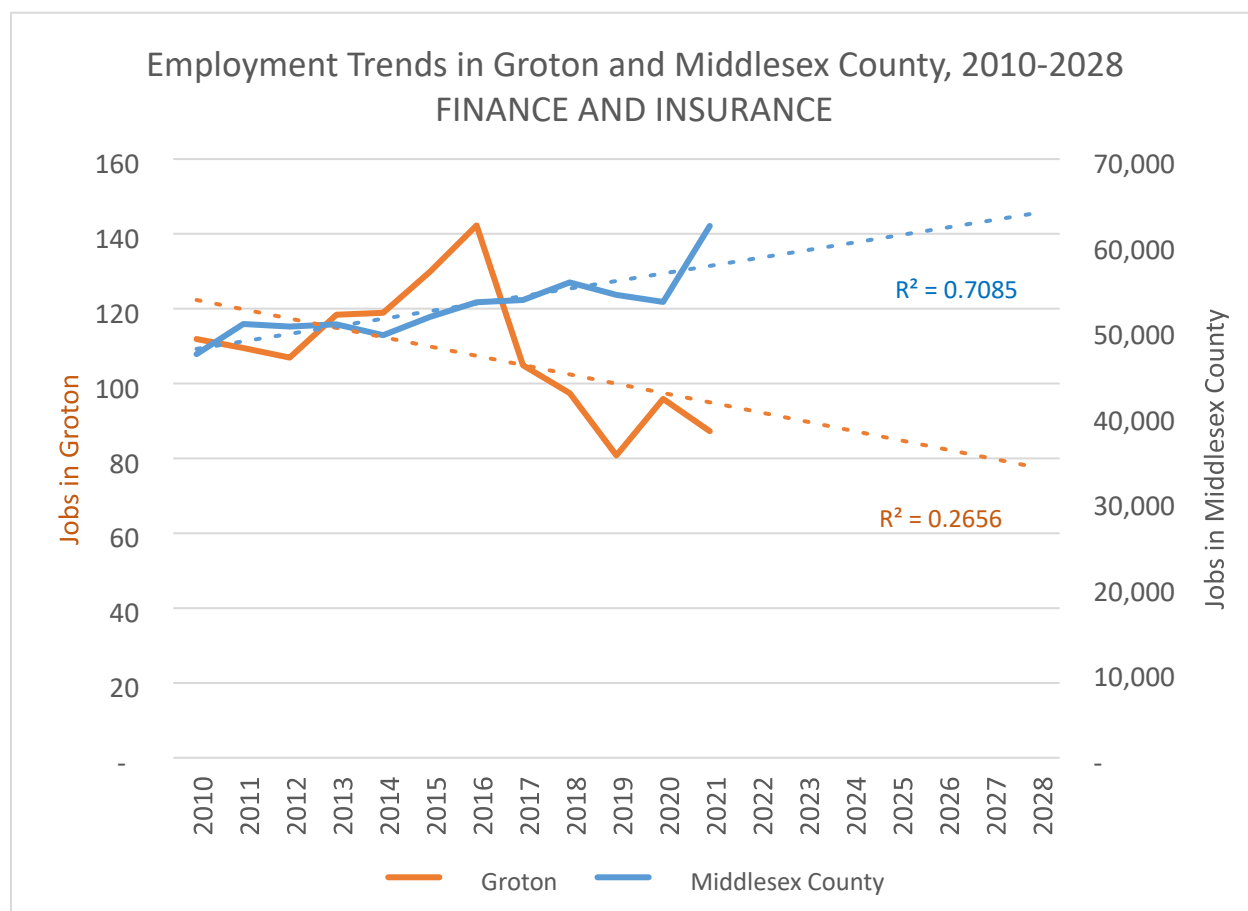
Figure 9, Information, shows upward trending lines for both Groton and Middlesex County. The R^2 s are low for both, a result of the high variations historically, so the future of this sector is still uncertain. This sector does not employ many people in Groton, even at its peak in 2019.

Figure 9



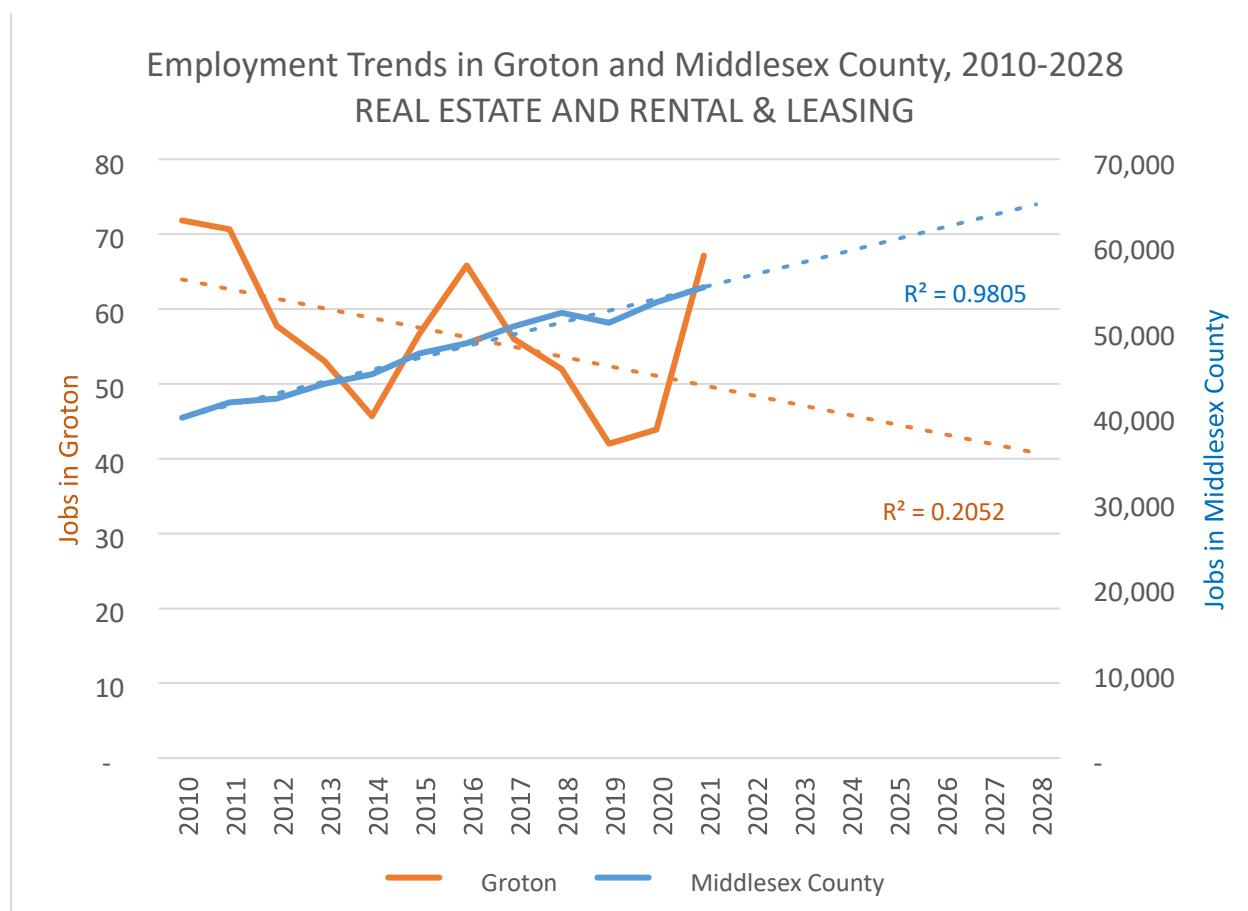
Finance and Insurance has been trending upwards in Middlesex County and is projected to continue to do so, with a high level of confidence in the projection. In Groton, the trend has been downward since 2016. The level of confidence is lower than that of the county, injecting an element of uncertainty in the projection, but it does not look promising for growth in Groton.

Figure 10



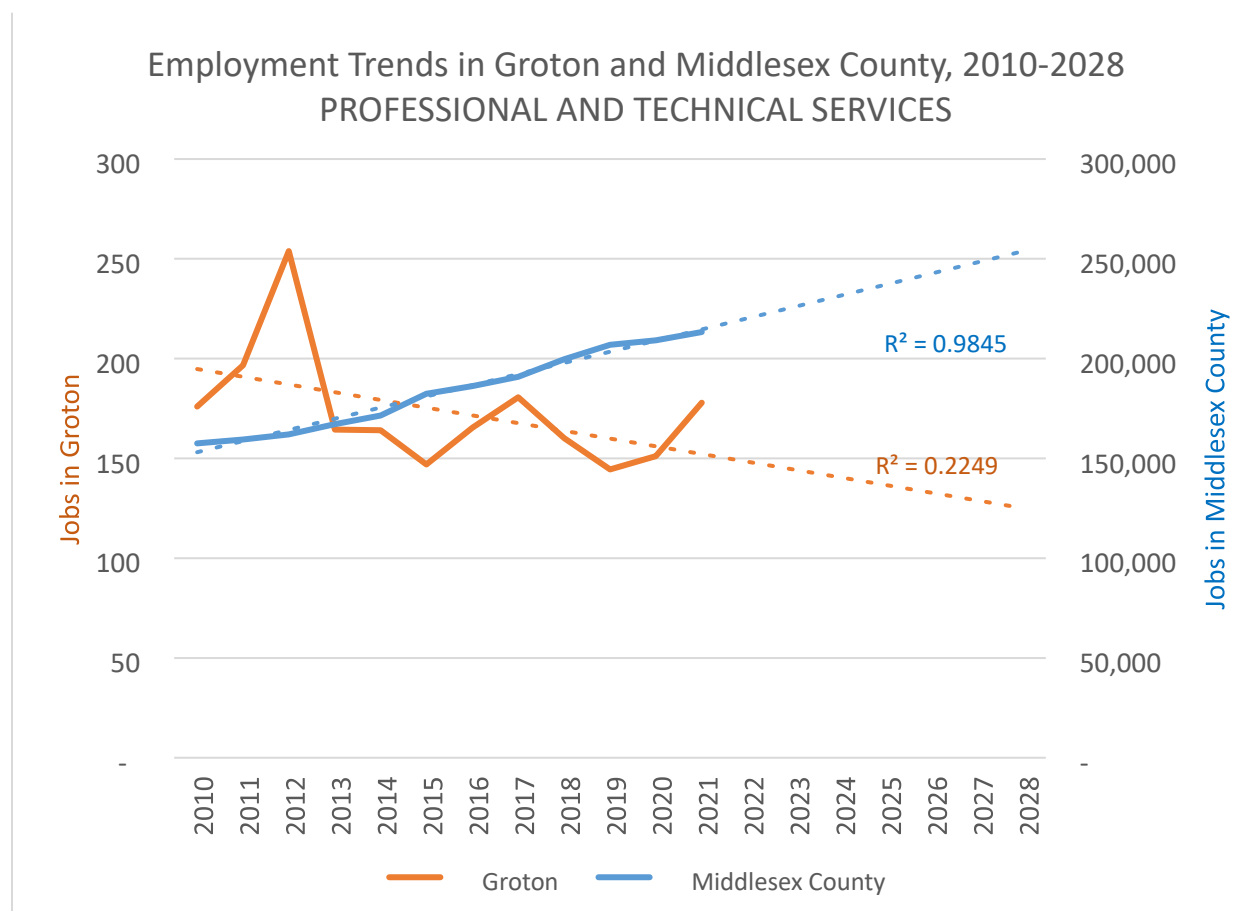
Real Estate jobs in Groton have been in decline, with sharp drops in 2014 and 2019, but with some recovery in 2021. In the county, however, they have steadily increased, and the projected continuation is at a high level of confidence.

Figure 11



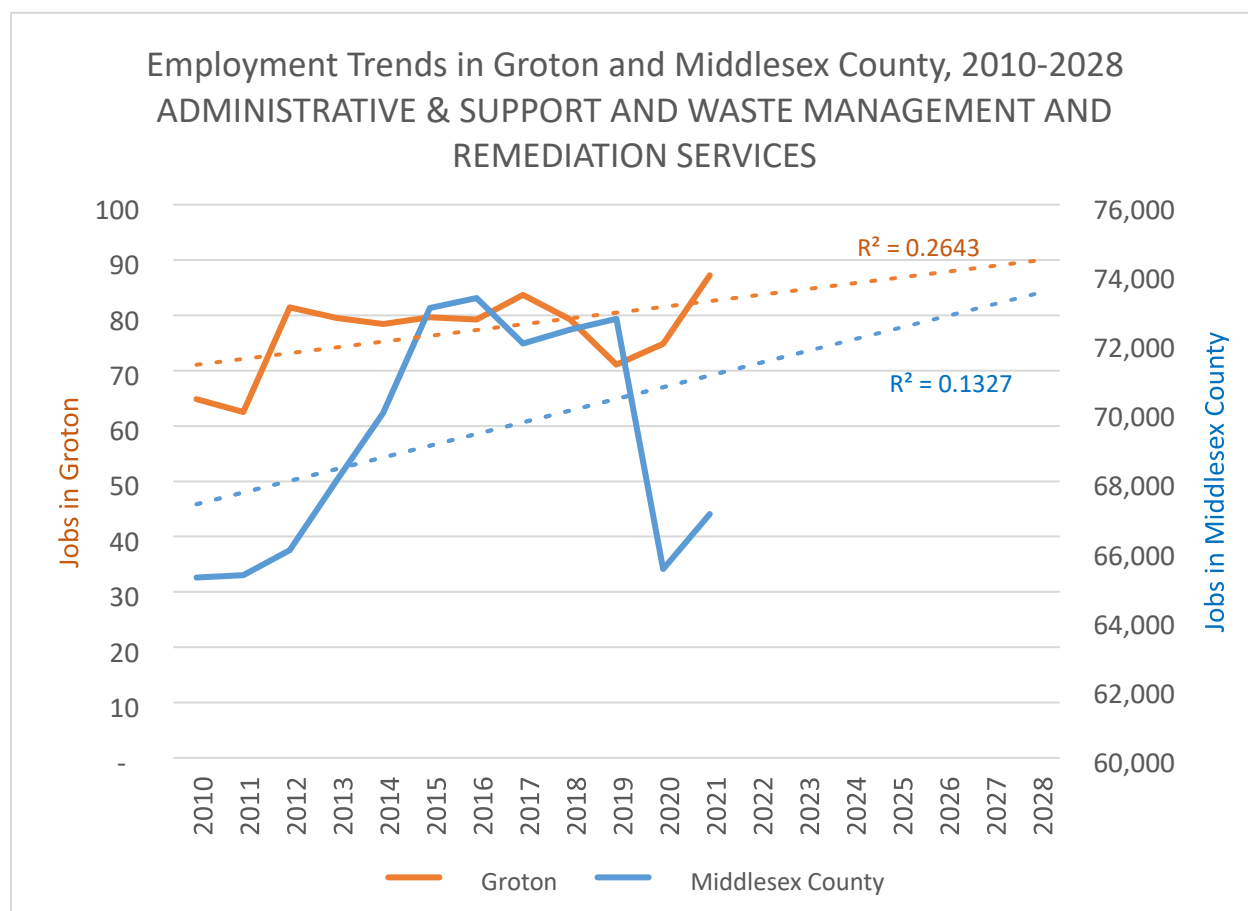
Here again, Groton is projected to lose Professional and Technical jobs, but with some uncertainty in the future projection. Middlesex County, meanwhile, is steadily trending upwards, with a very high R^2 value.

Figure 12



Employment in this sector is almost entirely in Administrative and Support Services, so it is included in the office-using group. Trends in both Groton and the county are heading upward, although the high variability in Groton makes the projection not very reliable.

Figure 13



The next two sectors, Education and Health Care and Social Assistance are both large employers in Groton and Middlesex County, and projections for the future in both are strongly upwards, as suggested by the analysis in Table 8. The Health Care and Social Assistance sector is a major driver of employment growth in the State as well. The types of jobs cover a wide range of skill requirements and attendant wages and salaries. Health Care employment in Groton is mostly in ambulatory health care services, followed by nursing and residential care facilities.

Figure 14

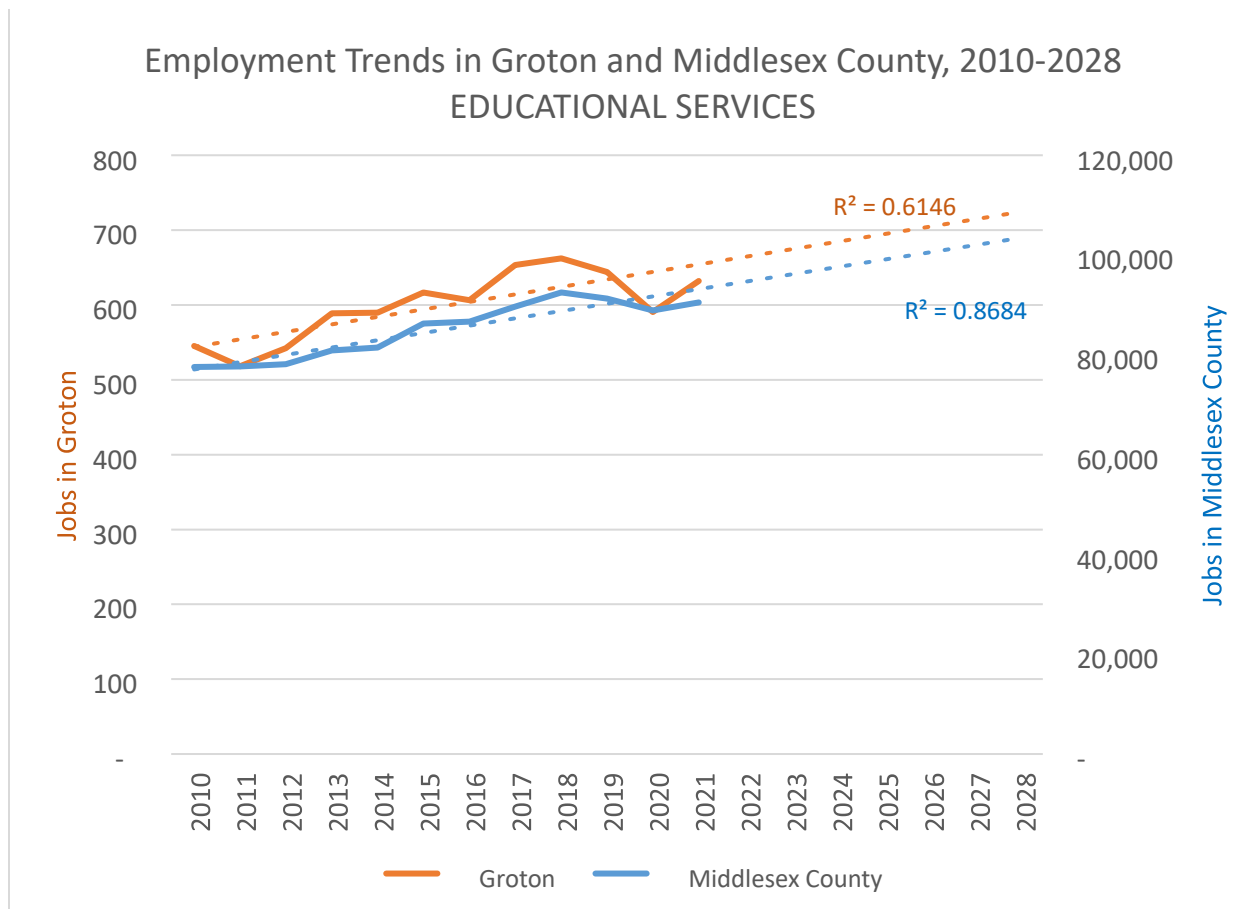
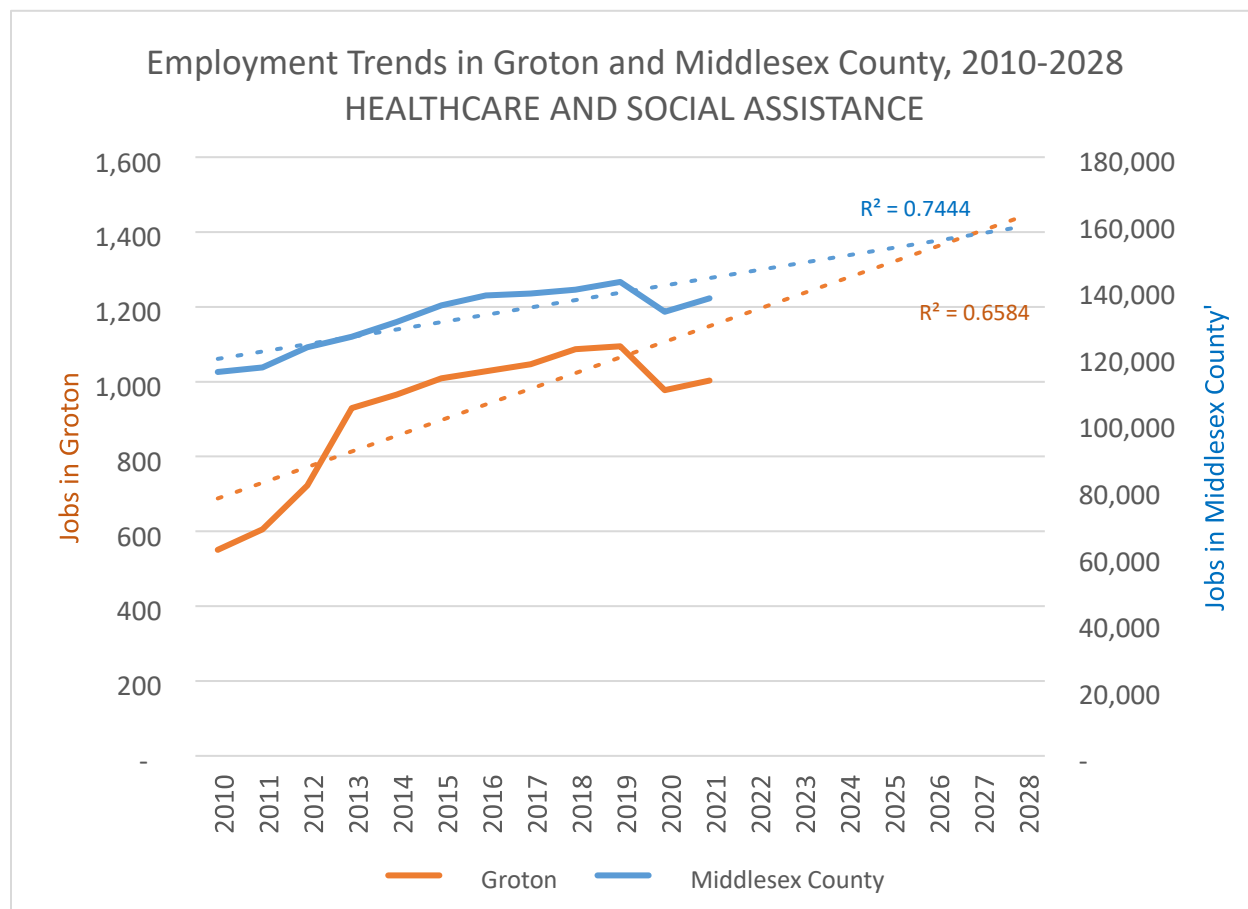


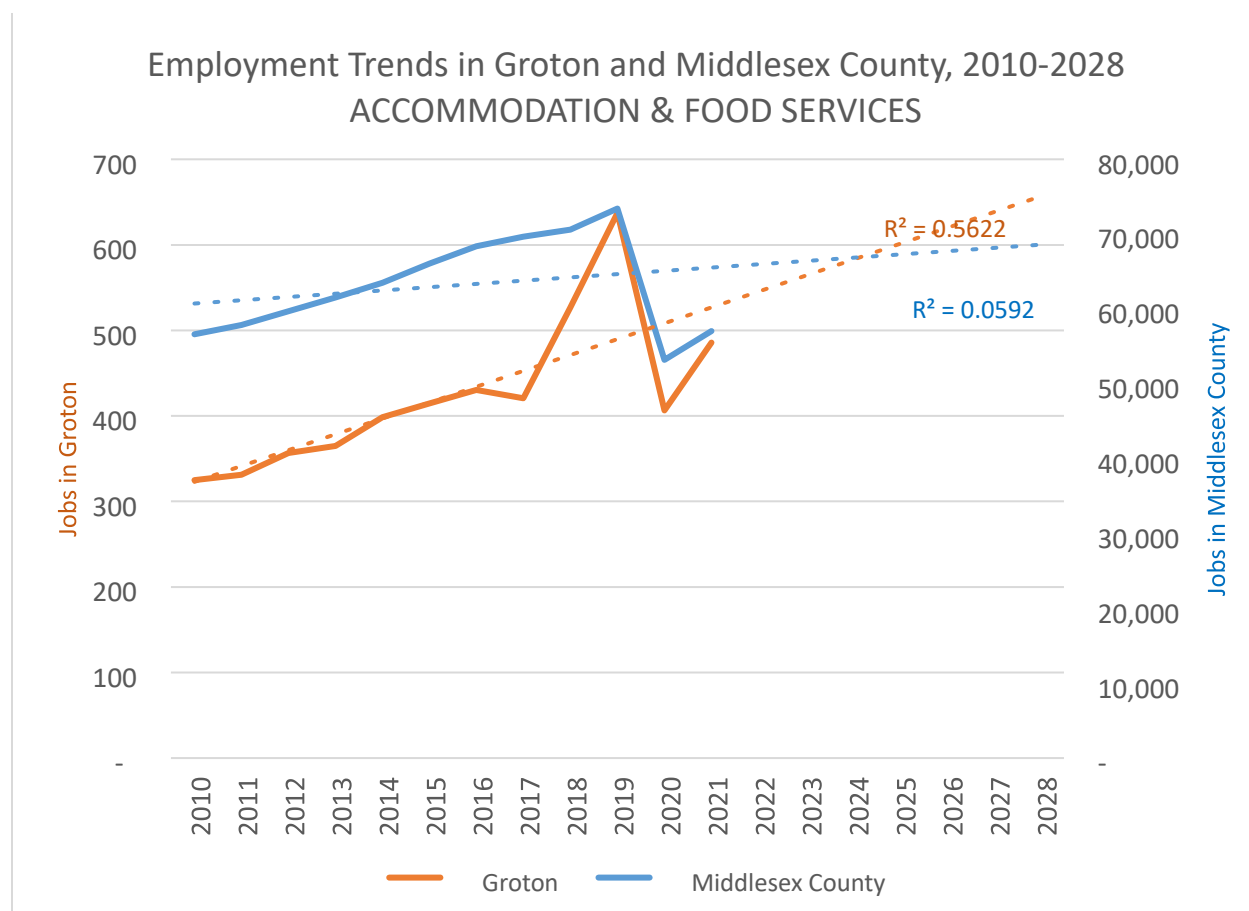
Figure 15



There is also an Arts, Entertainment, and Recreation sector in Groton, but data are missing for all but three years, the most recent data point in 2019, so it is not useful to graph it. This is unfortunate, as residents and community leaders have identified this sector as one of great opportunity for Groton due to the town's setting of natural beauty and existing arts and galleries. The sector fits well with Groton's character and would attract visitors coming to enjoy its trails, nature preserves, and other outdoor features. Future years' data should capture the influence of the new Groton Music Center on employment in this sector.

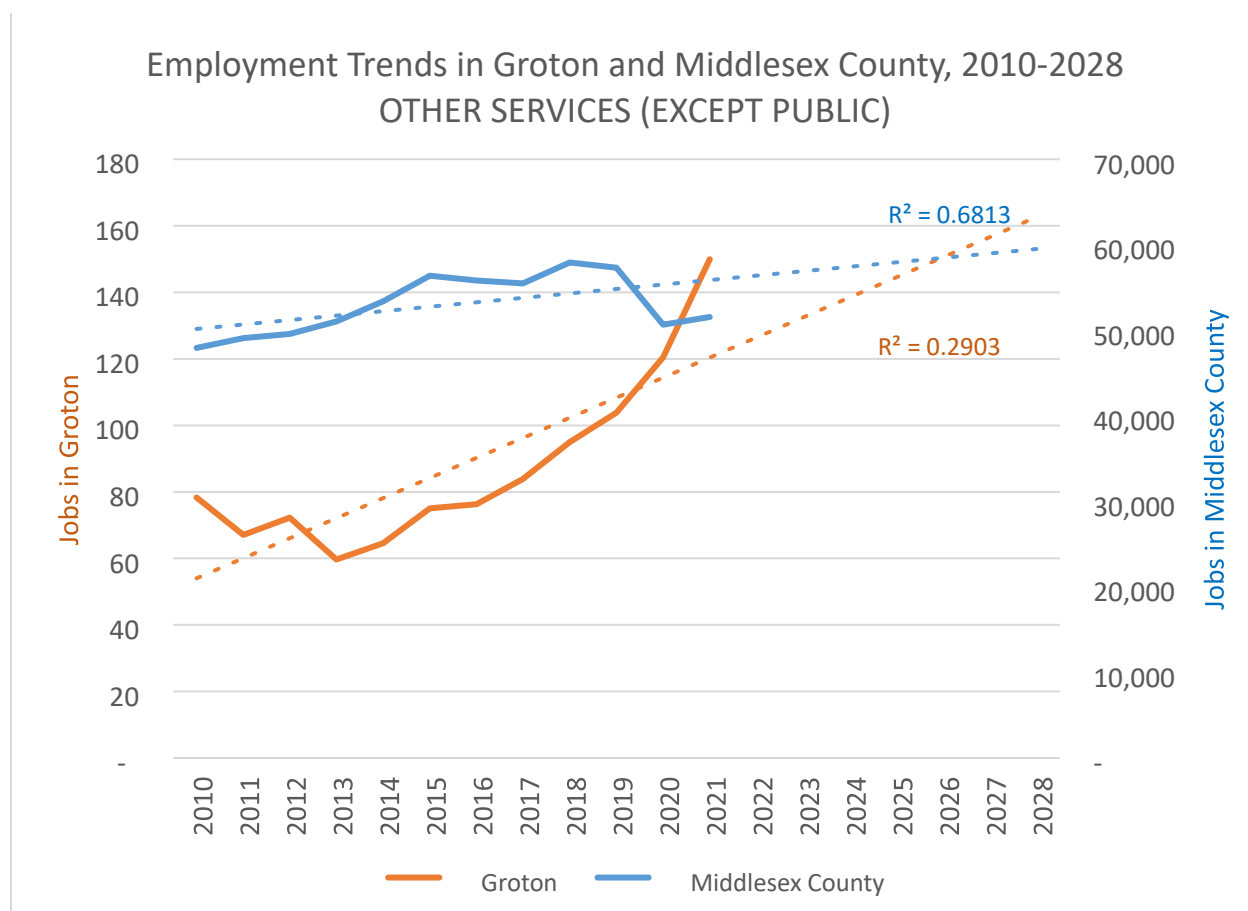
In both Groton and county, and, indeed, much of the state and country, Accommodation and Food suffered sharp losses of jobs in 2020, the pandemic year. Some recovery is already shown in 2021, and is likely to continue, based on the upward trends in prior years. The R^2 in Groton is very low because of the uncertainty introduced by the pandemic year and because of the small number of employees compared to the county's. In Groton, most of the jobs are in food services and drinking places (mostly restaurants), sectors that would be desirable additions to the downtown and other areas, according to interviews with knowledgeable residents.

Figure 16



The final category of employment is Other Services. This includes repair and maintenance services, laundry and personal care services, and non-governmental organizations. In Groton, the trend is upwards, although with only a modest level of confidence. Notably, there was a relatively large increase in Groton jobs in the sector in 2020, the pandemic year. In Middlesex County, the trend is also upwards, with a much higher reliability in the projection because of its much larger size. In contrast to Groton, it lost some jobs in 2020.

Figure 17



Based purely on the above employment trends, the growth sectors for Groton are Construction (and possibly Manufacturing, if the forecast proves reliable), Information, Administrative & Support, Educational Services, Health Care & Social Assistance, Accommodation & Food, and Other Services. The biggest gainers are Health Care & Social Assistance, Education, and Accommodation & Food. Health Care is a very large and growing industry in Massachusetts, so it is not surprising that it shows strength in Groton, where it is one of the largest employers and will likely continue to be so. The Groton School and Lawrence Academy contribute to the strong growth prospects in Educational Services. Potential growth in the Accommodation & Food sector is good news for those wanting to see more restaurants downtown and in areas accessible to the new Music Center. That potential, however, will only be realized if there is an effort to promote existing businesses and their potential expansion and recruit new ones.

Job losses projected for the Office-Using sector, except for Information, have implications for the demand for office space. Losses in Retail employment are concerning, as this sector is a large factor in downtown viability and attractiveness to visitors. However, in the more detailed Retail Opportunity Gap analysis below, there are indeed opportunities for specific types of stores to expand or grow based on consumer spending.

The employment trends shown above can be translated into demand for commercial space. The table below shows this analysis. Even considering losses in the calculations, Groton is projected to add a total of 887 jobs by 2028. The largest projected gains would be in Manufacturing, Health Care and Social

Assistance, and Accommodation and Food Services (mostly restaurants). Those new jobs could be expected to generate demand for 411,490 square feet of new or expanded commercial space. At the county level, the biggest gains in jobs are projected to be in Professional, Scientific, and Technical Services, Health Care and Social Assistance, and Transportation and Warehousing. Total new jobs would result in a need for about 59 million square feet of new or expanded commercial space. Although Groton represents and will continue to represent, a very small part of Middlesex County jobs, demand at the county level could still affect demand in the towns. The section below will focus on characteristics of commercial space in the Groton area.

Table 11

Groton Projected Space Demand Through 2028 Based on Historical Employment Trends									
Groton					Middlesex County				
Sector	Projected New Jobs	Projected Space Demand (SF)	Projected New Jobs	Projected Space Demand (SF)	Projected New Jobs	Projected Space Demand (SF)	Groton % of Middlesex County Jobs 2021	Groton % of Middlesex County Jobs 2028	
23-Construction	60		15,263				0.4%	0.4%	
31-33 -Manufacturing 206	103,002	(2,261)	(1,130,633)	0.5% 0.8%	44-45- Retail trade	(17)	(8,320)	4,486	2,243,106 0.3% 0.3%
48-49 -Transportation and Warehousing		(6)	(2,803)		18,686	9,343,029	0.00%	-0.01%	
Office-using									
51- Information	15	3,687	3,287	821,689			0.08%	0.11%	
52- Finance & Insurance	(10)	(2,423)	1,506	376,609			0.14%	0.12%	
53- Real Estate and Rental Leasing	(26)	(6,587)	9,688	2,422,082			0.12%	0.06%	
54 -Professional, Scientific, & Technical	(53)	(13,212)	40,471	10,117,751			0.08%	0.05%	
56- Administrative & Support	3	661	6,379	1,594,734			0.13%	0.12%	
Subtotal Office-using	(71)	(17,873)	61,331	15,332,865					
61 - Educational Services	92	129,325	12,921	18,089,544			0.7%	0.7%	
62- Health care and Social Assistance	439	175,563	21,508	8,603,214			0.7%	0.9%	
71- Arts, Entertainment, and Recreation	0	0	6,666	2,666,242			0.0%	0.0%	
72 -Accommodation & Food Services	171	30,067	11,538	2,030,673			0.9%	1%	
81- Other Services (Except Pub Admin)	13	2,529	7,937	1,587,331			0.3%	0.3%	
TOTALS	887	411,490	158,075	58,765,371			0.3%	0.4%	

Source: Massachusetts Department of Labor and Workforce Development, ES202 reports (adjusted by REIS), 2021; FXM Associates *Space Demand Model*

Commercial Real Estate Supply Trends

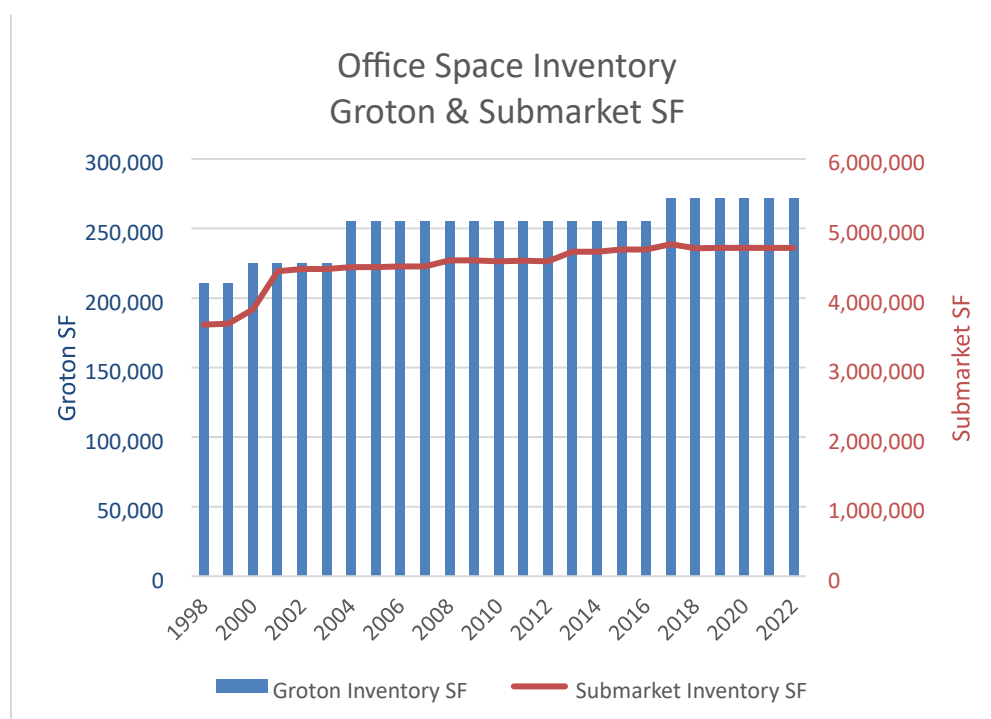
In addition to the assessment of potential growth in demand for commercial space attributable to projected employment growth, trends in the inventory, vacancies, occupancies, and lease prices of commercial space are analyzed. The source of data in the following section is CoStar *Property Information Services*, a subscription data provider generally accepted by property owners, developers, and brokers as the most

reliable and comprehensive commercial real estate information. In the following sections historical trends are examined for office space, retail, industrial, and flex space within Swansea and the broader Bristol County market area.

Office Space

Figure 18 graphs trends in the inventory of office space in Groton and the surrounding communities' submarket.⁴ Over the 24-year period shown the inventory of office space has grown by 61,000 square feet (SF), 29% in Groton, and 1,100,000 SF, 31% in the submarket overall. Based on these long-term historic trends, the inventory is projected to increase by about 3,100 SF per year in Groton and 58,000 SF per year in the submarket, each a 1.2% average annual gain.

Figure 18



Source: CoStar Property Information Services, 2023, and FXM Associates

Figure 19 graphs historical trends in vacant SF in Groton and the overall Submarket, while Figure 20 shows the corresponding vacancy rates. Vacancies have increased sharply since the pandemic, though the vacancy rate has historically been low in Groton compared to the overall submarket.

⁴ The submarket is defined as Groton plus the surrounding communities of Ayer, Dunstable, Littleton, Pepperell, Shirley, Townsend, Tyngsborough, and Westford.

Figure 19

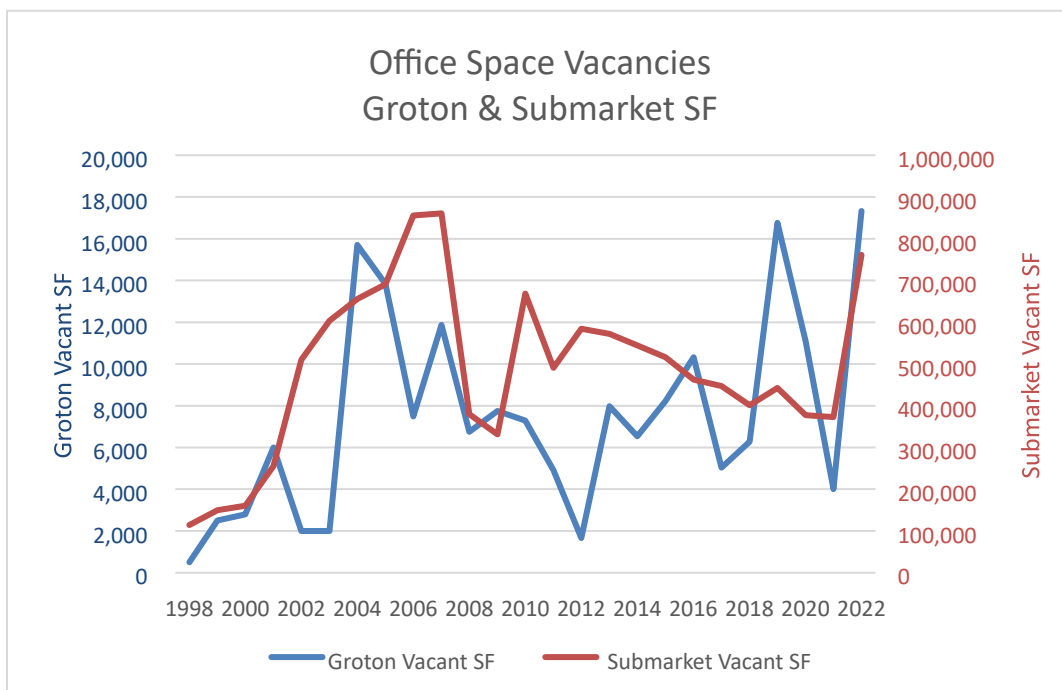
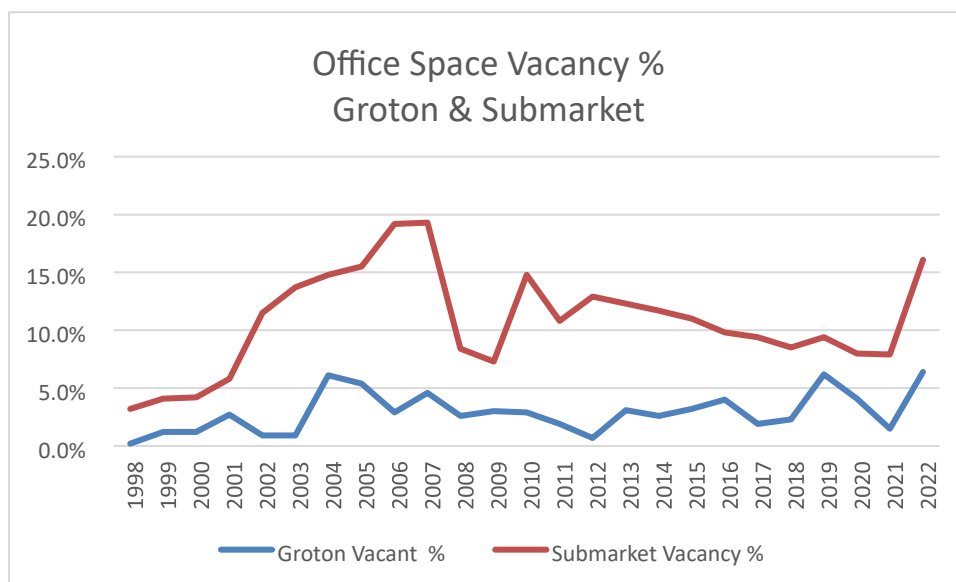


Figure 20

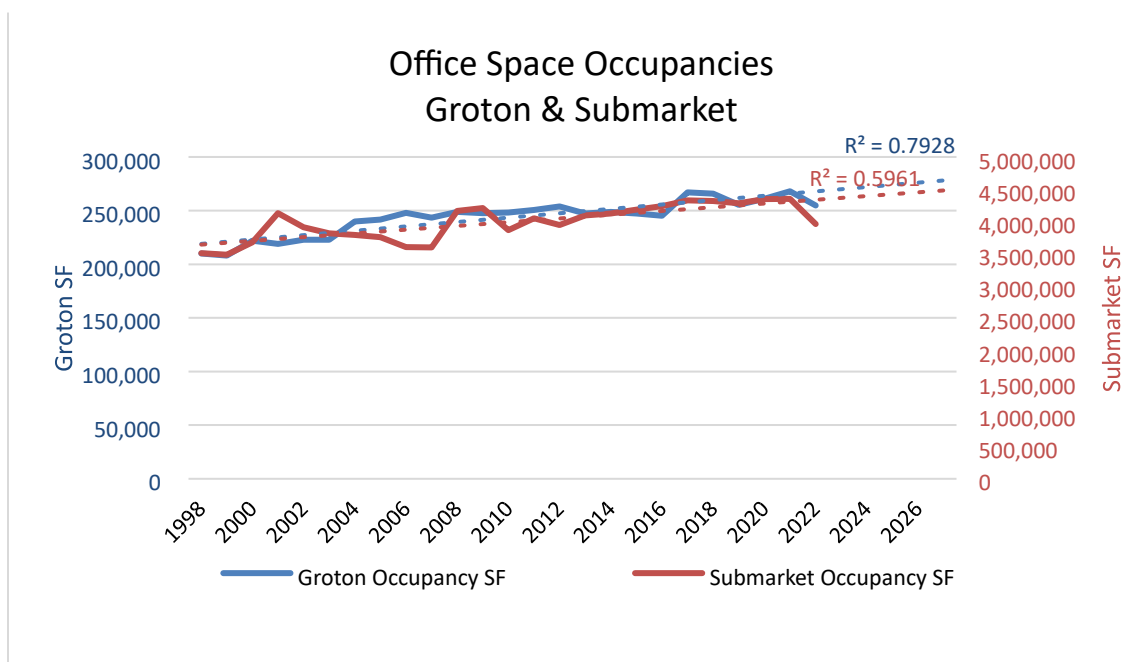


Source: CoStar Property Information Services, 2023, and FXM Associates

Figure 21 graphs office space occupancies, which trend upward over the long term. Office space occupancy in Groton is projected to increase by an average annual 3,700 SF, or 1.5%, and 76,000 SF in the submarket overall, a 1.9% average annual rate of growth. It is uncertain whether the recent occupancy losses largely attributable to the pandemic will be reversed, but unlike in larger cities where difficult commutes have made re-occupancy of office space problematic, commuters to suburban space may be more flexible. A significant portion of suburban office space is health care related and those

services require employees on-site and regional employment growth is anticipated in professional and technical services, and finance and insurance, among other office using industries.

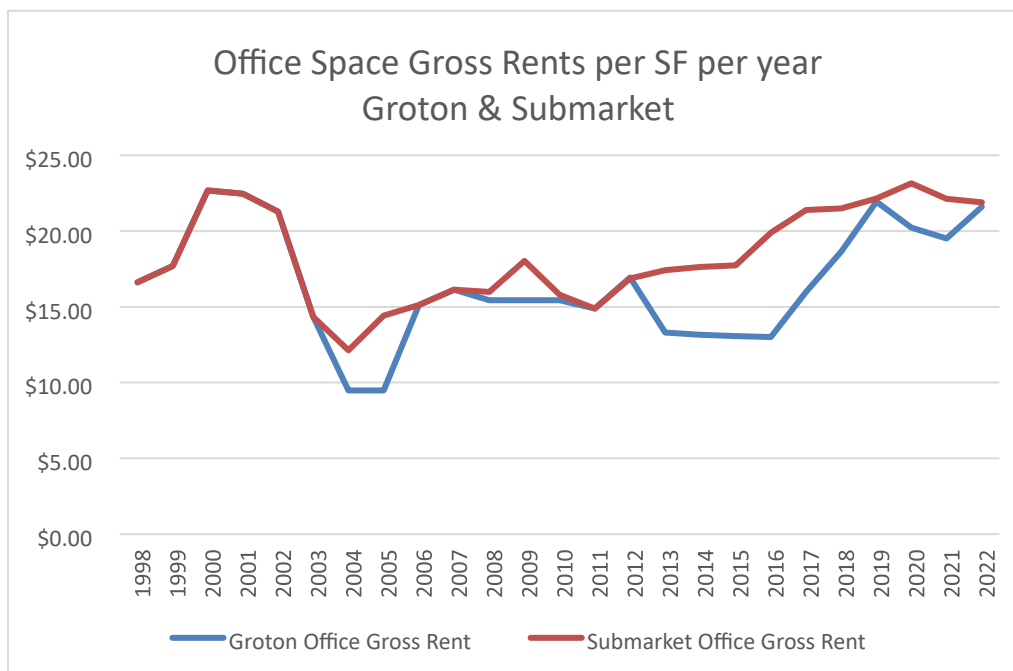
Figure 21



Source: CoStar *Property Information Services*, 2023, and FXM Associates

Figure 22 shows trends in average lease rates for office space (per square foot per year). Lease rates have been trending upward and are expected to continue to do so in both Groton and submarket overall.

Figure 22

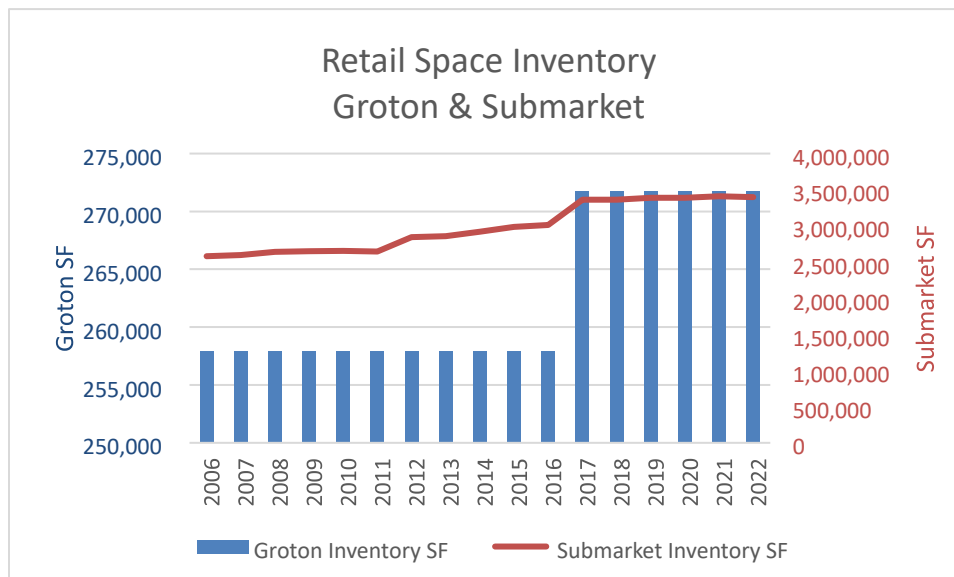


Source: CoStar Property Information Services, 2023, and FXM Associates

Retail Space

Figure 23 shows historical trends in the inventory of retail space in Groton and submarket overall.

Figure 23



As shown by the data in Figure 23, the inventory of retail space in Groton was stable between 2006 and 2016 at 258,000 SF and then jumped 15,000 SF to its current level. Within the submarket overall the inventory of retail space increased by 3,800,000 SF, or 32%. The projection of retail space, based on

trends from 2006 to 2022, suggests average annual increases of 1,100 SF in Groton and 83,000 SF within the submarket overall.

Figure 24 shows retail space vacancies in square feet (SF) while Figure 25 displays the corresponding vacancy rates. The vacancy rate for retail space has historically been higher in Groton than in the submarket overall, but the recent decline in both SF vacancies and the vacancy rate are noteworthy.

Figure 24

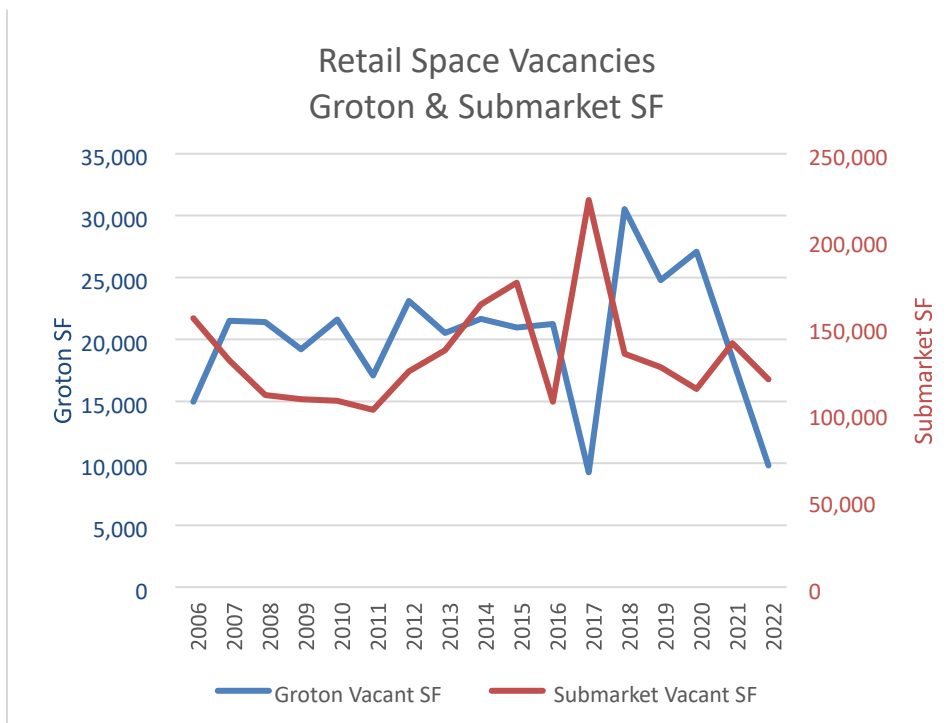
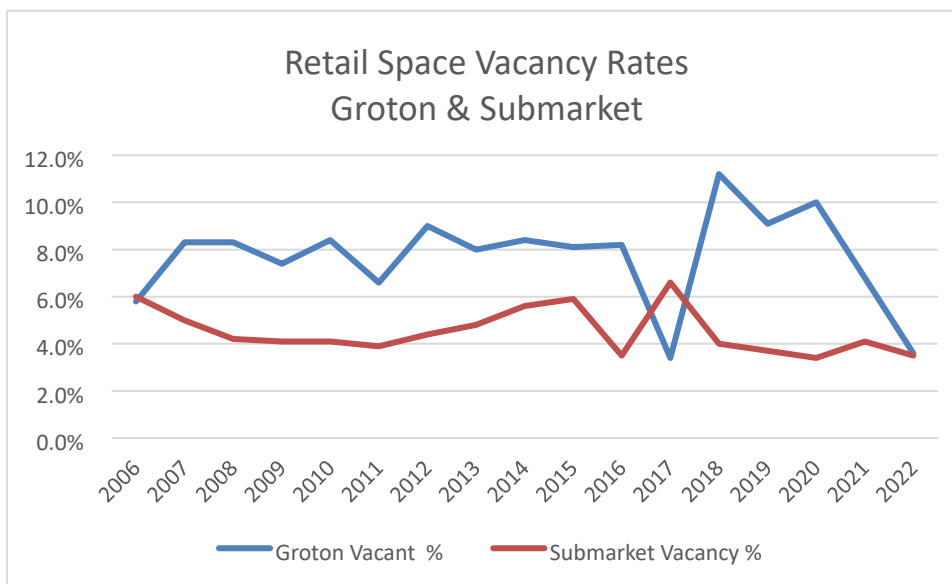


Figure 25



Source: CoStar Property Information Services, 2023, and FXM Associates

Figure 26 graphs historical trends in retail space occupancy. This is an encouraging indicator of the health of retail in both Groton and the submarket overall and suggests potential development opportunities, more likely if done in combination with residential and potentially office space to achieve premium rents. Figure 27 plots historical average lease rates for retail space.

Figure 26

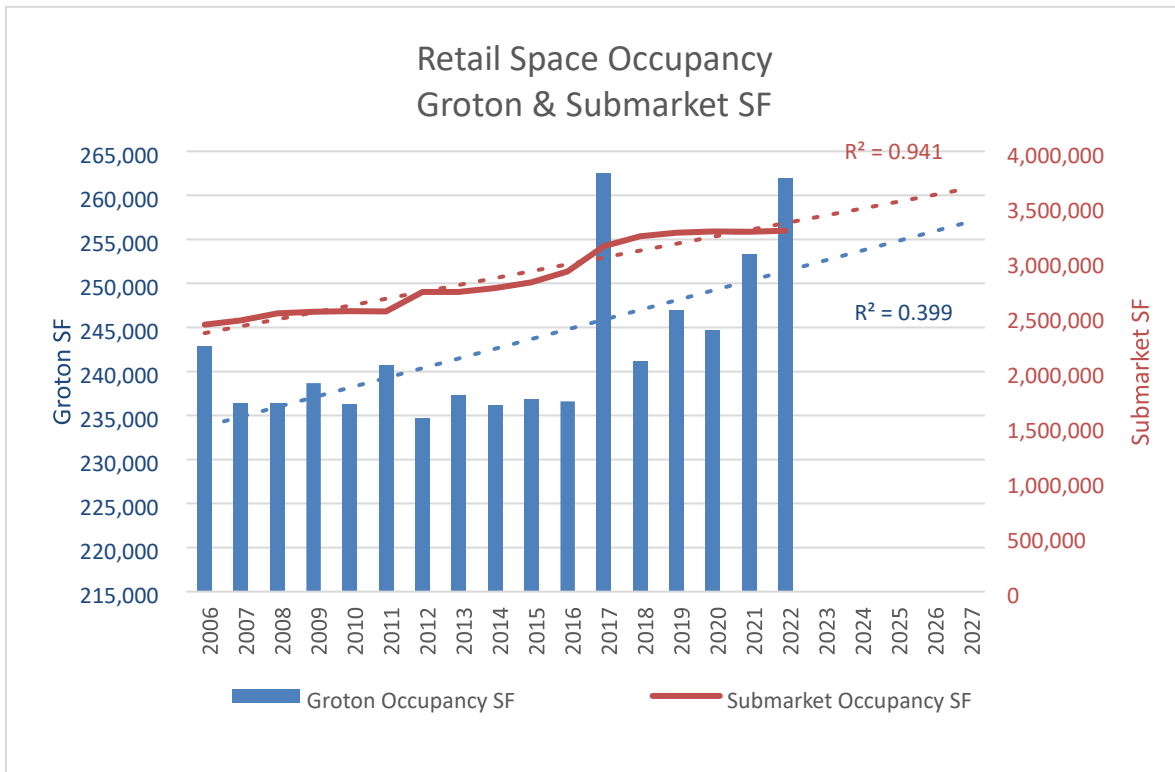
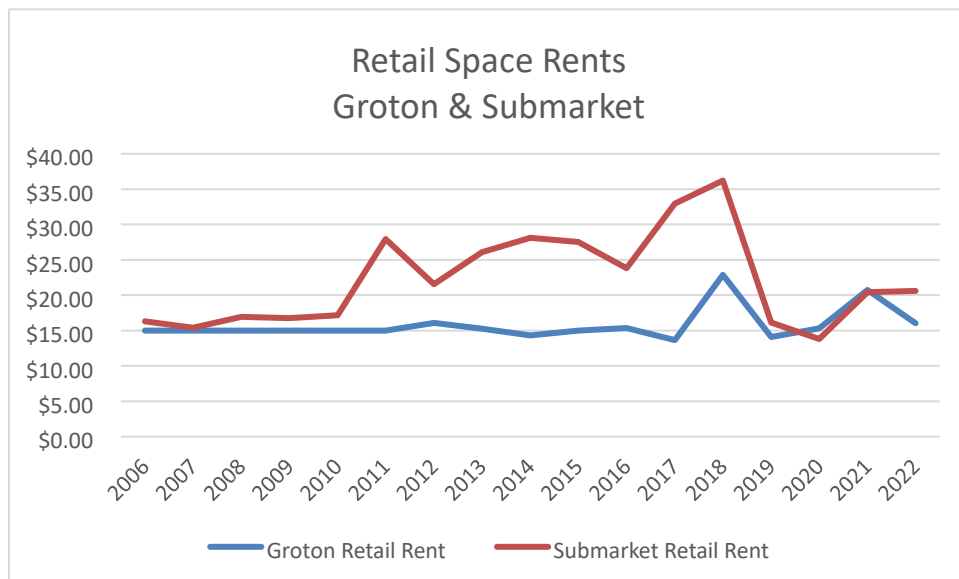


Figure 27



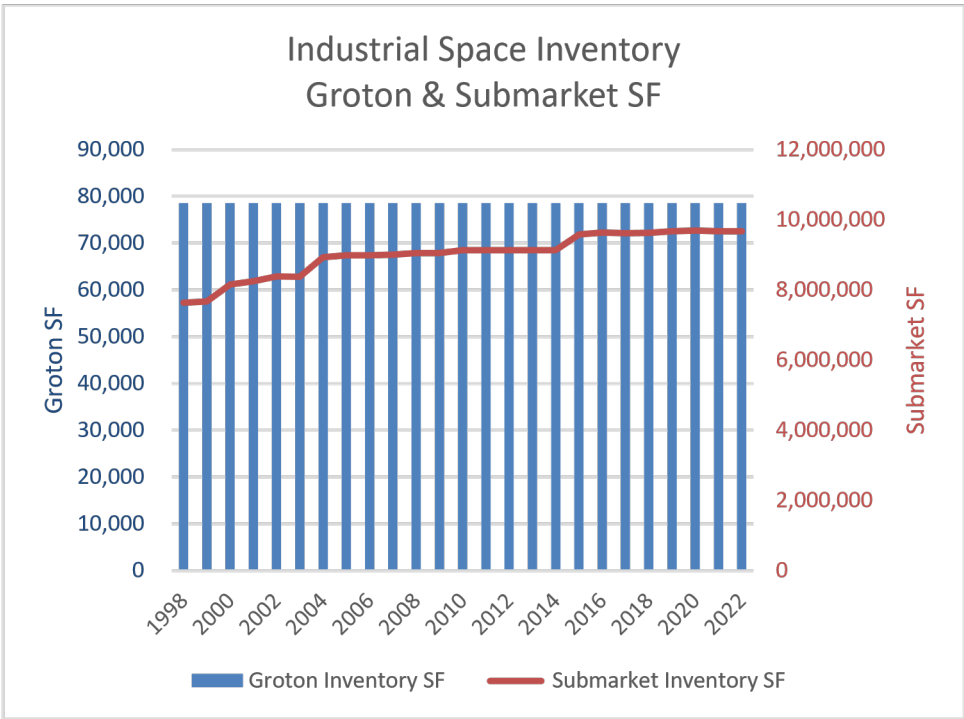
Source: CoStar Property Information Services, 2023, and FXM Associates

The demise of brick and mortar retail has been predicted for some time owing to increases in ecommerce and rapid deliveries, and is somewhat supported by the evidence of certain national brands decline and bankruptcy. While e-commerce is expected to continue to gain market share, the preponderance of retail purchases is still made at brick and mortar stores and will be for the foreseeable future. Within the Groton market area, for example, about 75% of all retail sales are made at brick and mortar stores within the market area⁵, consistent with national sales profiles. The evidence of declining vacancies and projected growth in local occupancies plus regional; employment growth bode well for retail, especially as part of a mixed-use project that includes residential and possible office uses. As will be discussed subsequently, there is at least 37,000 SF of currently leaked retail potential based on a market area sales gap of over \$60 million.

Industrial Space

As shown in Figure 28 the inventory of industrial/warehouse space in Groton has not changed since 1998. Within the submarket overall the inventory has increased by about 2,000,000 SF, a 26% gain over the 24-year period. The submarket inventory, based on historical trends, is projected to increase about 134,000 SF per year over the next five years.

Figure 28



Source: CoStar *Property Information Services*, 2023, and FXM Associates

⁵ Claritas *Site Reports*, Retail Opportunity/Gap, 2022.

Figure 29 graphs industrial space vacant SF while Figure 30 shows the corresponding vacancy rate. Both indicators of industrial space availability are very low and portend new development opportunities based on historical trends.

Figure 29

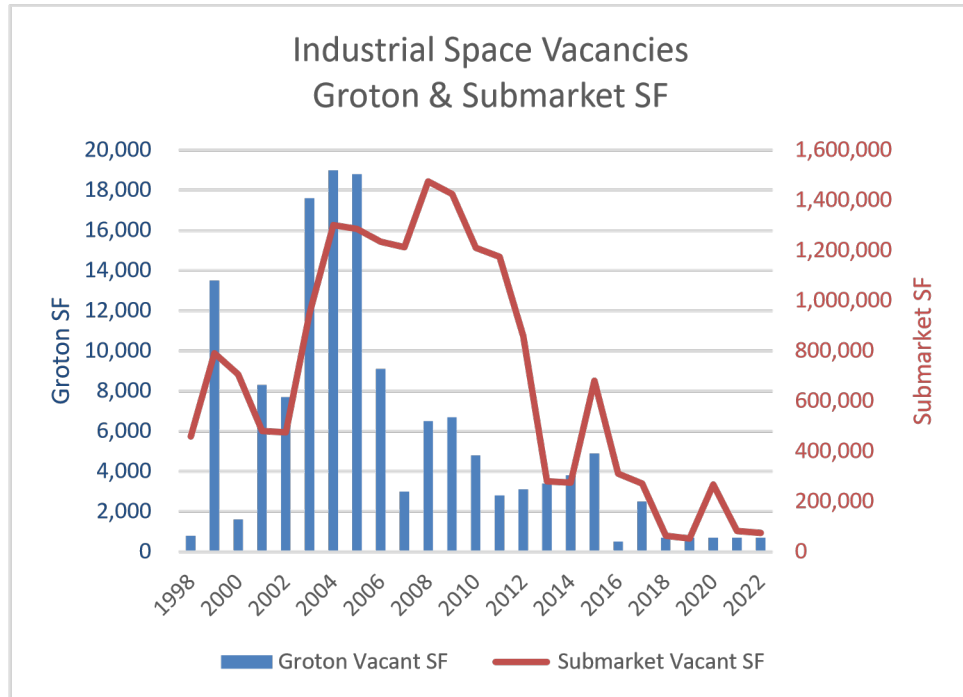
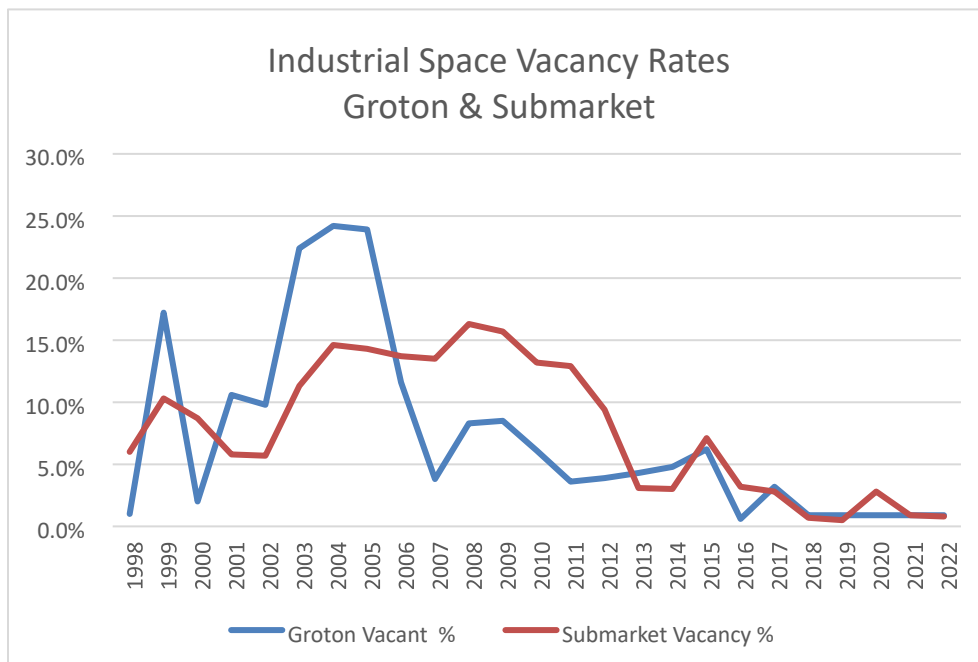


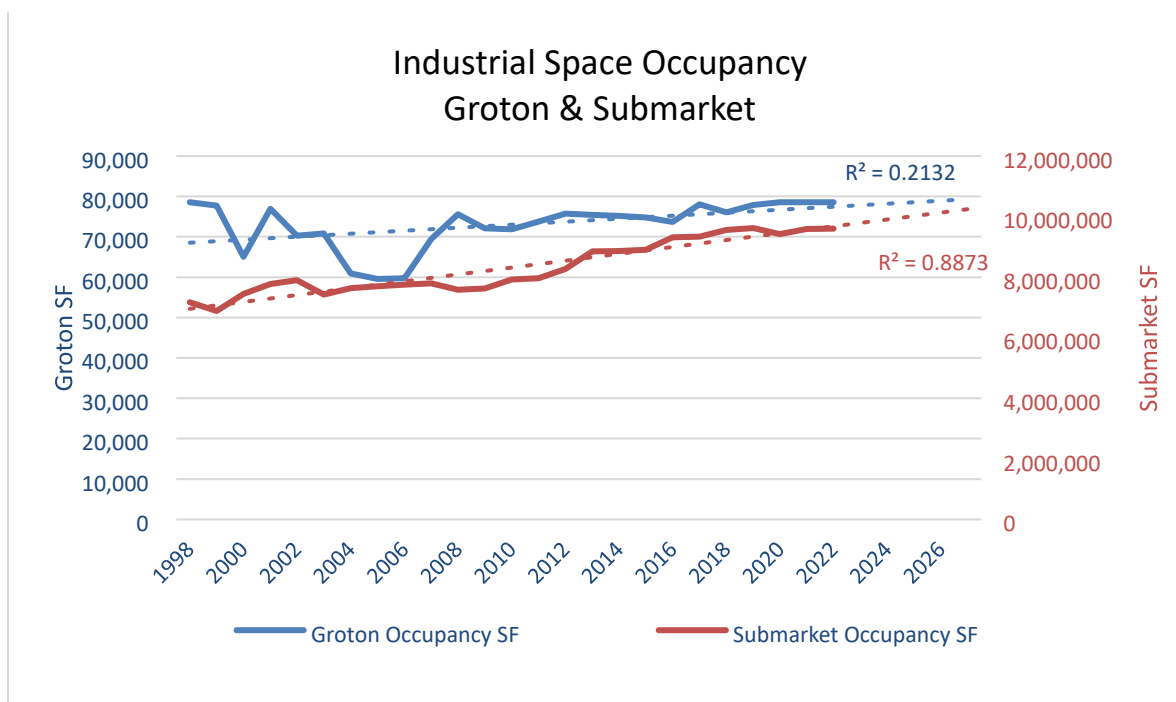
Figure 30



Source: CoStar Property Information Services, 2023, and FXM Associates

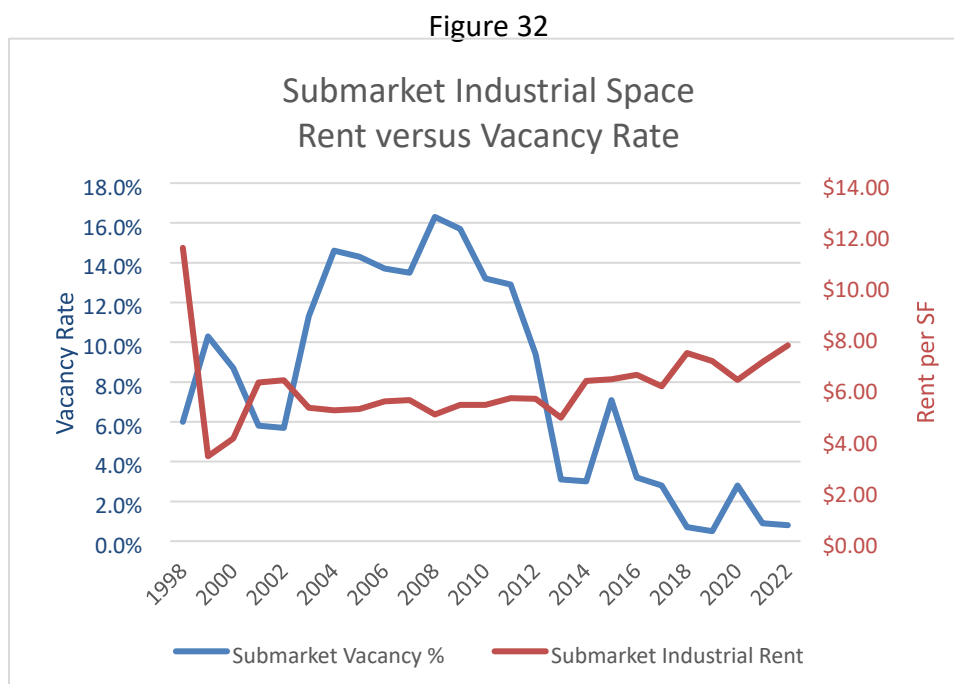
Figure 31 graphs occupancy trends in industrial space. These data show why vacancy rates are so low. Within the overall submarket occupancy is projected to increase by about 129,000 SF per year, very close to the projected inventory increase. Unless new industrial/warehouse space is constructed, availability will be extremely limited. This analysis is consistent with national trends in industrial space which are being driven by increased demand for decentralized distribution facilities to serve overnight and same day ecommerce deliveries.

Figure 31



Source: CoStar Property Information Services, 2023, and FXM Associates

Figure 32 shows the relationship between vacancy rates and average lease rates. As expected lease rates go up with increased vacancies and portend favorable development opportunities for industrial space within Groton or other submarket communities. According to CoStar, about 116,000 SF of industrial space are currently under construction and expected to lease at \$13 per SF, a substantial increase over the historical trend.



Source: CoStar *Property Information Services*, 2023, and FXM Associates

Retail Opportunity Gap/Surplus Analysis

Retail is such an important component of a busy and thriving town center that it is worth looking for immediate opportunities to grow the sector. One approach to assessing potential opportunities for expanding retailing is a retail opportunity gap/surplus analysis, a tool used by major retailers and chain restaurants to gauge market demand and competition within a specified geographic area. The analysis presents a snapshot of current consumer spending on various retail categories alongside actual retail store sales in those same categories within the same geographic area. Where expenditures by households in the market area exceed sales in that market area, a gap or opportunity exists for existing or new stores within the market area to “capture” more of those household expenditures. (This loss of potential sales is also called “leakage.”)

Conversely, where market area household expenditures are less than actual sales categories, it indicates that stores in that retail category in the market area already attract consumer dollars from outside the market area and opportunities for additional retail activity might be more limited, or their success might offer opportunities for expansion.

The retail gap analysis is a snapshot of current opportunities for retailers to newly locate or expand facilities based on a well-established principle drawn from many empirical studies showing that people will typically purchase goods and services within the shortest available walking or drive time from where they live. The principle applies to comparable and competitive goods, services, and pricing: there is no guarantee of success based strictly on location advantage, which simply presents the opportunity.

Retailers typically define market areas in terms of drive times, with a 20-minute drive time considered the maximum time consumers would be willing to drive for all but the largest stores and store types in less populated areas like Groton. Market support within a 10-minute drive time is considered the maximum time consumers would be willing to drive to smaller, convenience type retailers, and market demand within a 15-minute drive time is considered essential for most medium sized stores and restaurants. If a specific category of retail sales opportunity were shown for a 10-minute drive-time market area and held up at the 20-minute market area, then most retailers would consider market conditions favorable – from a demand standpoint – to locating or expanding a store within that market area.

The following figure shows the areas encompassed by 10-, 15-, and 20-minute drive times. The centroid is Groton’s Town Hall.

Figure 33



Claritas Spotlight Reports supplies estimates of expenditures and sales by NAICS code, information widely used in the real estate industry and by professional analysts. This source estimates that within a 15-minute drive time of Groton these expenditures totaled over \$1 billion, including purchases at restaurants and other food services in addition to retail stores in 2023, as shown in Table 12 below. At all three distances, residents are spending more than stores in those areas are selling, indicating sales dollars are

going to businesses outside the area. These are sales that could potentially be captured by new or expanded businesses within Groton's market area.

Table 12

Retail Opportunity Gap/Surplus Market Overview

	10-min	15-min	20-min
Households	3,788	15,003	30,005
Total Retail & Restaurant Expenditures	\$ 282,623,699	\$ 1,085,746,001	\$ 2,227,784,919
Total Actual Store Sales	\$ 237,636,411	\$ 747,993,317	\$ 1,478,744,023
Retail Opportunity Gap	\$ 44,987,288	\$ 337,752,684	\$ 749,040,896

Source: EnvironicsAnalytics, Claritas Spotlight Reports, 2023, and FXM Associates

More useful, however, is the following table which shows which retail sectors (by NAICS code) are "leaking" sales to outside areas. The gap is translated into square feet using industry norms, and then number of stores is estimated based on store sizes. Finally, the number of stores that might reasonably be captured by Groton is shown in the last column. It is important to note that there are many uncertainties in these estimates. Average store size and sales per square foot are very difficult to determine and vary widely based on the source. The purpose of the analysis is to suggest areas in which Groton might want to attract more consumer spending. This might be via recruiting new businesses or encouraging expansion of existing businesses. Based on business sales and consumer expenditures, Groton could capture enough demand to support a total of 12 stores, generating demand for almost 125,000 square feet of retail and restaurant space.

Table 13

Retail Opportunities in the Groton Retail Market Area

Retail Stores	Market Area Gap	Supportable SF	Potentially Captured SF	Potentially Supportable Stores
Floor covering stores (NAICS 44221)	\$ 9,233,841	19,785	4,100	1
Electronics stores (NAICS 443142)	\$ 3,920,615	6,848	2,800	1
Nursery, garden center, and farm supply stores (NAICS 44422) \$ 7,723,956		26,520	10,000	1
Cosmetics, beauty supplies, and perfume stores (NAICS 44612) \$ 2,028,416		3,740	1,527	1
Other health and personal care stores (NAICS 44619)\$ 1,829,306		4,931	1,807	1
Shoe stores (NAICS 4482)	\$ 5,591,997	15,642	3,000	1
Jewelry stores (NAICS 44831)	\$ 7,711,009	8,354	2,400	2

Art dealers (NAICS 45392)	\$	4,633,916	15,498	4,600	2
Full-service restaurants (NAICS 722511)	\$	14,540,374	18,285	5,204	1
Limited-service restaurants (NAICS 722513)	\$	3,664,590	5,240	1,750	1
	\$	60,878,020	124,844	37,188	12

Source: EnvironicsAnalytics, Claritas Site Reports, 2023 estimates; FXM Associates

The desirability of more development in the business areas shown is something that the town would consider and would vary based on the locations available for development. Interviews with knowledgeable residents, local organizations, and officials suggest that increased retail activity would be welcome if it fits and enhances the existing character of the town. From the stores shown in the table, some of the more desirable sectors for development in the downtown area might be such retailers as art dealers, full-service restaurants, and shoe and jewelry stores. Other factors to be considered, however, would apply to successful stores anywhere – well maintained and attractive premises that fit with the town’s character, managed supply, competitive prices, good services, sufficient parking, and public transportation access – apply as well to realizing potential opportunities.

Rental Housing Demand

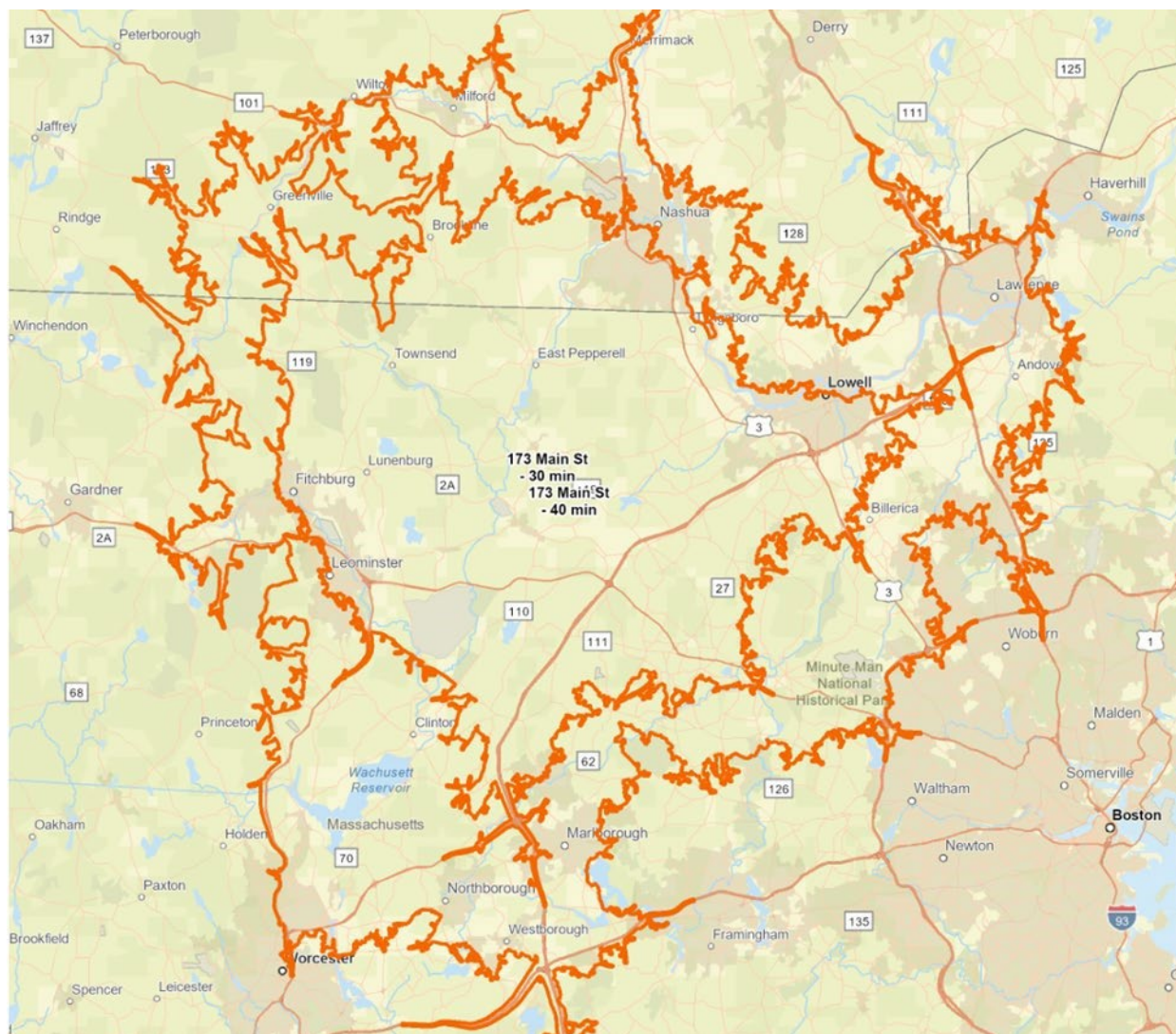
Rental housing can be an important element of economic development. It can attract private investment to suitable areas and can serve as an attraction for labor, a source of customers for local businesses, and a source of tax revenues for town finances. There are needs for both affordable and market rate housing and the attraction of private investment can accomplish that end. Fundamental to the development of both affordable and market rate housing is understanding the financial capacity of households within the larger market area.

FXM’s Housing Demand Model is designed to capture rental demand by householder age, a key characteristic of demand, and ability to pay. It uses those data, plus data on mobility and new growth projections within a designated market area to estimate the types of households that might be attracted to the area, along with their estimated ability to pay, based on affordability norms. The model projects over the next five years the average annual demand for rental housing by age, income group, and affordable rental rates.

The model enables planners and developers to target types of rental units, in terms of cost and size and amenities, to various age groups of potential renters. For example, households within the under 35 and 55 to 74 age groups are frequently targeted by developers for urban and specialty rental housing, such as re-use of formerly commercial and institutional structures, because they are less likely to have school age children and therefore more open to units with fewer bedrooms in locations that are not necessarily ideal environments for children. They are also likely to be attracted to environments that allow walking to restaurants and retail shops. Households in other age groups, however, also comprise demand for housing within the market area, and this section also assesses overall potential demand for all age groups.

The market area is shown in Figure 34. The map shows both a 30-minute drive time area and a 40-minute drive time area. The 40-minute drive time area was selected as the best definition of the market area for housing in Groton, consistent with Groton’s average commute time of 39 minutes and the average commute time for Groton and surrounding towns of 38 minutes.

Figure 34



FXM used its *Housing Demand Model* to estimate demand for rental housing within this 40-minute drive time of the center of Groton. For the geographic area, FXM obtained proprietary 2023 data from Claritas, Spotlight Reports, estimating the number of households by age of householder and income ranges in 2023 and projected to 2028.

The table below shows the context for demand within this market area.

Table 14

Housing Demand Context

Groton 40-Minute Market Area	
2023 Population	1,121,787
Households	420,282
Renter Households	143,963
% Renters	34.3%
Renters Moving in Average Year	12,812
% of All Households	3.0%
<u>Median Household Income</u>	<u>\$100,614</u>

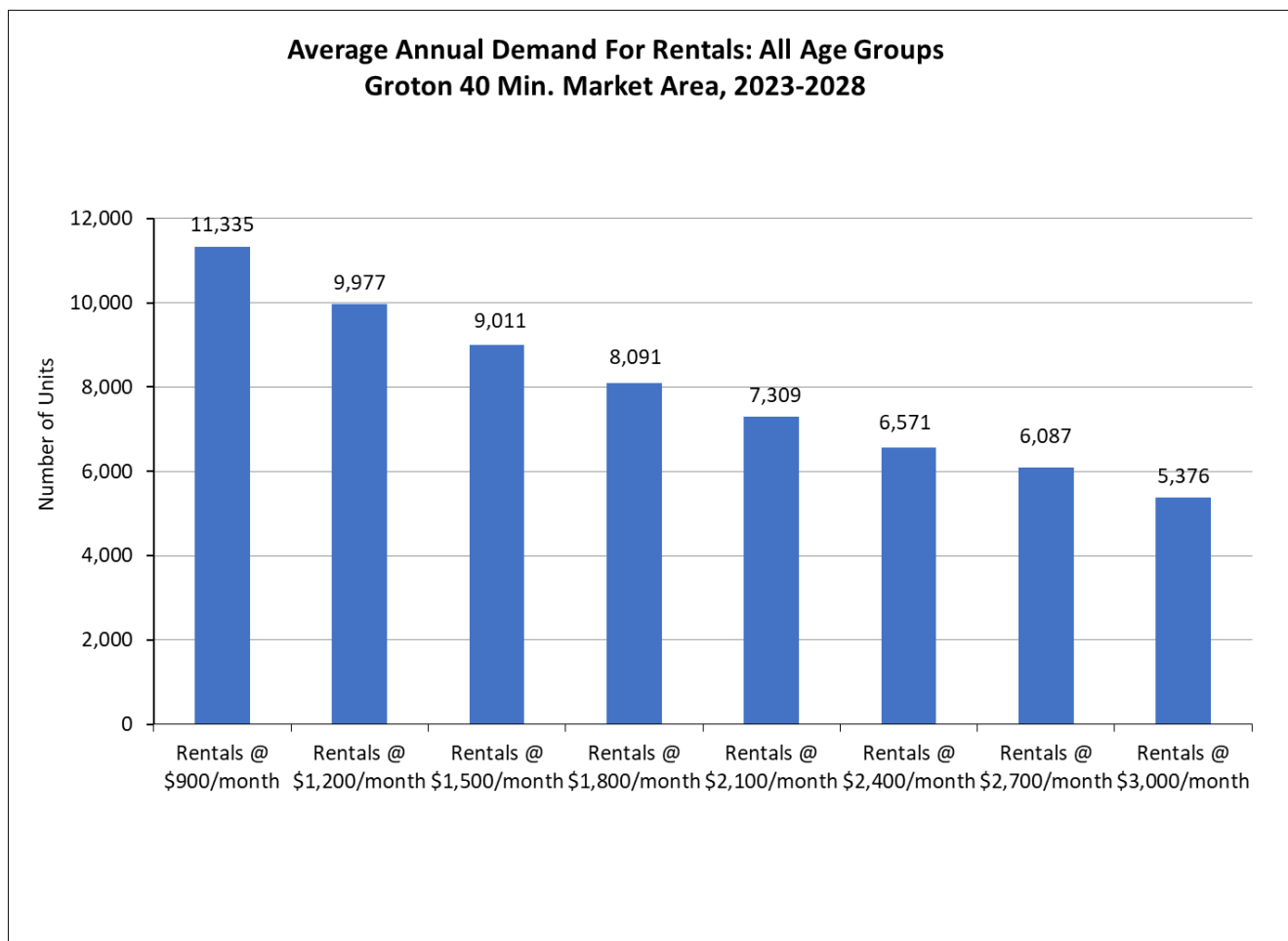
Source: Claritas Inc., Spotlight Reports, Demographic Snapshot, 2023 Estimates, and FXM Associates

Model results are shown in the figures below. The source for all data used in the model and figures is Claritas, Inc., 2023.

Following the figures and model narrative, the results are compared to rents for units currently listed on Zillow.com in Groton and surrounding towns. This sample indicates what rents the market is offering for various sizes and types of units in newer, high-quality developments and serves as a further dimension to the affordability estimates produced by the model.

Figure 35 shows the average annual demand for all rentals by all age groups in the Groton Market Area, taking into consideration affordability, propensity to move in any given year, and propensity to rent. Note that the numbers are cumulative, not additive.

Figure 35



For example, according to the above figure, of the total number of households 11,335, expected to move to rental housing each year within the 40-minute market area and able to afford at least \$900 per month rent, approximately 8,091 would be able to afford monthly rents of up to \$1,800.

As shown in Table 15 below, based on Groton's current *share of rental housing in the market area*, an estimated 23 households able to afford up to \$1,800 a month rent might be absorbed by additional rental development in a competitive rental property in this location each year. The table also shows the numbers of households at each rental point that might be absorbed based on Groton's *share of rental housing in the market area*. Table 15 presents these estimates for each of the rental points shown in the Figure 31. (Again, the figures in the demand columns are **not** additive. They are cumulative, with the "Rentals @ \$900" figure representing total estimated average annual demand in both Figure 31 and Table 15. Some number of these units, in the lower price points, could add to the Town's affordable housing stock.

Table 15

Groton's Average Annual Demand for Rental Units

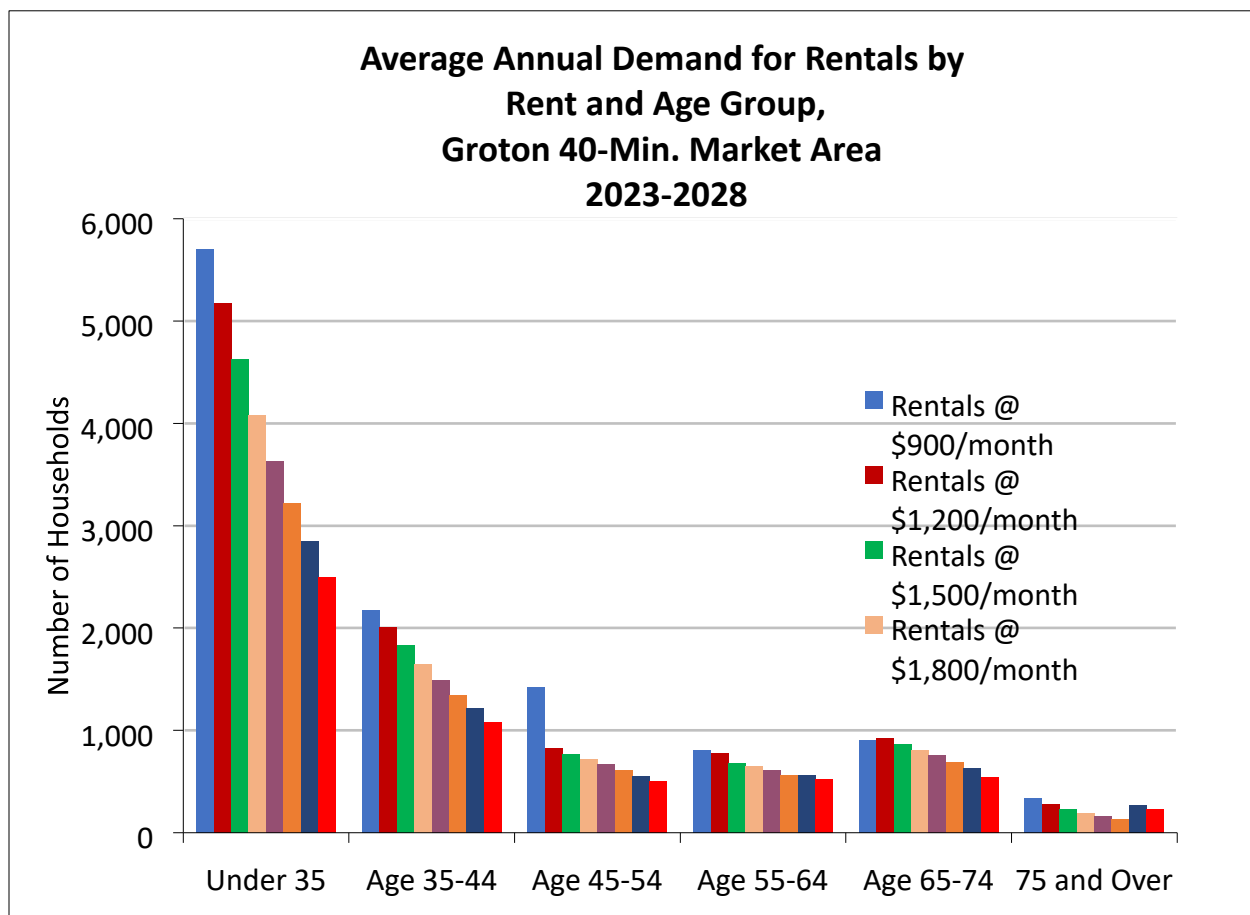
	Total Average Annual Demand in 40 min Market Area	Groton Share of Total Average Demand @ capture rate in market area (0.3%)
Rentals @ \$900	11,335	33
Rentals @ \$1,200	9,977	29
Rentals @ \$1,500	9,011	26
Rentals @ \$1,800	8,091	23
Rentals @ \$2,100	7,309	21
Rentals @ \$2,400	6,571	19
Rentals @ \$2,700	6,087	18
<u>Rentals @ \$3,000</u>	<u>5,376</u>	<u>16</u>

Source: Claritas Spotlight Reports, 2023, and FXM Associates

The actual number of units that might be captured at these rental prices in a rehabilitation or new construction project in Groton will depend on the quality and size of the units, site and building amenities, pricing, marketing, and other factors.

The information in Figure 36 can be further broken down into age groups, since rental housing developments often seek to attract households such as retirees and young singles. Figure 32 presents demand data for all age groups.

Figure 36



The graph reflects the greater propensity of younger households to rent and the frequency of their moving compared to older households, as well as the sensitivity of levels of demand to varying rental prices. Note that, the largest demand for units at all price levels comes from householders younger than age 35.

Figure 37 offers the same kind of analysis, but for rents in the upper ranges only.

Figure 37

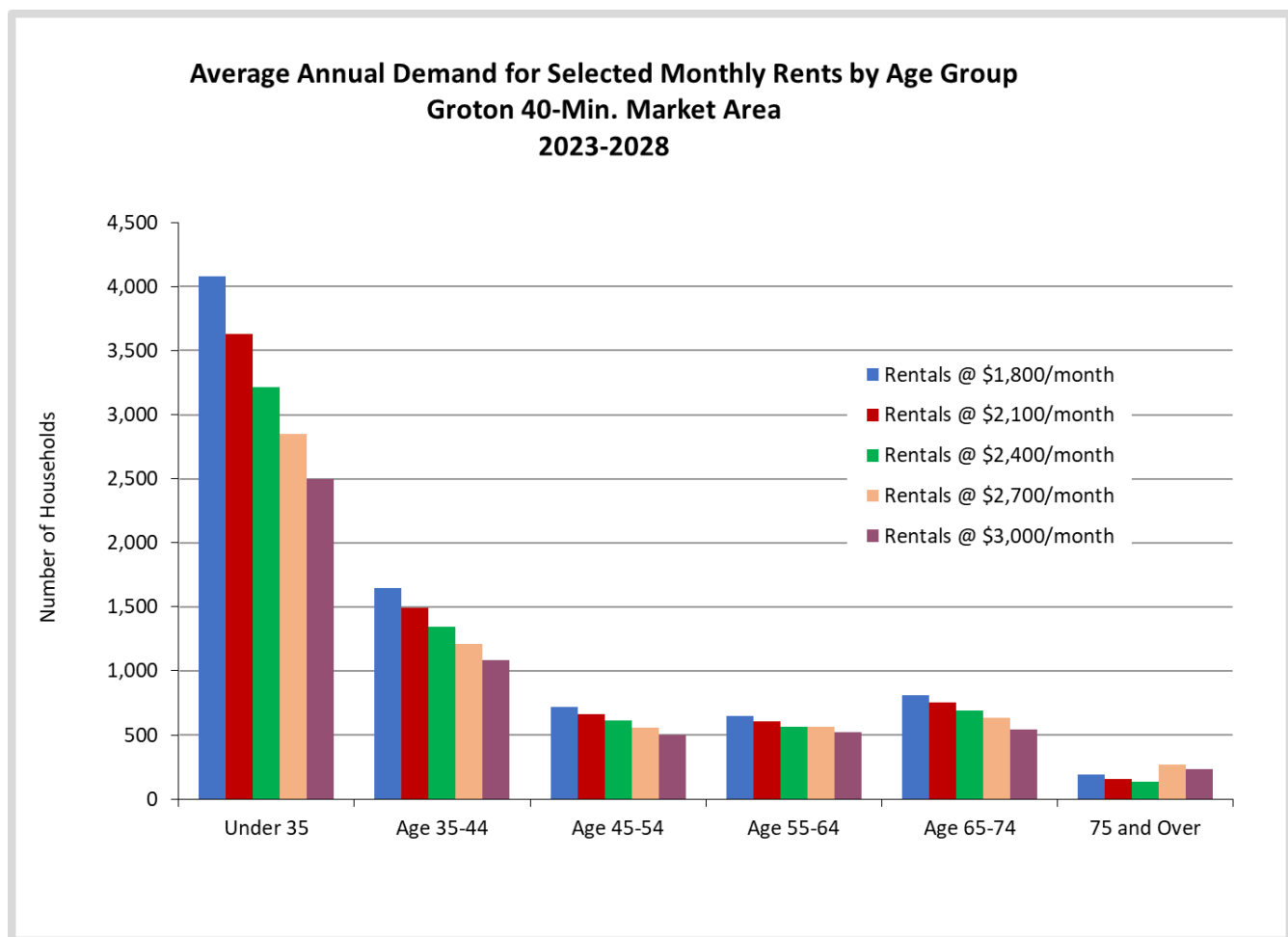
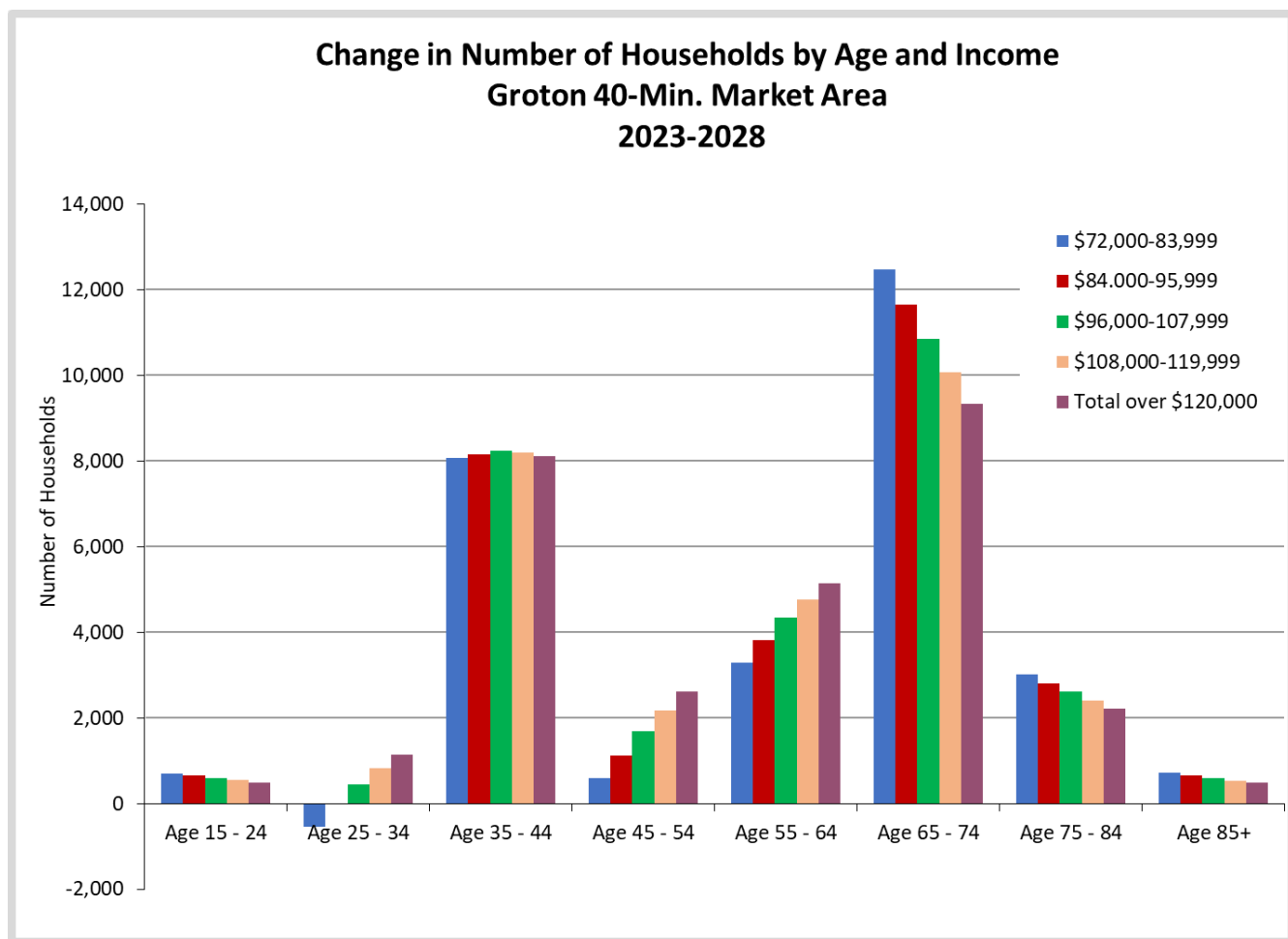


Figure 38 shows another dimension to the estimation of future rental demand: the changes projected over the next five years in numbers of households by age and income. The incomes chosen are in the upper ranges, since these households are more likely to have the means to pay the higher affordable rents necessary to support market rate rehabilitated or newly constructed housing.

Figure 38



Particularly striking is the projection of changes in upper income age cohorts in the market area over the next five years: the greatest gains across all five upper income categories are estimated to be in the age 65 to 74 cohort, compared to much smaller increases in the 45 to 54 and 55 to 64 age cohorts, the latter containing the youngest of the baby boomers (those born between 1946 and 1964). Also notable is that these mid-life age groups, who should be in their peak earning years, are unable to afford the higher rents that the younger age 35 to 54 cohort can afford, a plus for marketing to the younger age group over the next five years, but a concerning outlook for those households in midlife. In the 25 to 35 group, affordability is an even greater issue.

Also noteworthy is the indication that households in the income category over \$120,000 – who could afford rents up to \$3,000 per month —, are robust in the age 65-74 boomer cohort, only dropping off after age 75. The baby boom generation households have shown an increasing propensity to rent in recent years as they become empty nesters and sell their single-family homes for smaller, more manageable units. Others want to cash in on the equity of their former

dwellings because they need liquid income in the absence of the pensions enjoyed by prior generations of retirees. Many also continue to work part time.

Some developers in recent years have targeted rental units, especially within denser areas, to households under age 35 and age 55 to 74, who often mix well within the same developments. There are fewer school age children within both age categories than in those aged 35 to 54. Both groups show a higher propensity to live within walking distance of retail stores, restaurants, and transit if possible. Households under age 35 are more mobile on average and more likely to rent, but they are a very small group in Groton, and will be so over the next five years. Market rate housing targeted at seniors could be an appropriate investment in Groton.

The model projects demand for market rate rental housing. Groton's housing stock is predominantly single-family detached, and owner-occupied. Current zoning for such housing requires two-acre lots. Yet there is a capacity for the Groton market to absorb some rental units: if the focus is only on the households able to pay rents from \$1,800 to \$3,000, 23 households a year from the 40-minute market area could be absorbed by new or rehabilitated rental housing if it were available. Rents at these levels would be sufficient to attract developers of market rate units.

Interviews with residents and local officials have made it clear that Groton is not seeking largescale developments. Currently, Groton has only 212 units in two- to four-unit structures, representing 5% of its total housing stock. Twenty-three units a year would represent a substantial increase in the number of such units. They could be rentals over retail or other commercial uses; they could be units created in the rehabilitation of large older homes; they could be accessory dwellings, such as in-law apartments. They could also be small new rental developments. This potential can only be realized by changes in zoning and sewage disposal requirements that will not be easy to make. Fulfilling that potential also needs property owners and developers who see the market potential in small-scale rental development, whether stand-alone or in existing housing. Attracting such development would require active promotion of the opportunities by the Town and local housing and real estate organizations.

Local Capacity, Policies, and Regulations

The 2011 Master Plan identified the following impediments to development:

- lack of land zoned for commercial development.
- Lack of Town support for businesses and competition from other towns
- Fair and efficient permitting process
- Limited water and sewer infrastructure
- High rents
- Cost of housing

By and large, these impediments remain. According to local businesspeople and officials, there is a need for more land zoned for commercial development. This is important to the town's tax base sustainability. Likewise, the town government's reputation for not being supportive of its businesses does not encourage new or expanded businesses. The one area in which Groton is clearly competitive with surrounding towns, however, is fiscal: as shown in the above analyses, Groton's tax policies, both residential and commercial, situate it well within the competitive range of other towns.

In 2016, the Town issued a *Guide to Permitting*, for "homeowners, property and business owners, developers, brokers, and contractors who want to develop land within the Town of Groton." The intent was to streamline procedures and make it easy to work through the process. It includes a convenient matrix with the vertical axis listing all 37 in the universe of permits, with number keys indicating the order in which they are to be obtained, as appropriate to the project. The horizontal axis shows the Town entity responsible for each.

The guidance itself does not apply to approvals needed under the Wetlands Protection Act, zoning approvals, or building permits, all of which have separate procedures. Only after all the permitting approvals in the guidance have been obtained from the appropriate regulatory authorities, including any state and federal approvals, can the applicant apply for a building permit. This, and subsequent permits, are shown in the matrix, accompanied by contact information for each Town department needed.

The Building Department's process for permits is entirely online. The website says that they are still in the process of implementing the application process, but there are links to the various permits and licenses needed for the building permit. When fully implemented, the online application process should be easier for both residents and businesses.

[The last three impediments are covered in other sections of this Master Plan.]

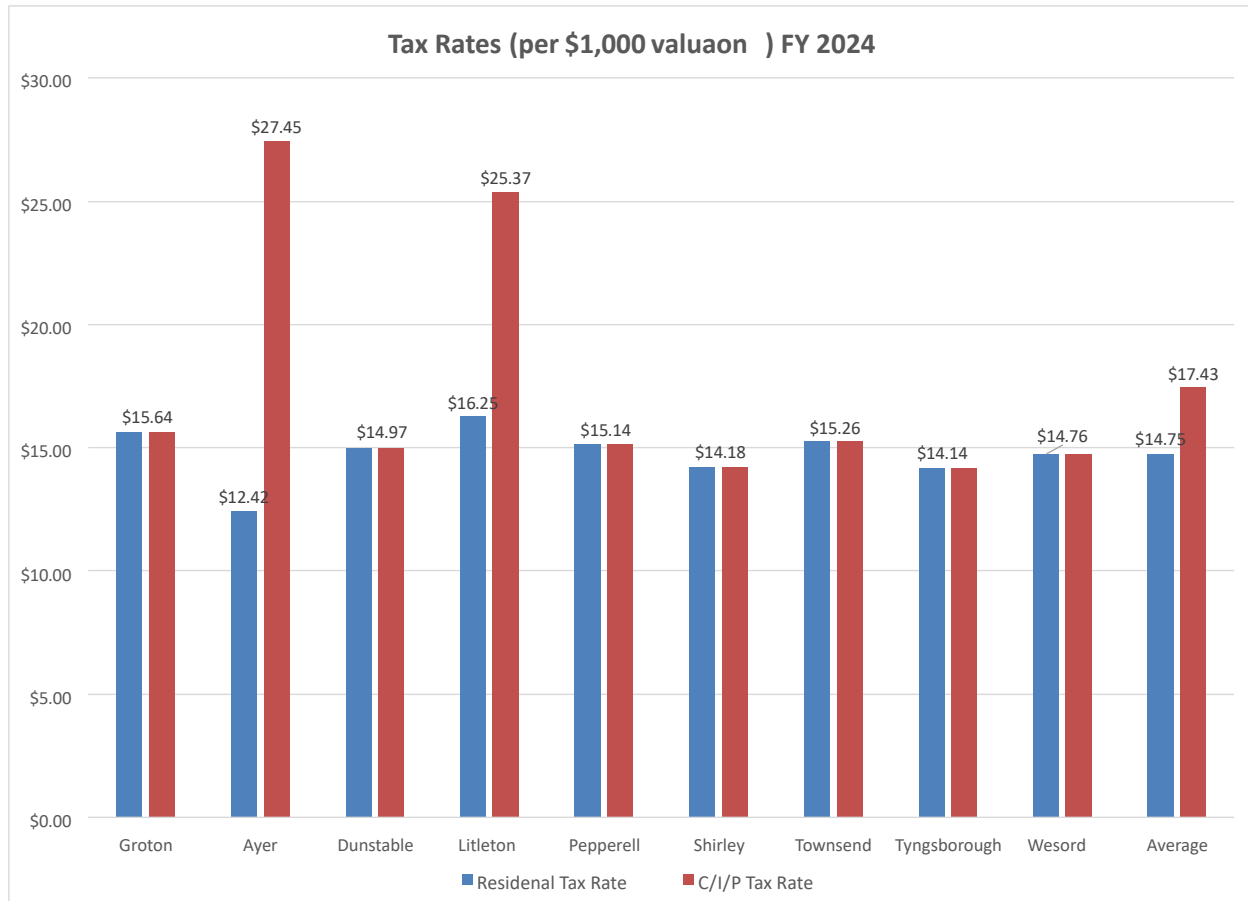
Fiscal Policies

A very powerful way in which the town can affect economic development is in its fiscal policies. This section presents an analysis of where Groton stands in terms of its existing tax policy compared to that of surrounding communities. Tax rates and tax policies are competitive factors for both business and resident location decisions. They also are key to understanding the financial base of the community.

Tax Rates

As shown in the figure below, Groton's 2023 commercial/industrial and residential tax rates are very much in line with those of all surrounding communities except for Ayer and Litleton, whose commercial rates are much higher. Groton's rate is slightly below average for C/I/P.

Figure 39



Source: Mass. Department of Revenue, Division of Local Services, *Community Comparison Reports*, 2023, and FXM Associates.

Residential and Commercial Property as a Percent of Total Assessed Valuaon and Tax Levy

The following Figure illustrates that residential properes contribute the largest poron of the overall assessed value in Groton and all the other towns. Groton, with 94% dedicated to residential properes, shares the highest level with Dunstable and Pepperell. In contrast, Groton has one of the smallest proporons of commercial property valuaon. Ayer and Litleton, on the other hand, rely more heavily on commercial properes for their tax base and have the lowest percentage allocated to residential properes. These two communities also have the highest commercial tax rates, as shown in the preceding figure.

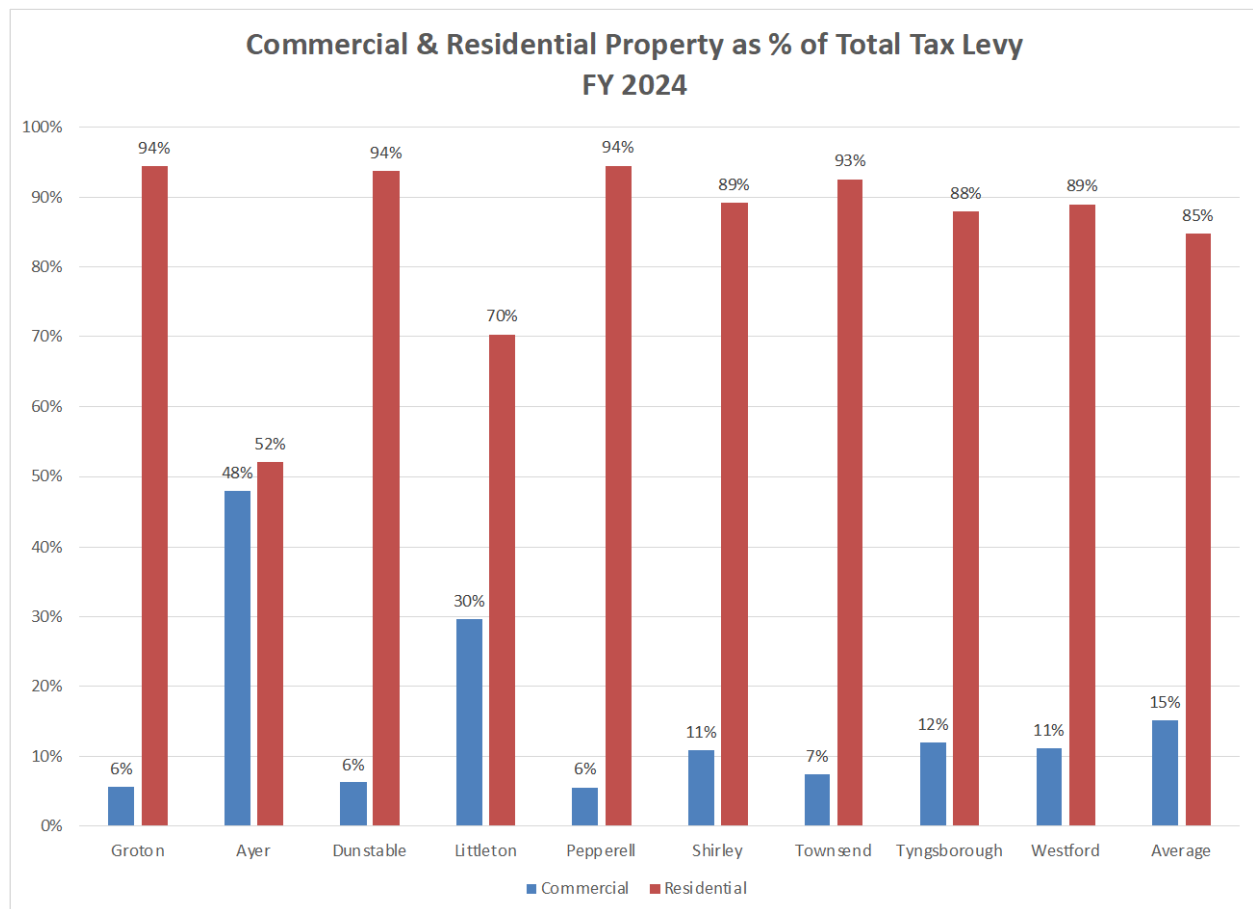
Figure 40



Source: Mass. Department of Revenue, Division of Local Services, *Community Comparison Reports*, 2023, and FXM Associates.

The share of total tax levies that comes from commercial and residential properties is shown in the figure below. The proportions are almost identical in Groton and all towns except Ayer and Litleton, where their larger share of commercial property translates into larger shares of the total tax levy than of the total valuation. Almost half of Ayer's tax levy comes from commercial properties and almost a third in Litleton, again reflecting in part their higher commercial tax rates. This contrasts with Groton's 6% commercial share of the tax levy.

Figure 41

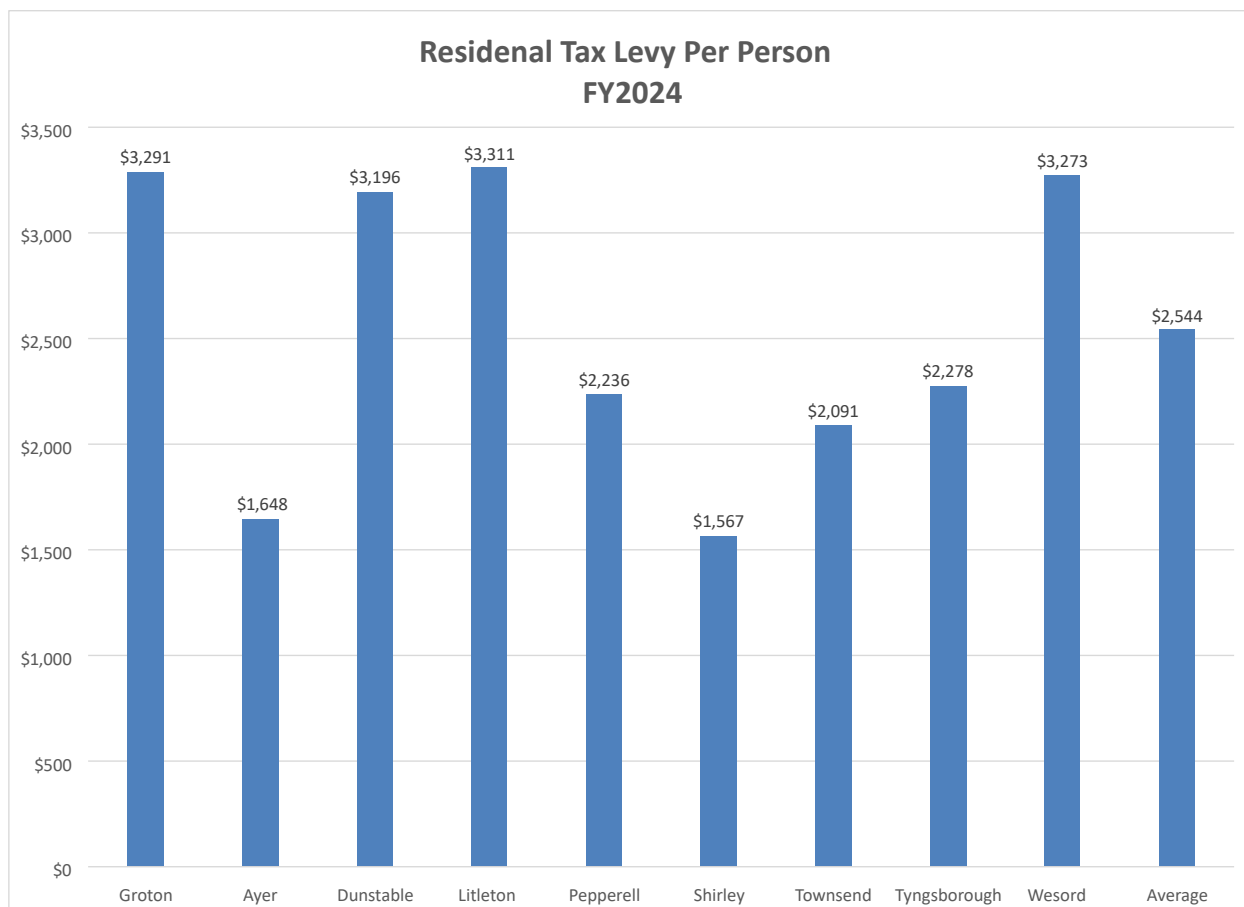


Source: Mass. Department of Revenue, Division of Local Services, *Community Comparison Reports*, 2023, and FXM Associates.

Per Person Revenues

Groton has one of the highest levies per person compared to the surrounding towns. Only Littleton is higher.

Figure 42

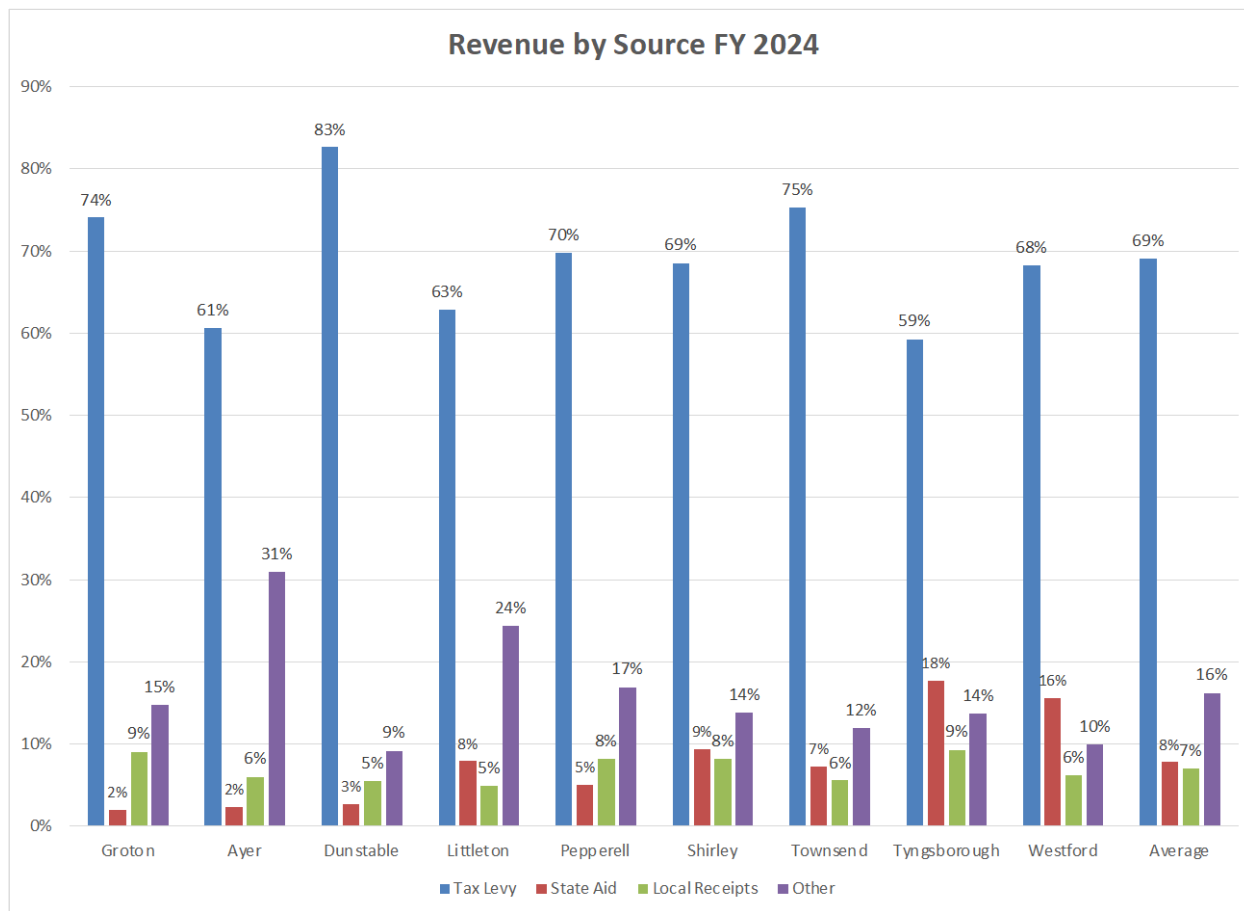


Source: Mass. Department of Revenue, Division of Local Services, *Community Comparison Reports, 2023*, and FXM Associates.

Revenue by Source

This graph shows the sources of local budget funds. Groton is more reliant than average on the tax levy, with only Dunstable and Townsend higher. Its state aid is among the lowest of the communities, and local receipts at 2% is the lowest proportion of all the towns.

Figure 43



Source: Mass. Department of Revenue, Division of Local Services, *Community Comparison Reports*, 2023, and FXM Associates.

Average Single-Family Tax Bills

The following two graphs show average single-family tax bills across Groton and the surrounding communities and then the average single-family tax bill as a proportion of valuation. The patterns vary in magnitude but not in form. Groton has the highest single-family tax bill of all surrounding towns except Westford, but none of the towns have kept pace with property value increases.

Figure 44

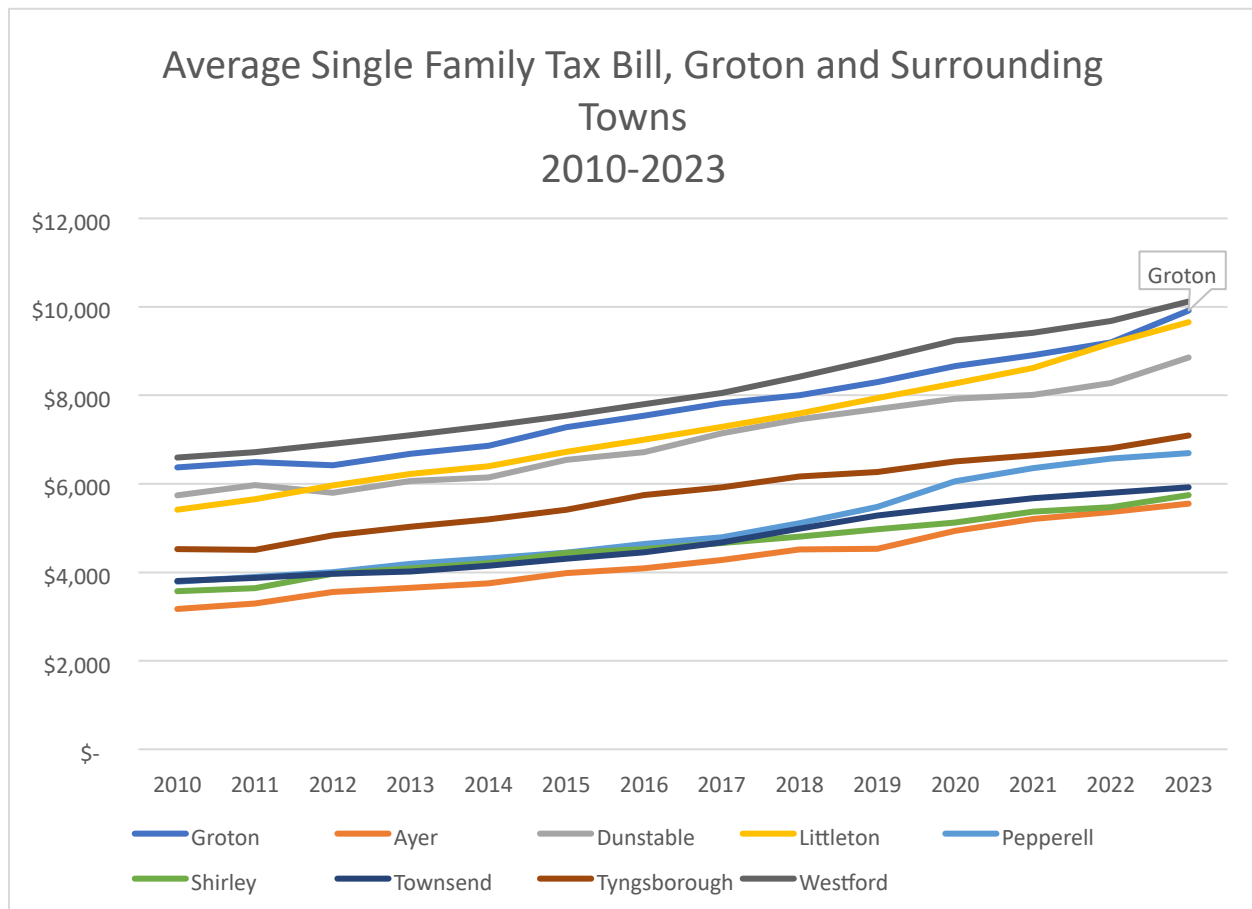
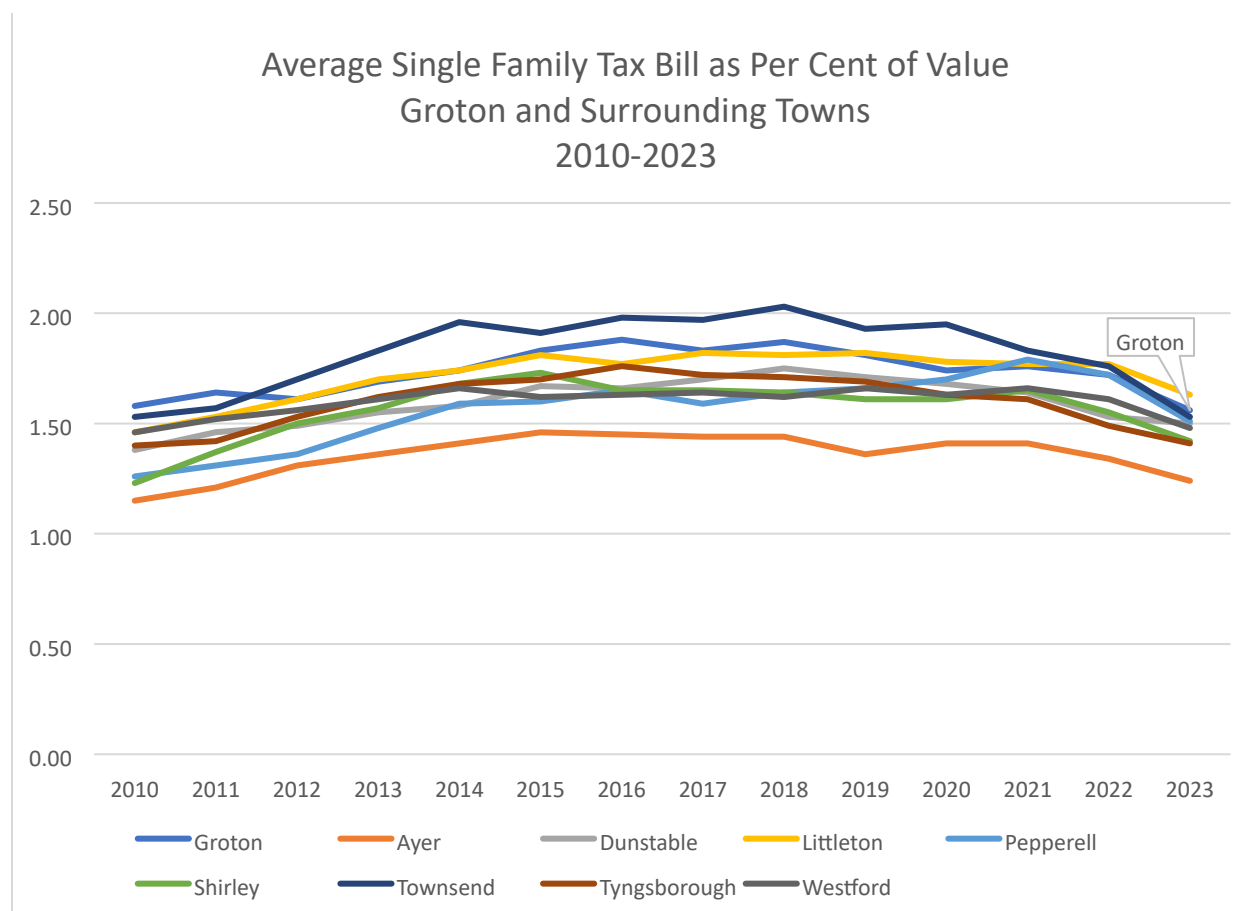
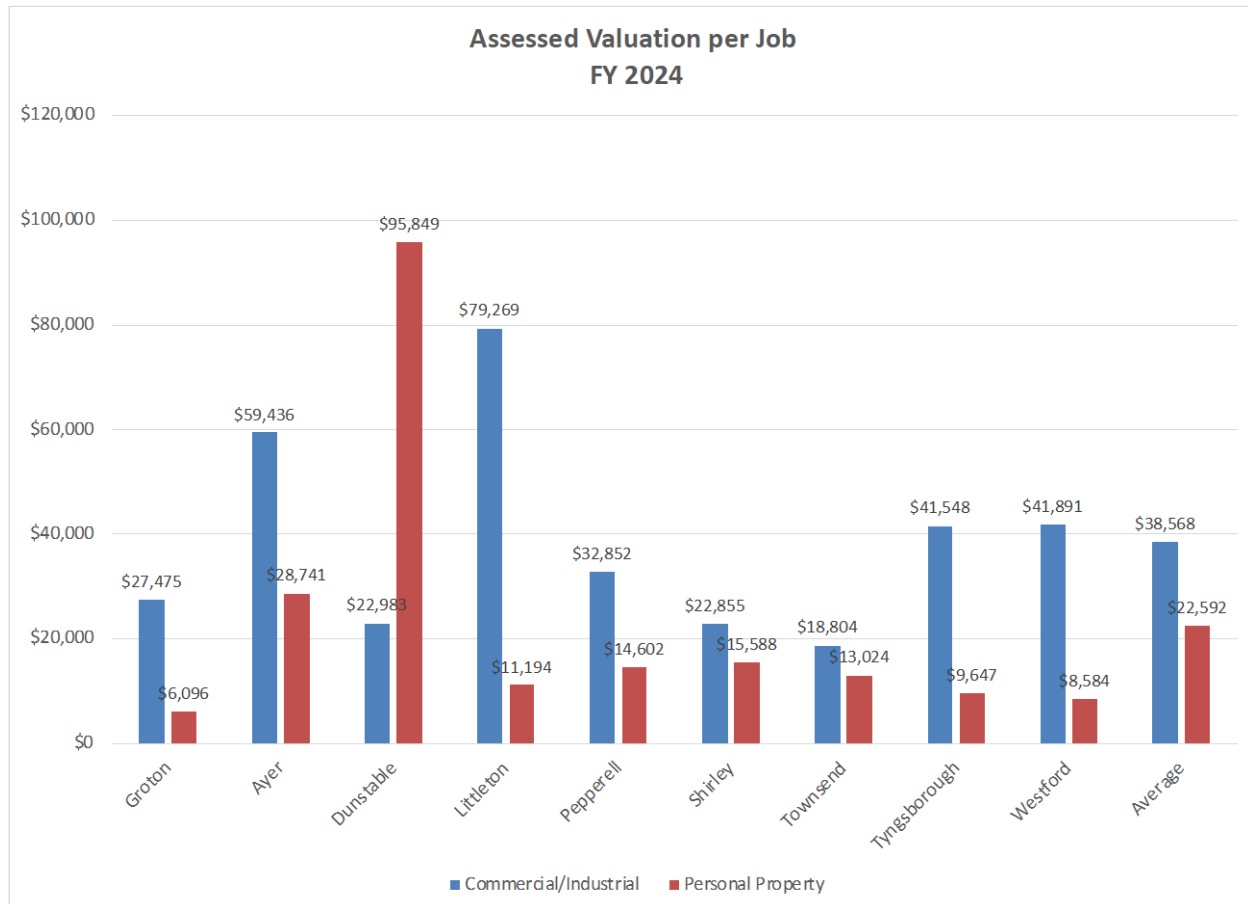


Figure 45



Per Job Revenues

An alternative perspective on commercial revenues is to assess them on a per-job basis: determining the amount of commercial tax levy and assessed value generated for each job within each community. The following figure shows how the towns compare regarding assessed commercial values per job. Ayer and Littleton have the highest Commercial/Industrial values per job, while Dunstable stands out for its extremely high personal property valuation per job. Groton's relative values per job are low. Figure 46

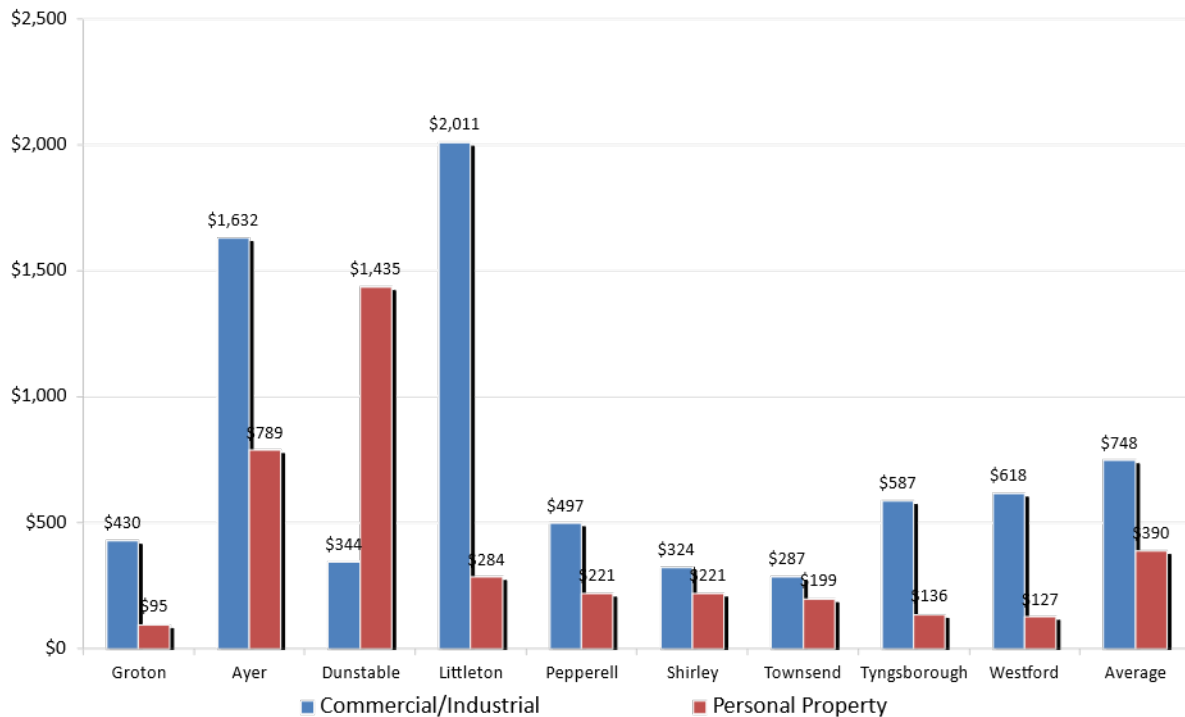


Source: Mass. Department of Revenue, Division of Local Services, *Community Comparison Reports*, 2023, and FXM Associates.

From a tax standpoint, Ayer, Dunstable, and Littleton once again stand out as the most expensive business locations. Groton is one of the least expensive business locations from a tax standpoint. Its commercial tax rates, as shown in Figure 35 above, are also relatively low.

Figure 47

**Tax Levy Per Job
FY 2024**



Source: Mass. Department of Revenue, Division of Local Services, *Community Comparison Reports*, 2023, and FXM Associates.

Non-Profit Instuons

Groton Hill Music Center

The new Groton Hill Music Center, funded by an anonymous donor at a cost estimated to be between \$50 and \$100 million, opened in 2022. Its 126,000-square foot facility includes a 1,000-seat concert hall plus a 300-seat hall with views of the surrounding countryside; 35 rehearsal and teaching spaces, classrooms for students, lobby, dining room, and concessions situated on 110 acres. The center was designed by architects Alan Joslin and Deborah Epstein, who designed the Seiji Ozawa Hall at Tanglewood. The acoustic quality has been noted “exceptional” and “remarkable” and is a major feature of the complex, which has already garnered considerable publicity. The purpose of this analysis is to estimate the potential contribution of the Groton Hill Music Center to the town’s economic development.⁶ The impact of the Center as it develops will go beyond the financial aspects and into the cultural character of Groton as well as its surroundings.

⁶ The estimates of visitors and of Music Center expenditures and contributions to the municipal government were provide by CEO Lisa Fiorentino.

Because the Center opened so recently, any estimates of its current economic impact can only be indicative. Attendance numbers, in particular, are indicative only of the current situation. At full operation, the numbers would be higher. For the upcoming season, an estimated 44,000 ticket holders are expected to attend events at the Center. Beyond ticket sales, the Center derives revenues from student tuition and food and beverage sales.

To gauge the potential economic impact of 44,000 visitors on local businesses, visitor per capita spending for food, retail shopping, services, and transportation is estimated at \$87.⁷ Multiplying the per cap spending by the expected number of visitors yields a potential impact of nearly \$4 million on town businesses from the expenditures of attendees to concerts.

To date, the Center has contributed \$48,000 to the Town. The Town also receives a \$2 fee for each ticket sold. The majority of ticket types are subject to this fee. Expenditures for services and supplies are currently estimated at \$2 million, much of which would likely be spent in Groton. The estimated \$4.4 million in annual salaries and wages could generate \$2.2 million in purchase of goods and services locally by employees.

The two private educational institutions described below have offered much more than economic benefits to the Town of Groton. The schools also contribute to the prestige and character of the town, offering events which attract local residents as well as tourists. The numbers in the descriptions are therefore only a part of their contributions but are those most relevant to economic development.⁸

The Groton School

The Groton School is a private school founded in 1884 by Endicott Peabody, was originally a boys-only school, becoming coed in 1975.

Currently it has 380 students, 12 of whom live in Groton, and 186 employees, 94 of whom live in Groton. the school makes important contributions to the Town and its economy. With average annual wages of about \$76,000, total payments to the 94 employees who live in Groton total \$7.2 million, of which about \$3.6 million would likely be for local goods and services. Expenditures for municipal services total almost \$1 million, in addition to which the school makes regular voluntary contributions to the town and additional payments on request. Spending at local businesses for transportation and for parent and alumni events totals an estimated \$55,000 annually. Visitors spend money on Groton lodgings, restaurants, shops, and galleries. Student spending is mostly at local eang places and shops.

The Groton School has its own sewage treatment plant, as well as considerable infrastructure. It uses local contractors, plumbers, electricians, etc., as well as legal services. Spending on these has totaled as much as \$14 million.

The school also leases extensive acreage to local farmers for nominal rents and hires those farmers for maintenance of field areas.

⁷ Stephen Sheppard, *The Economic Impact of the Boston Symphony Orchestra*, Williams College, 2017.

⁸ Information on the schools' economic contribution to Groton was provided by their legal counsel, Robert L. Collins

Lawrence Academy

Founded in 1793 by Samuel Lawrence, as an independent, coeducational academy, the school became a boys-only prep school in 1900. In 1971 Lawrence Academy once again admitted girls. The current enrollment is 414 students, 40 of whom are from Groton, and 143 employees, 60 of whom live in Groton. At average annual wages of \$76,000, about \$4.4 million total, local expenditures would likely be about \$2.2 million per year. The school pays almost \$650,000 for municipal utilities. Like The Groton School, Lawrence Academy makes regular voluntary contributions to the town and *ad hoc* support as needed. Spending on local transportation totals approximately \$220,000 annually. Parents and alumni events at local restaurants are estimated at \$25,000 a year. They also spend at shops and galleries, as do students.

The school relies on local suppliers for building maintenance and on local legal services. The amounts expended vary but can range from \$1 million to \$20 million.

Recent Developments

Within the business environment analyzed in this section of the Master Plan, Groton has seen some new developments, described below. All except Four Corners seem to fit within the community's concept of development that will serve residents and attract visitors while maintaining or enhancing the town's rural character. Four Corners is the subject of considerable discussion among residents and officials.

Four Corners

Located at the intersection of Routes 119 and 225, three corners have seen recent development: medical offices, retail establishments, and office space. The remaining corner is considered vacant land (the house on it formerly housed three tenants). It is zoned residential. It is not sewered. It is owned by a developer who has proposed various commercial activities, among them a pickleball court and a big box store, neither of which received town approval for the zoning changes needed. A proposed small scale 40B project for the corner is still possible. Residents interviewed said that there is a need for better planning for the types of things the community wants there. A large apartment project is not among them. One constraint to residential development is the corner's location at the intersection of two highways coupled with its lack of sidewalks. Safe pedestrian and bicycle access is a major issue here, as in other areas of town.

The Prescott School Community Center

Friends of Prescott School (501(c) 3 corporation) submitted a business plan in 2019. The Center relies on donations, subleasing parts of the building, and rentals for events. According to one source, a private developer offered to buy the structure and bring it to code but Town Meeting failed to approve the sale.

Housing Developments

Groton Farms - Located at 500 Main Street, the 40B project provides 200 rental units, 25% of which are affordable. These units bring the town closer to the state's 10% affordable housing goal.

Heritage Landing – This new development at Cow Pond Brook Road contains 28 single family homes and six duplexes. Thirty units were proposed for pricing at market value and 10% at 80% Area Median Income (AMI). All units would be owner-occupied.

Groton Inn

In 2011, the Groton Inn, then considered to be the oldest continuously operating inn in the United States, burned down. It was rebuilt in 2018 and houses the Forge and Vine restaurant as well as a 60room Inn. A Boston Globe article at the time states:

According to Groton Inn general manager Warren Francis, they get corporate business from the I-495 belt, along with parents and visiting scholarly types from prep schools Lawrence Academy (next door) and nearby Groton School. For those considering a country getaway, Groton offers farm stands galore, plus Gibbet Hill, laced with foot trails, Rocky Hill Wildlife Sanctuary, and Nashoba Valley Ski Area, just a few miles away.