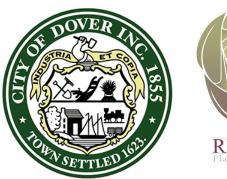
# **Existing Conditions Summary**

# 2025 Land Use Chapter

Dover, New Hampshire



# May 13, 2025





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## Introduction

The Existing Conditions Summary was created to provide a baseline understanding of data, trends, needs, and opportunities on a variety of topics that influence land use. This document will serve as a resource to directly inform the Land Use Chapter and will serve as a basis to explore future land use scenarios and possibilities.

## **Existing Land Use**

Successful land use planning reveals its impact over time, and Dover is now seeing the results of decades of thoughtful effort. These planning efforts have shaped a vibrant, historic downtown; a mixed-use core that serves residents and visitors; protected rural areas; and distinct neighborhoods. Infill development has preserved community character, while open space and recreation areas connect rural and urban parts of the city. As a regional leader in planning, Dover continues to guide growth with recent work, like the Conservation and Open Space Chapter. The upcoming Land Use Chapter will build on this legacy, aiming to balance natural resource protection with the city's ongoing growth needs by first understanding existing land use patterns.

## **Existing Land Use**

With the help of the Land Use Chapter Committee, the existing land use classifications in this section were created from the nearly 100 unique land use codes in the City of Dover's Assessing data. The codes were aggregated to determine the 13 existing land use classifications seen in Table 1. The simplified Assessing data was then linked to the nearly 9,000 individual parcels in Dover, such that each parcel in Dover is associated to one land use classification, which is seen in Map 1, while Map 2 includes conserved lands with land use.

Residential uses account for more than half of Dover's existing land use. Single-family residential properties account for most of Dover's land area with an average size of each lot being 1.2 acres. While multi-family residential properties are found throughout the City, they are mostly congregated within 1 mile of the downtown area (as measured from the Cochecho Mill Courtyard).

Table 1: Dover Existing Land Use Source: City Assessing and GIS data									
Existing Land Use	Acres	Percent of Dover's land area	Acres conserved	Percent conserved					
Commercial	1,429	9%	113	8%					
Exempt: Education	196	1%	32	16%					
Exempt: Government (county, state, federal)	1,027	7%	845	82%					
Exempt: Municipal	1,209	8%	845	70%					
Exempt: Other	1,189	8%	511	43%					
Exempt: Religious	104	1%	-	-					
Industrial	814	5%	32	4%					
Mixed Use	64	0%	-	-					
Residential: Multi-family	621	4%	83	13%					
Residential: Single-family	7,405	48%	868	12%					
Unknown	40	0.3%	-	-					
Utility	52	0.3%	-	-					
Vacant	1,391	9%	430	31%					
Total	15,541		3,759	24%					

Although commercial uses only account for 9% of the City's land area – with an additional 5% of industrial use – they are dense, highly productive, and represent the primary economic drivers in Dover.

There is also a significant amount of tax-exempt land (combined 24% of land uses in Dover), much of which is owned by the City of Dover or other governmental agencies. Although not exclusively, much of the tax-exempt lands are permanently conserved, which speaks to Dover's continued efforts in protecting its natural resources. To that end, 60% of all tax-exempt lands in Dover are permanently conserved. Furthermore, 70% of municipally exempt lands and more than 80% of government exempt lands are permanently conserved, which, again, displays the importance the City of Dover places on natural resource protection and open space.

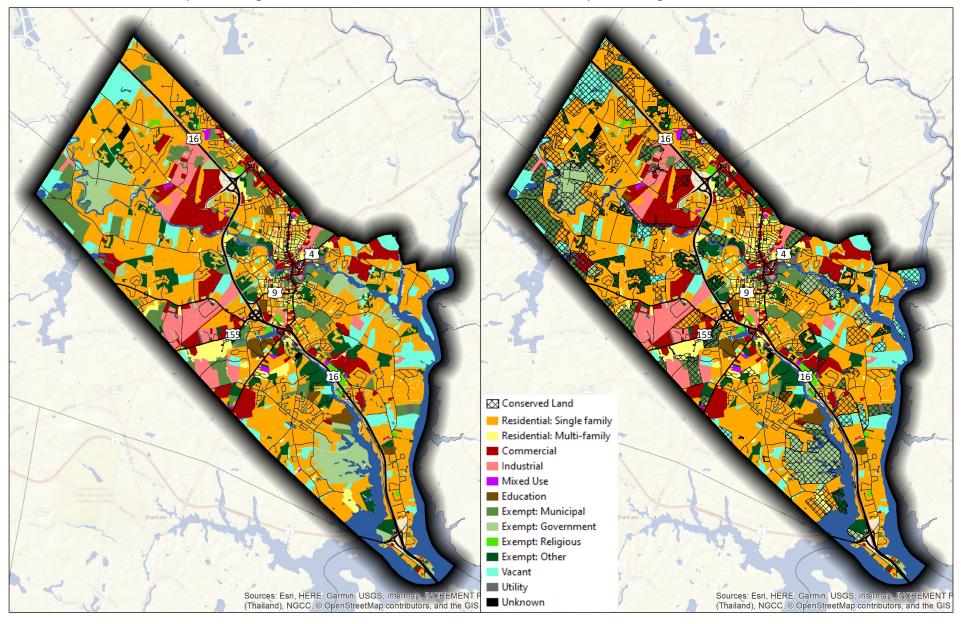
Vacant land accounts for 9% of Dover's land area and represents nearly 1,400 acres. Approximately 1/3<sup>rd</sup> of these lands (430 acres) are permanently conserved. Another 181 acres have some other type of development constraint as defined by the 2025 Conservation & Open Space Chapter of the Master Plan. This leaves 780 acres of vacant land unspoken for.

A note about recreation: it has been determined that recreation isn't sufficient to be a standalone land use classification. Although it was included as such in the 2015 Land Use Chapter, it is unclear how that classification was determined. Furthermore, recreation has many definitions and can include, but is not limited to, public playgrounds, municipal athletic fields, private golf courses, and individual properties with trails. Because of the varied definitions for recreation, the overlying land uses provide greater insight into how a particular property is actively being used. For example, a privately owned single-family residence that allows trail access is not a predominantly recreational use. Rather, that property would be single-family residential. Another example would be a private golf course, which would more broadly be considered a commercial use rather than recreational. Because of these recreational nuances, rather than having a recreation land use classification, recreation will be discussed as it relates to the various land uses.

According to the 2020 Culture & Recreation Chapter of the Master Plan recreation properties account for ~8% of Dover's land area totaling 1,470 acres. A more detailed breakdown of the specific recreation properties can be found in the 2020 Chapter, which further differentiates between recreation "sites" and recreation "areas".

Map 1: Existing Land Use

Map 2: Existing Land Use with Conserved Land



## **Zoning District Analysis**

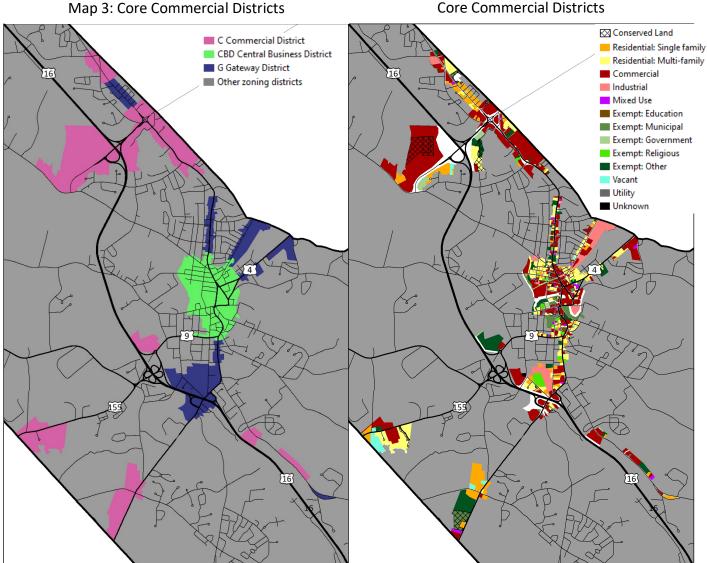
The City of Dover has 15 primary zoning districts and 9 overlay districts. Table 2 provides the details on the area covered by each zoning district. The Zoning Districts Map shows the distribution of these districts throughout Dover. Conducting a zoning and land use analysis

provides helpful insight into how each zoning district is actively being used. The following subsections discuss specific zoning districts in detail and provide their subsequent land use breakdown. This analysis is conducted on the parcels within each zoning district and, thus, removes road networks and waterbodies from the calculations. Because of this, the actively used land acres exclusive of roads and waterbodies – of each zoning district are also shown in Table 2.

	r Zoning Districts ssessing and GIS data				
Category	Zoning District	Total Acres	Percent of Dover	Land Acres	Percent of Land in Dover
s ai	C: Commercial	608	3%	484	3%
Corre Commercial Districts	CBD: Central Business District	235	1%	172	1%
Con	G: Gateway	281	2%	214	1%
s al	IT: Innovative Technology	1,457	8%	1,377	9%
Additional Commercial Districts	변 문 문 말 문 K CM: Commercial Manufacturing		4%	657	4%
Adi Con Di	CWD: Cochecho Waterfront District		1%	86	1%
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	R-40: Rural Residential		50%	8,205	53%
Low to Medium Density Residential Districts	R-12: Medium-Density Residential	2,552	14%	2,098	13%
- 20 80	R-20: Low-Density Residential	2,135	11%	1,266	8%
v ⊒ žit	RM-SU: Suburban Density Resident	576	3%	456	3%
Medium to High Density Residential Districts	RM-U: Urban Density Residential	379	2%	314	2%
Me High Res	HR: Heritage Residential	166	1%	137	1%
10	LBW: Little Bay Waterfront	89	0.5%	28	0.2%
Other	0: Office	17	0.1%	14	0.1%
ā	H: Hospital	37	0.2%	35	0.2%
	Total	18,593		15,543	

Because of the number and complexity of Dover's zoning districts, this analysis grouped districts into 5 broad categories – Core Commercial, Additional Commercial, Low to Medium Density Residential, Medium to High Density Residential, and Other Districts. These categories will be used to discuss districts with similar themes while allowing space to discuss districts individually.

## Core Commercial Districts: Commercial District, Central Business District, Gateway District



Map 4: Land Uses within the Core Commercial Districts

These three core commercial districts – Commercial, Central Business and Gateway – are the three economic drivers of Dover and are shown in Map 3. Although they represent a relatively small percentage – 6% – of Dover's total area, significant economic activity exists in these areas. Collectively, more than half of these districts are actively being used for commercial or industrial activities, which can be seen in Table 3. The Commercial District has the highest percentage of commercial/industrial activity, which accounts of 54% of the district. The Gateway District has nearly the same total combined percentage but has noticeably more industrial uses.

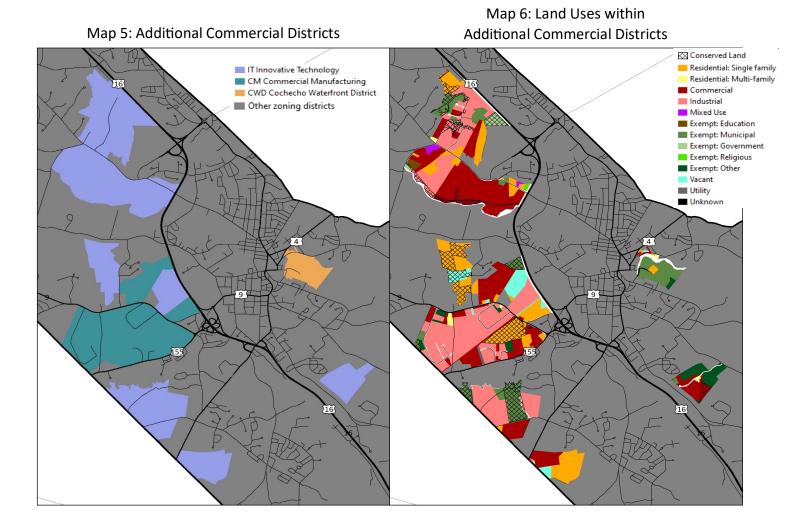
These districts also average more than ¼ of the area as residential uses. The Commercial District has nearly the same amount of single- and multi-family residential uses at 12% and 11% respectively. The Central Business District has 24% multi-family residential with another 5%

single-family, whereas the Gateway District has 18% multi-family residential and another 15% single-family. The relatively high percentage of residential uses in these districts shows the density of them. Equally, mixed with the high amounts of commercial/industrial uses in these districts, these downtown drivers are offering dense areas for economic and residential opportunities. Map 4 shows the land uses within these primary commercial districts. These districts

	C: Commercial District		Central	3D: Business trict	G: Gateway District		
Land Use	Acres	Percent of District	Acres	Percent of District	Acres	Percent of District	
Commercial	254	53%	63	37%	70	339	
Exempt: Education	-	-	1	1%	-	-	
Exempt: Govt (county, state, federal)	10	2%	4	2%	-	-	
Exempt: Municipal	18	4%	21	12%	1	09	
Exempt: Other	59	12%	14	8%	13	69	
Exempt: Religious	-	-	5	3%	10	59	
Industrial	4	1%	8	5%	43	209	
Mixed Use	4	1%	5	3%	3	19	
Residential: Multi-Family	55	11%	42	24%	39	189	
Residential: Single-Family	60	12%	8	5%	33	159	
Utility	-	-	1	1%	-	-	
Vacant	19	4%	-	-	1	09	
Unknown	-	-	-	-	-	-	
Total	483	100%	172	100%	213	1009	

contain about ¼ of the ~75 properties that support recreation in Dover. Although several of these properties are owned by the City of Dover, many of them are privately owned with different land uses.

## <u>Additional Commercial Districts</u>: Innovative Technology District, Central Manufacturing District, Cochecho Waterfront District



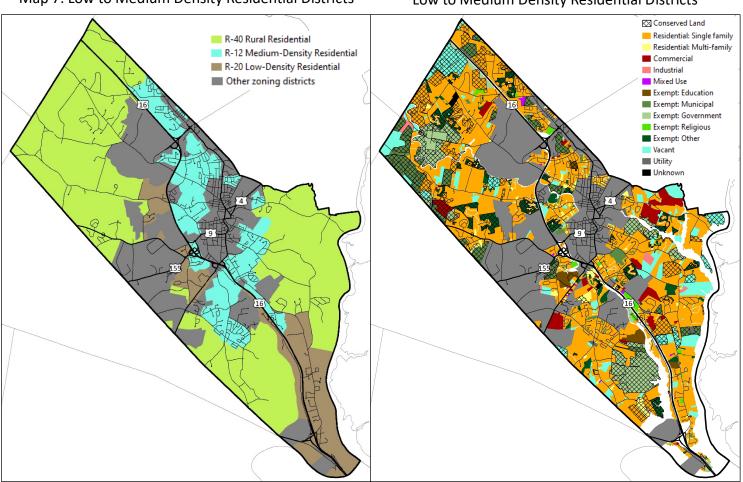
While these districts have a heavy commercial/industrial emphasis, they are not broadly seen as Dover's economic powerhouse mostly because they are not part of the core downtown. Additionally, the density of activity is less than the primary commercial districts. Maps 5 and 6 show the extent of these districts and their associated land uses. Table 4 shows the land use breakdown for these three districts in tabular form.

The Innovative Technology and Commercial Manufacturing Districts still have high amounts of commercial/industrial activities accounting for an average of 63% of the land area. While the land area of these activities is greater than the primary commercial districts, they are much less dense and have limited sense of place being located outside of Dover's core downtown. In contrast to the primary commercial districts, the residential uses in these secondary commercial districts are almost exclusively single-family residential. This again speaks to the lower density

found in these districts. Additionally, 3/4<sup>ers</sup> of the Cochecho Waterfront is municipally owned, which impacts the density of activity in the district.

#### Table 4: Additional Commercial Districts Source: City Assessing and GIS data CWD: IT: CM: Innovative Technology **Commercial Manufacturing** Cochecho Waterfront District District District Percent of Percent of Percent of Land Use Acres Acres Acres District District District Commercial 417 30% 177 27% 3 3% Exempt: Education 8 1% . -Exempt: Govt (county, state, federal) 23 2% 2 0% -. 137 10% 24 4% 65 75% Exempt: Municipal 50 4% 19 3% 5 6% Exempt: Other Exempt: Religious 3 0% . -. 378 27% 304 46% Industrial --Mixed Use 9 1% -Residential: Multi-Family 4 0% 7 1% 2 2% Residential: Single-Family 278 20% 113 17% 7 8% Utility 4 1% 2 2% -1% Vacant 70 5% 6 1% 1 Unknown 1 0% 2 2% -657 100% 87 Total 1,377 100% 100%

## Low to Medium Density Residential Districts: Rural Residential District, Medium-Density Residential District, Low-Density Residential District



Map 7: Low to Medium Density Residential Districts

Map 8: Land Uses within the Low to Medium Density Residential Districts

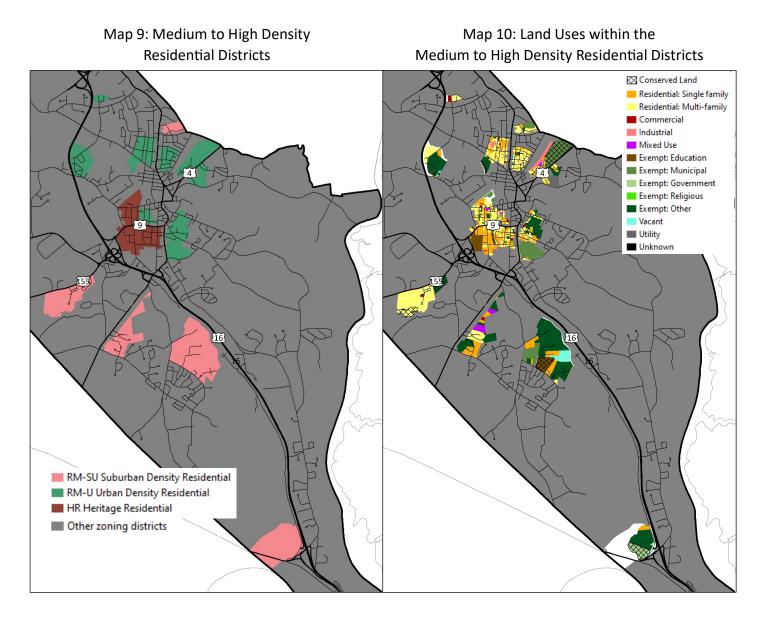
These three districts represent 75% of Dover's total area; because of that, they also represent the largest residential land use by area in the City. Maps 7 and 8 show the extent of these districts and their associated land uses. Table 5 shows the land use breakdown for these three districts in tabular form.

An average of 60% of these districts are residential uses. However, in the Medium- and Low-Density Residential Districts that percentage increases to 69% and 71% respectively. With that said, most residential uses are single-family with only 2% of these total districts being used for multi-family residential. With minimum lot sizes ranging from ~1/4-acre in the Medium-Density Residential District to ~1/2-acre in the Low-Density Residential District to ~1-acre in the Rural Residential District, it's clear to see these districts as residing a large percentage of Dover's residents. Worth noting is the nearly 25% of exempt land uses in these districts. Of the more than 2,700 acres of exempt land uses in these districts, nearly 3/4<sup>ers</sup> is permanently conserved. Another 11% (nearly 750 acres) of single-family residential uses have also been permanently conserved. There are also many properties that support recreation in these districts. Of the ~75 properties that support recreational in Dover, more than 40% found in these districts. While several of

	Rural Re	40: sidential trict	R-: Medium-D Dist	ensity Res	R-20: Low-Density Res District		
Land Use	Acres	Percent of District	Acres	Percent of District	Acres	Percent of District	
Commercial	353	4%	56	3%	12	1%	
Exempt: Education	55	1%	14	1%	83	7%	
Exempt: Govt (county, state, federal)	871	11%	62	3%	26	2%	
Exempt: Municipal	574	7%	212	10%	40	3%	
Exempt: Other	511	6%	145	7%	75	6%	
Exempt: Religious	11	0%	57	3%	16	1%	
Industrial	60	1%	-	-	2	0%	
Mixed Use	2	0%	16	1%	8	1%	
Residential: Multi-Family	96	1%	123	6%	21	2%	
Residential: Single-Family	4,524	55%	1,323	63%	877	69%	
Utility	26	0%	6	0%	-	-	
Vacant	1,098	13%	74	4%	103	8%	
Unknown	24	0%	10	0%	3	0%	
Total	8,205	100%	2,098	100%	1,266	100%	

these properties are owned by the City of Dover and are likely designed primarily for recreation, there are others where the line is less clear. For example, three properties are privately owned single-family residences that allow recreation. Similarly, there are other exempt properties that are privately owned but still support recreation.

## Medium to High Density Residential Districts: Suburban Density Residential District, Urban Density Residential District, Heritage Residential District



Although these districts account for only 6% of the total area in Dover, they represent dense residential neighborhoods with a mixture of exempt lands. An average of 43% of these districts represent some form of residential land use. Multi-family residential accounts for between 23-28% of these districts. Single-family residential uses account for nearly half (45%) of the Heritage Residential District, while the other districts are closer to ~13%. These numbers show a residential density that does not exist elsewhere in Dover and, thus, presents a distinctly

different neighborhood feel. Table 6 shows the land use breakdown within these districts. Maps 9 and 10 show the extent of these districts and their associated land uses.

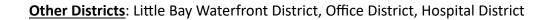
Exempt land uses are also high in these districts, representing an average of 50% of the area. The exempt uses are divers, however, and include education, municipal or government ownership, and others including but not limited to land trusts. To that point, some of Dover's most well-known

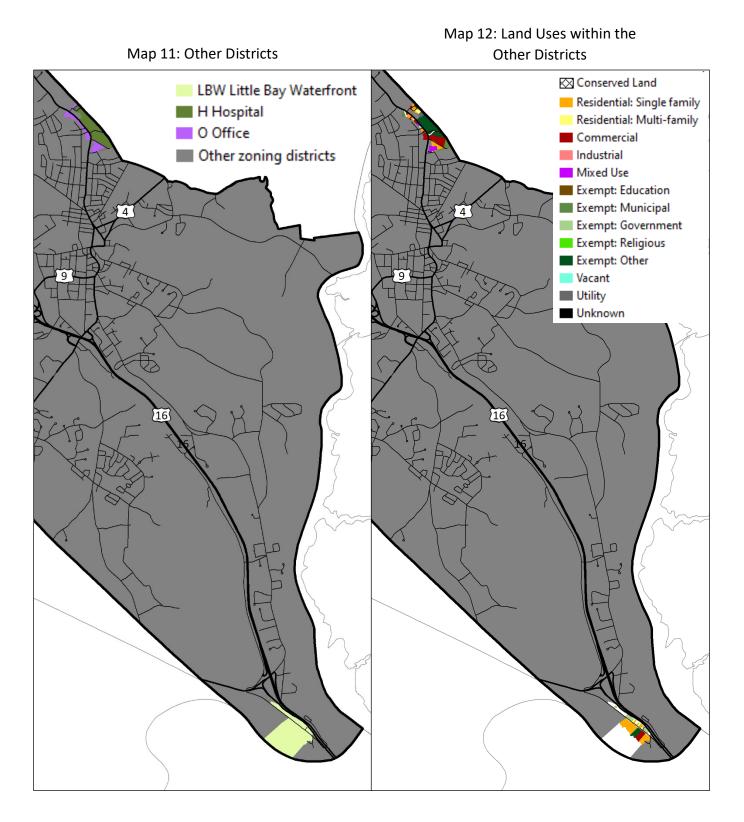
Table 6: Medium to High Density Residential Districts   Source: City Assessing and GIS data									
	Suburban [	-SU: Density Res trict	Urban De	I-U: ensity Res trict	HR: Heritage Residential District				
Land Use	Acres	Percent of District	Acres	Percent of District	Acres	Percent of District			
Commercial	2	0%	4	1%	2	1%			
Exempt: Education	18	4%	-	-	17	12%			
Exempt: Govt (county, state, federal)	23	5%	-	-	3	2%			
Exempt: Municipal	30	7%	75	24%	8	6%			
Exempt: Other	197	43%	73	23%	6	4%			
Exempt: Religious	-	-	-	-	-	-			
Industrial	-	-	14	4%	1	1%			
Mixed Use	11	2%	-	-	1	1%			
Residential: Multi-Family	106	23%	88	28%	36	26%			
Residential: Single-Family	52	11%	47	15%	62	45%			
Utility	-	-	12	4%	-	-			
Vacant	17	4%	1	0%	1	1%			
Unknown	-	-	-	-	-	-			
Total	456	100%	314	100%	137	100%			

recreational and open spaces are found in these districts including but not limited to the following:

- Dover ice arena
- Dover skatepark
- Guppey Park
- Jenny Thompson outdoor pool
- Bellamy River WMA east

Although many of these properties supporting recreation are municipally owned and, thus, exempt, many others are privately owned. In fact, several properties are primarily classified as multi-family land uses with another being industrial.





These three districts make up less than one-half percent of Dover's total land area. Instead, more than half of the Hospital District is considered an exempt land use because the hospital functions as a non-profit organization. To a similar extent, most of the Little Bay Waterfront District is single-family residential, which gives its primary function. Table 7 shows the land use breakdown within these districts. Maps 11 and 12 show the extent of these districts and their associated land uses.

	Little Bay	W: Waterfront trict	Off	O: Office District		l: pital trict
Land Use	Acres	Percent of District	Acres	Percent of District	Acres	Percent of District
Commercial	4	14%	4	29%	8	23%
Exempt: Education	-	-	-	-	-	-
Exempt: Govt (county, state, federal)	4	14%	-	-	-	-
Exempt: Municipal	-	-	1	7%	4	119
Exempt: Other	4	14%	-	-	19	549
Exempt: Religious	-	-	-	-	-	-
Industrial	-	-	-	-	-	-
Mixed Use	-	-	3	22%	-	-
Residential: Multi-Family	1	4%	0.3	2%	1	49
Residential: Single-Family	15	54%	5	37%	1	39
Utility	-	-	-	-	2	69
Vacant	-	-	0.3	2%	-	
Unknown	-	-	-	-	-	-
Total	28	100%	14	100%	35	1009

## 2024 Dover Land Use Regulation Audit Report

An Ad-Hoc Committee to address community housing needs was created in 2023 to recommend to the City a list of actions to "encourage and incentivize thoughtful development to meet the housing needs of residents..." In support of those efforts, the Strafford Regional Planning Commission (SRPC) was tasked with completing a regulatory audit of Dover's Land Use regulations and preparing recommendations to assist the City in meeting its housing goals. In addition to the regulatory audit, SRPC conducted a developable land analysis for Dover to "establish a baseline estimate of land available to meet projected housing demand." Once certain constraints to development were removed (conserved land, steep slopes, water, wetlands, and currently developed land), about 26% of the city was "developable" (SRPC made it clear this does not mean "available for development").

With 29% developable acreage, the Rural Residential District (R-40) has the most developable area, which is by design based on the City's zoning design for less dense development and more open space. This zone provides an opportunity for "gentle infill in the form of Accessory Dwelling Units (ADUs) and two-to-four-unit structures." This exercise also identified the Urban Density Residential District (RM-U) with having 64% of the lots as nonconforming, which are lots that are smaller in area than is required by the zoning. In these areas, the City could consider "adjusting zoning standards to bring more lots into conformity to provide more opportunities for infill development."

#### **In Summary**

Dover's land use patterns across zoning districts reflect a clear alignment with the City's planning goals. Core commercial areas like the Central Business District, Gateway, and Commercial zones successfully balance residential and commercial uses, creating a vibrant, mixed-use downtown. Other commercial districts—such as Innovative Technology, Commercial Manufacturing, and Cochecho Waterfront—appropriately emphasize non-residential activity. Residential zones also align with their intended densities, with lower-density districts dominated by single-family homes and higher-density areas supporting more multi-family housing near jobs and services. Looking ahead, it will be important for Dover to build on this foundation by continuing to balance development with resource protection, addressing ongoing housing needs, and supporting a strong, resilient economy.

# **Demographics and Housing**

Understanding demographic trends and housing needs is essential to guiding land use decisions that support a vibrant and sustainable future for Dover. As the city's population grows, becomes more diverse, and household compositions shift, there is increasing demand for housing that reflects a range of needs—whether that means smaller units for aging residents, affordable options for young families, or proximity to jobs and services. These changing dynamics directly influence how and where Dover plans for residential development and underscore the importance of aligning housing policy with long-term land use goals.

#### **Population Trends**

Based on estimates provided by the US Census, Dover had a 2023 population of 33,070 representing an increase of 2,863 (9.4 percent) since 2013. Dover became the State's fifth most populated community in 2010, as well as the most populated in Strafford County, and this standing continues today. In general, the population has grown in all the neighboring communities within the region Dover is situated. Between 2013 and 2023, Dover's population has been growing significantly faster than neighboring cities of Portsmouth (2.2%), Somersworth (2.4%), and Rochester (3.9%). Dover's rate of population growth has been higher than the county's and the state's. According to population projections from the NH Office of Planning and Development, Dover's population is anticipated to continue increasing looking out to 2050.

Table 1:	Population		Change 2013 to 202	3
Community	2013	2023	Number	Percent
Dover	30,207	33,070	2,863	9.4%
Durham	9,907	10,577	670	6.8%
Eliot, ME	6,234	6,978	744	11.9%
Madbury	2,055	2,121	66	3.2%
Newington	798	899	101	12.7%
Portsmouth	21,237	22,332	1,095	5.1%
Rochester	29,801	32,866	3,065	10.3%
Somersworth	11,780	12,060	280	2.4%
Strafford County	123,836	133,243	9,407	7.6%
New Hampshire	1,323,458	1,402,054	78,596	5.9%

American Community Survey 5-Year Estimates

#### Age

Dover's median age as of 2023 was 37.6 years old, which is comparable to the median age of the county and lower than the state. The most prominent age group in Dover is the 25-34 year old age cohort, which increased by 37% between 2013-2023, while the 34-44 year old age cohort grew 8% in that timeframe. The number of youths below 19 years of age in Dover have been declining, showing a 17% decrease between 2013 and 2023. The 60-64 year age cohort has increased by 34% between 2013 and 2023, while the 65-74 year age cohort has increased by 68%, indicating an aging population in Dover which mirrors trends seen county and state wide. Dover's aging population and its growing young adult and working professional population are all seeking a range of housing

opportunities, and the community should consider the tools available to create the diverse types of housing desired.

#### Table 2: Median Age

Year	Dover	Strafford County	New Hampshire
2013	36.1	36.9	41.5
2018	36.1	36.9	42.7
2023	37.6	37.9	43.2

American Community Survey 5-Year Estimates

	Dover				Strafford	d County		New Hamp	oshire	
Age Group	2013	2018	2023	2023 %	2013	2018	2023	2013	2018	2023
				of Pop.						
Under 10 years	3,432	3,564	2,850	8%	13,537	13,114	12,045	114,630	136,082	131,707
10-19 years	3,560	2,664	2,965	9%	17,937	17,813	17,498	176,224	165,261	166,381
20-24 years	3,154	2,897	3,442	10%	12,988	14,069	13,131	85,126	90,164	85,524
25-34 years	4,463	6,079	6,131	18%	14,767	16,252	18,018	147,022	161,541	175,865
35-44 years	3,966	3,541	4,312	13%	15,599	14,370	15,737	172,458	155,671	168,194
45-54 years	4,376	3,940	3,754	11%	18,833	17,390	15,535	222,200	200,920	177,065
55-59 years	2,061	2,131	2,199	7%	8,796	8,980	9,740	99,383	110,487	107,739
60-64 years	1,291	1,779	1,734	5%	5,994	8,087	8,268	85,046	95,512	109,834
65-74 years	1,872	2,590	3,160	10%	8,414	10,749	13,231	104,075	135,715	165,496
75+ years	2,032	2,131	2,523	8%	6,971	7,413	8,540	83,007	92,269	105,029

#### Table 3: Population by Age Group

American Community Survey 5-Year Estimates

#### School Enrollment

School enrollment numbers show a decrease in the population of school-age children enrolled in Dover's school system, and this matches the declining number of youths seen in the census figures. From 2019 to 2023, the enrolled school-age population decreased by 9%.

Table 4. Fatt School Enfortment Numbers									
School Enrollment	2019	2020	2021	2022	2023				
Kindergarten	264	193	247	249	244				
Elementary	1,361	1,335	1,238	1,244	1,210				
Middle	885	834	856	814	798				
High School	1,204	1,244	1,242	1,199	1,123				
Total	3,714	3,606	3,583	3,506	3,375				

#### **Table 4: Fall School Enrollment Numbers**

NH Department of Education

#### Households

The number of households continue to increase in Dover, while household sizes are decreasing. Strafford County is also seeing a similar trend, with Dover having a smaller average household size comparatively. The need for additional housing units in New Hampshire communities of all sizes is expected to continue to increase as the number of small households of one to two people increases. Older adults often look to downsize, either upon becoming "empty nesters" or when seeking more accessible, single-story-living arrangements. Young and emerging adults similarly seek modestly sized units as "starter homes." In some cases, both groups find they are competing for the same types of units, which often leaves out young and emerging adults who may lack existing assets/capital.

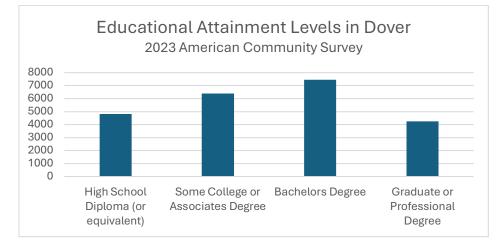
U	over	Strafforc	l County
2019	2023	2019	2023
13,489	15,000	48,982	51,684
7,429	8,087	31,210	32,061
6,060	6,913	17,772	19,623
4,224	5,039	12,804	14,345
1,836	1,874	4,968	5,278
2.27	2.14	2.45	2.39
	13,489 7,429 6,060 4,224 1,836 2.27	13,48915,0007,4298,0876,0606,9134,2245,0391,8361,874	13,48915,00048,9827,4298,08731,2106,0606,91317,7724,2245,03912,8041,8361,8744,9682.272.142.45

### Table 5: Household Types

American Community Survey 5-Year Estimates

#### **Educational Attainment**

Dover continues to attract a more educated demographic compared to the State of New Hampshire and many area communities, and existing residents are also pursuing higher degrees. According to the American Community Survey, nearly 50 percent of Dover residents that are aged 25 and over have a bachelor's or graduate degree. Educational attainment has a profound impact on the local economy, and the eligibility of residents for available jobs. While this level of education is difficult to guarantee, the city is looking to continue to attract jobs within the top job growth fields (health care or technology-related), which require high levels of education.



#### **Housing Trends**

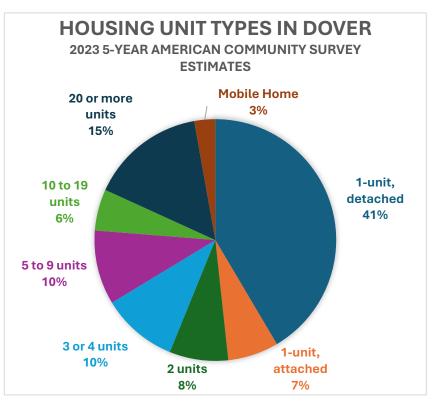
The 2024 Dover Regulatory Audit identified housing affordability as the biggest challenge facing Dover today, based on public engagement and data analysis, and homelessness and housing insecurity continue to be issues in the city. The median home sale price in Dover reached \$450,000 in March 2025, reflecting a 1.8% increase from the previous month, and rental prices have also been increasing significantly. Dover's fast population growth rate intensifies the demand for housing, further straining the already limited supply. While the city has a higher diversity of housing types and price points than some neighboring communities, the housing market remains tight with

high demand for rentals and homeownership,

accessible/transitional housing, and workforce housing. Such escalating prices and the lack of available units pose challenges for prospective homebuyers and renters, particularly those with moderate incomes.

#### **Housing Types**

According to the 2023 American Community Survey, there are 15,000 occupied housing units and 439 vacant housing units. Of the occupied housing units in the city, 7,694 units are owner-occupied, while 7,306 units are renter-occupied. Homeownership dominates the rural areas of the city, while renteroccupied units are largely in the more developed areas of Dover, closer to



services and amenities. Many housing units in Dover are single-family units, making up 48% of the community's housing stock. Smaller complexes of multi-family units (range from 2-9 units), make up 28% of the city's housing stock, while larger complexes of 10 or more units make up 21% of the city's housing stock.

#### **Housing Construction**

According to Dover's 2024 Regulatory Audit, building permit data from both Dover and New Hampshire show a sharp decline in housing production of all types following the 2008–09 Recession. However, Dover rebounded more quickly than many other Seacoast communities and saw 58 net housing units created in 2011 and more units each year after. As two of the region's more populous cities, Dover and Rochester have also seen higher levels of

#### Table 6: Permitted New Buildings – 2024 Regulatory Audit

	Residential				Total
Year	Single Family	Multifamily	Manufactured Housing	Other	
2008	31	30	0	0	61
2009	48	20	0	0	68
2010	0	0	0	0	0
2011	51	7	0	0	58
2012	71	19	1	0	91
2013	66	40	0	0	106
2014	64	18	0	0	82
2015	45	27	0	0	72
2016	61	5	3	0	69
2017	61	138	4	0	203
2018	54	212	2	0	268
2019	43	145	1	0	189
2020	32	65	4	0	101
2021	30	64	tel:0%2019%201%2018%200%	205%203%20	212%202%2065
2022	41	48	0	3	92

Source: SRPC and City of Dover 2008-2022

multifamily housing development. In 2018 alone, Dover approved up to 212 multifamily units. Data from the American Community Survey indicates that between 2017 and 2022, single-family housing grew by just 11%, while conversions and new developments with 10 or more units increased by 58%. During the same period, "missing middle" housing—typically buildings with 3 to 9 units—grew by 15%. However, its important to note that permitted new buildings is not the same as units actually built and more tracking is required to understand these patterns better.

#### **Recent and Pending Housing Projects**

In more recent years, Dover has seen important housing developments get constructed, including the Orpheum Apartment Complex in the downtown, and a cottage court on Back River Road that responded to the need for workforce housing. Currently, about 1,440 housing units are approved to be built over the next several years. Roughly 640 of these units have been built as of March, 2025. Many more housing developments are in the works for 2026 and beyond. The 2023 Strafford Regional Housing Needs Assessment shows Dover needs an additional 2,077 homes by 2040 with an additional 250 homes needing replacement. If approximately 600 homes are expected to be built in 2025, that represents 29% of the total number of homes Dover needs by 2040.

**Cochecho Waterfront Development -** Situated along the Cochecho River in Dover, this new mixed-use development will provide 415 residential units, including 45 condominiums, 346 apartments ranging from studios to three-bedroom units, and 24 townhouses. The project also includes 30,000 square feet of retail space designed to enhance the vibrancy of the area. The first phase consists of two apartment buildings with a total of 197 units, along with a cluster of townhouses. The development is a collaboration with Cathartes, a Boston-based firm. According to Cathartes, apartment rental rates will reflect current market prices, comparable to their Orpheum property in Dover, where rents are \$2,365 for a studio, \$2,548 for a one-bedroom, \$3,312 for a two-bedroom, and \$4,350 for a three-bedroom unit.

#### Residential Development at Littleworth Business Park

Construction of the Littleworth Business Park—a public-private partnership with the city—is progressing steadily. The project is expected to eventually deliver nearly 1 million square feet of industrial space along with up to 800 residential units. Work on the industrial component is already underway. The development spans two parcels: an 85-acre site south of Littleworth Road designated for industrial use, and a 100-acre site to the north planned for mixed-use residential and commercial development. The residential portion will offer a diverse mix of housing options, including garden-style condominiums, townhomes, duplexes, a dedicated "55 and older" area, and single-family homes.

#### Mixed-use Development of Former Asia Restaurant Property

A five-story, mixed-use development is planned on the former Asia Restaurant property onThird St. The project was approved by the Planning Board in October of 2024, and construction of the 58 residential units is expected to begin in 2025.

#### **McIntosh West Apartments**

Construction of the McIntosh West Apartments is expected to occur in 2025 on the former McIntosh College site on Cataract Avenue. The development will include 158 housing units, 78 of which will be designated as workforce housing, with leasing anticipated to begin in late 2025. This project represents another significant step toward addressing the city's affordable housing needs. Rent for the 78 workforce units will align with the New Hampshire Housing Finance Authority's (NHHFA) area median income (AMI) guidelines. To qualify, tenants must earn 60% or less of the area median income, which is currently \$131,200 for a family.

#### **Cost of Housing**

Median purchase prices have been increasing in Dover, in the county, and throughout the state at a very high rate, especially since 2020. In just three years, between 2020 and 2023, median home purchase prices in Dover rose 36%, exacerbated by an ever-tightening housing market. Similarly, median rental prices have been increasing in Dover, in the county, and throughout the state. Between 2013 and 2023, median rents nearly doubled in Dover and are currently higher than the median average for both the county and the state. The increasing cost of homes has also shifted many potential homeowners into the rental market.

Table 7:	Median Purchase Prices			Median Rental Prices		
Year	Dover	Strafford	NH	Dover	Strafford	NH
		County			County	
2013	\$248,475	\$200,000	\$220,000	\$953	\$942	1,108
2014	\$243,500	\$210,000	\$219,000	\$958	974	1,037
2015	\$228,100	\$205,000	\$221,000	\$1,026	992	1,069
2016	\$233,500	\$211,500	\$230,000	\$1,073	1,043	1,113
2017	\$268,000	\$229,000	\$240,000	\$1,143	1,108	1,143
2018	\$290,000	\$244,900	\$254,000	\$1,166	1,146	1,177
2019	\$288,000	\$255,000	\$270,000	\$1,347	1,259	1,251
2020	\$315,000	\$284,500	\$302,300	\$1,439	1,210	1,283
2021	\$365,000	\$320,000	\$350,000	\$1,470	1,356	1,373

2022	\$403,000	\$390,000	\$400,000	\$1,801	1,518	1,510
2023	\$430,000	\$390,000	\$418,000	\$1,981	1,571	1,644

#### New Hampshire Housing and Finance Authority

According to the New Hampshire Housing and Finance Authority, Dover's median income for renter households is \$63,988. In 2012, the median income for renter households was \$37,533, much closer to the \$38,680 needed to afford a two-bedroom unit at that time. In the rest of Strafford County, an income of \$64,520 is needed to rent a housing unit without fear of being cost burdened. The term "cost burdened" refers to a household that spends more than 30% of its gross income on housing costs.

## **Rental Vacancy Rates**

A healthy rental vacancy rate is approximately 5%, and southeastern New Hampshire has not reliably seen a vacancy rate above 1% since 2019, nor a 5% vacancy rate since 2015 according to the annual rental survey conducted by NHHFA. As a result, more households than ever are experiencing the additional burden of housing costs. According to the 2024 Land Use Regulatory Audit, as many as 35% of all households, and 44% of renting households, must now pay 30% or more of their household income on housing in Dover.

## **Housing Opportunity Zones**

In Dover, a Housing Opportunity Zone (HOZ) is a designated area where qualifying mixed-income housing developments can receive property tax relief for up to 10 years. To qualify, a development must allocate at least 30% of its units to low-income households or meet other income mix criteria defined under state law. This program aims to encourage the construction of affordable housing by providing financial incentives to developers, thereby addressing housing shortages and promoting economic development in targeted areas. The HOZ initiative is part of New Hampshire's broader efforts to increase housing affordability and availability across the state.

#### **Future Housing Needs**

The 2023 Strafford Regional Planning Commission Regional Housing Needs Assessment determined that the City of Dover needs at least 1,754 additional housing units by 2035 to constitute a balanced housing supply. With 1,440 units approved to be built over the next several years, including 600 expected to be built in 2025, Dover is on track for achieving – and possibly exceeding – 1,754 units by 2035. However, new units need to be a combination of rental and owner-occupied units at varying price points, as well as housing for specific populations, such as those with disabilities.

Dover recently adopted a new Master Plan Vision titled *Distinctly Dover*, which envisions:

- Affordable and attainable housing and support services that are accessible to, and utilized by individuals, families, and households of diverse backgrounds and needs.
- **Diversity of housing options are available,** including single-family and multi-family homes, and safe, well-maintained rental units, assisted living, and long-term care options to meet the needs of residents of all ages and abilities.

- Low barrier shelter and support services are available for people experiencing housing insecurity.
- Housing types are interspersed to foster multigenerational neighborhoods.
- Housing in the downtown area that is available for walkable, car-less living.

The 2024 Regulatory Audit also identified some specific actions and recommendations Dover should pursue to achieve its housing goals. These include:

- Utilizing underutilized lots and non-conforming lots for gentle infill, ADUs, and small-scale multifamily housing.
- Encouraging ADUs (removing barriers & increasing public awareness).
- Expanding Missing Middle Housing (more 2-4 unit dwellings allowed by right).
- Revising multi-family zoning (increase density, revise height & parking limits).
- Improving conversion policies (allow easier subdivision of large homes).
- Strengthening financial incentives (Housing Opportunity Zone, TIF expansion, new Affordable Housing Fund).
- Increasing disability-accessible housing (ADA incentives & emergency shelters)

## **Economic Development**

Dover serves as an economic hub for surrounding communities in Maine and New Hampshire. Together, the communities in the region also attract workers from other areas of New Hampshire, Maine and Massachusetts, and serve as a home for many people who commute out of the region daily. As the fastest-growing city in New Hampshire, Dover offers a dynamic environment for businesses and residents alike. The city's economic landscape is diverse, with significant contributions from manufacturing, healthcare, and educational services.

Strategic land use planning is essential for Dover to foster a resilient and thriving economy. By proactively designating areas for diverse economic activities—such as commercial hubs, industrial zones, and mixed-use developments—Dover can attract new businesses, support existing enterprises, and create job opportunities. By integrating strategic land use policies that accommodate emerging industries, foster workforce development, and enhance infrastructure, Dover can position itself to effectively navigate post-COVID-19 economic trends and ensure a robust and diversified economy for the future.

## **Major Employers**

Although Dover has several large employers, most businesses in the city are quite small, and there is a notable self-employed population as well. The hospital is the largest employer in the city, by far, compared to other local businesses and organizations. In 2023, Liberty Mutual, one of Dover's other large employers closed two of their campuses in Dover, consolidating activity at their Portsmouth campus, in response to the adoption of a more hybrid work model. Many employees of Liberty Mutual still live in Dover today and will likely continue supporting local businesses.

The major employers table below lists employee information by employer. The City of Dover collects this information annually by asking each large employer for their employee numbers. Not all businesses respond with their numbers, which may be why some major employers are not listed.

Business Name	Industry	Employees
Wentworth-Douglass Hospital	Healthcare services	2,668
Lincoln Financial Group	Financial services	1,032
Community Partners	Counseling and mental health	494
	services	
Strafford County	County government services	487
Dover Schools/SAU 11	Education	410
City of Dover	Local government services	287
Stonewall Kitchen	Manufacturing	225
Hannaford Supermarkets	Retail/Distribution	118
(combined locations)		
HiRel Systems/Vishay	Manufacturing	94
Rand Whitney	Manufacturing	54
Nemo Equipment	Manufacturing	38

#### Table 8: 2024 Major Employers in Dover

36
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City of Dover, NH

#### **Dover's Central Business District**

Dover's Central Business District (CBD) serves as the city's vibrant economic and cultural hub. This area of the city features a diverse array of businesses, including retail shops, restaurants, professional offices, and personal service providers. It is a mixed-use area that also includes housing units, making it a rich and active live/work community. The district's dynamic mix of commerce and community activities fosters a lively atmosphere that attracts both residents and visitors. Strategically located with access to major highways and rail services, the CBD offers prime opportunities for business growth and redevelopment. The city's commitment to revitalizing historic mill buildings and investing in infrastructure has further enhanced the district's appeal.

#### Median Household Income

As of 2023, Dover's median household income was \$92,748, according to the American Community Survey, which is higher than the county's median of \$84,869. Among the five communities outlined in Table 9, Dover had relatively high growth rate between 2013 and 2023, with Portsmouth and Durham the only communities growing faster during that timeframe. The median household income for homeowners in Dover is a bit higher at \$128,734, while the median household income for renters was \$63,988. The poverty rate in Dover as of the 2023 American Community Survey was 8.1%, which is slightly lower than Strafford County's (8.8%). This number has been increasing slightly in Dover since 2019.

Median Household Income	2013	2018	2023	Growth Rate between 2013 and 2023
Strafford County	\$58,825	\$70,650	\$84,869	+44.2%
Dover	\$57,389	\$70,757	\$92,748	+61.6%
Durham	\$71,250	\$75,066	\$126,658	+77.7%
Portsmouth	\$64,577	\$78,027	\$105,756	+63.7%
Somersworth	\$53,223	\$64,786	\$79,677	+49.7%
Rochester	\$62,398	\$58,427	\$79,388	+27.2%

#### Table 9: Median Household Income

2023 American Community Survey 5-Year Estimates

#### Labor Force

The civilian labor force refers to individuals who either have a job or are actively looking for a job. Dover's civilian labor force grew by 3,280 people from 2010 to 2024. In 2024, new metrics were employed so comparing the growth between 2010 and 2024 is less straight forward. Employment figures also rose during this time. Unemployment rates showed a significant decline over this period, decreasing from 5.4% in 2010 to 2.0% in 2024. A notable deviation occurred in 2020, when the unemployment rate spiked to 6.5%, likely due to the COVID-19 pandemic's impact on the

economy. Overall, these trends indicate a strengthening local economy with increasing employment opportunities and a growing workforce.

Year	Civilian Labor	Employed	Unemployed	Unemployment
	Force			Rate
2010	17,390	16,458	932	5.4%
2011	17,411	16,583	828	4.8%
2012	17,494	16,662	832	4.8%
2013	17,600	16,846	754	4.3%
2014	17,731	17,090	641	3.6%
2015	17,854	17,338	516	2.9%
2016	18,226	17,798	428	2.3%
2017	18,297	17,871	426	2.3%
2018	18,670	18,250	420	2.2%
2019	18,991	18,581	410	2.2%
2020	18,674	17,465	1,209	6.5%
2021	18,469	17,880	589	3.2%
2022	18,606	18,239	367	2.0%
2023	18,438	18,079	359	1.9%
2024	20,670	20,260	410	2.0%

#### Table 10: Labor Force Rates in Dover

#### **Employment Sectors**

Educational services and health care dominate the labor force in Dover. Nearly 5,000 workers are employed in this combined sector, making it the largest industry by a significant margin. This reflects Dover's role as a regional hub for healthcare and education, with institutions like Wentworth-Douglass Hospital and local schools and colleges driving employment. Professional/scientific/management services and manufacturing sectors are also strong, making up a major share of the labor force. Retail and hospitality also remain key support sectors, and finance/insurance/real estate industries are also well-represented in Dover.

Industry	2023	% of Total
Agriculture, forestry, fishing, hunting, and mining	157	1%
Construction	602	3%
Manufacturing	2,616	13%
Wholesale trade	285	1%
Retail trade	2,177	11%
Transportation and warehousing, and utilities	344	2%
Information	331	2%
Finance and insurance, and real estate and rental and leasing	1,596	8%
Professional, scientific, management, administrative, and waste management	2,550	12%
services		
Educational services, and health care and social assistance	4,935	25%

#### Table 11: Employment Sectors

TOTAL	19,461	
Public administration		5%
Other services, except public administration		4%
Arts, entertainment, recreation, accommodation, and food service		10%

#### American Community Survey 5-Year Estimates

#### Recent, Pending, or Potential Economic Development Initiatives

## Strategic Plan for Fiscal Years 2026–2029

The Dover Business and Industrial Development Authority (DBIDA) has had an economic development strategy that primarily focused on buying and selling land for business park development. As available land decreases, the economic development strategy of DBIDA is also evolving as it recently adopted a comprehensive strategic plan on April 1, 2025, to create a conducive environment for businesses to thrive in Dover. This plan focuses on:

- **Eliminating Barriers for Businesses:** Identifying and addressing city policies or processes that may hinder business operations and proposing more business-friendly alternatives.
- **Enhancing Infrastructure:** Investing in infrastructure improvements to support business growth and expansion.
- **Promoting Workforce Development:** Collaborating with educational institutions and training programs to ensure a skilled workforce that meets the needs of local employers.

# Strafford Regional Planning Commission's Regional Comprehensive Economic Development Strategy

The Strafford County CEDS report highlights Dover as a regional economic hub facing both opportunity and transition. The report notes that while the city experienced a setback with Liberty Mutual vacating 600,000 square feet of office space—pushing vacancy rates to over 38%— economic momentum remains strong in Dover, with Northeast Credit Union relocating its headquarters to the city and robust industrial development continuing due to demand spilling over from the Portsmouth area. Dover was the only submarket in the state to see a decrease in industrial vacancy rates in 2023, while rents rose nearly 8%. The CEDS includes multiple Dover-based priority projects—such as infrastructure investments, redevelopment of the Liberty Mutual site, downtown business incubators, and pedestrian improvements—that aim to revitalize key areas and enhance the city's economic resilience. SRPC plans to continue supporting Dover's future development through technical assistance, workforce development programs, and partnerships that align local planning with regional economic goals.

#### Cochecho Waterfront Development

In partnership with the Boston-based developer Cathartes, Dover is transforming its waterfront area into a vibrant mixed-use district that includes housing, commercial space, and a riverfront park. The project encompasses 415 residential units—including apartments, condominiums, and townhouses—and approximately 30,000 square feet of retail space.

#### Littleworth Business Park

The Littleworth Business Park is a significant economic development initiative in Dover resulting from a public-private partnership between the city and private developers. This expansive project encompasses two primary parcels:

- **Industrial Development:** An 85-acre site south of Littleworth Road, designated for industrial and commercial use, with plans to develop approximately 700,000 to 800,000 square feet **of** non-residential spaces.
- **Mixed-Use Residential/Commercial Development:** A 75-acre parcel north of Littleworth Road, proposed for up to 800 residential units alongside commercial spaces, aiming to create a vibrant mixed-use community.

The project includes constructing a road connecting Crosby Road and Industrial Park Drive, along with installing essential public utilities such as water and sewer systems. Plans feature a 1.6-megawatt solar array, reflecting a commitment to sustainable energy solutions within the industrial park. The Littleworth Business Park project is envisioned as a multi-phase, decade-long endeavor, poised to significantly enhance Dover's economic landscape by attracting businesses, creating jobs, and providing diverse housing options. The mixed-use development aims to emulate the success of similar projects like Pointe Place, fostering a community-centric environment that integrates residential and commercial spaces seamlessly.

#### Liberty Mutual Property Redevelopment

In 2023, Liberty Mutual announced plans to vacate its Dover, New Hampshire, campus, which includes two substantial buildings: Dover East (235,000 square feet) and Dover West (350,000 square feet). This decision prompted city officials to begin exploring redevelopment opportunities for the site. In 2024, the city began exploring a potential vision to transform the property into a vibrant mixed-use community, considering ideas like elderly care, attainable housing, hotel or conference center, residential towers, schools, a shelter, and removing a floor in one of the buildings to create a manufacturing hub. With many potential new uses being considered, this could present another successful opportunity for a public-private partnership in the years to come.

#### Economic Development Tools and Programs in Dover

#### **Community Development Block Grant Funding**

Dover continues to leverage CDBG funds to support a wide range of community development activities, including:

- **Revitalizing Neighborhoods**: Implementing projects that enhance the livability and aesthetic appeal of residential areas.
- **Economic Development**: Funding initiatives that stimulate economic growth and create job opportunities.

• Improving Community Facilities and Services: Upgrading infrastructure and public services to benefit lower-income residents

## Tax Increment Financing (TIF) Districts

Dover utilizes Tax Increment Financing (TIF) as a strategic economic development tool to stimulate investment in designated areas of the city. Through a TIF, the city can finance public infrastructure improvements—such as roads, utilities, and streetscapes—within specific districts by capturing the incremental increase in property tax revenues that result from development activity and the enhanced property values in those areas. Dover has established TIF districts, including the Downtown Dover TIF District and the Waterfront TIF District, which are overseen by a dedicated advisory board. The city employed TIF funds to finance essential public enhancements for the Cochecho Waterfront Development project, including the construction of a new street system to provide site access, installation of necessary utilities, and the creation of a 3.4-acre public riverfront park.

#### Dover Economic Loan Program

The Dover Economic Loan Program (DELP) is designed to promote the growth and expansion of small businesses in Dover through gap financing. It primarily targets existing small businesses in Dover seeking to expand, businesses considering relocation to Dover, and new small businesses aiming to establish themselves in the city. The program offers loans to finance activities such as land and building acquisition, construction, equipment purchase, and working capital. By providing this financial assistance, DELP aims to stabilize and expand Dover's economic foundation and tax base by promoting the growth of small enterprises. The city has administered two DELP loans to local businesses in the last 10 years.

#### **Economic Revitalization Zones**

Dover has established several Economic Revitalization Zones (ERZs) to stimulate economic redevelopment, expand the commercial and industrial base, create new jobs, and increase tax revenues within the city. These zones offer short-term business tax credits to companies that invest in infrastructure and create jobs in designated areas. Dover's ERZs include the Central Business District, Industrial Park, Locust Street, Mast Road Site, and Sixth Street Site. By leveraging this program, Dover aims to attract and support businesses, thereby enhancing the city's economic vitality.

#### Dover's RSA 79-E Program

Dover adopted the Community Revitalization Tax Relief Incentive, known as RSA 79-E, to encourage the rehabilitation of underutilized buildings within designated areas such as the Central Business District. This program offers temporary property tax relief to property owners who undertake substantial rehabilitation projects that provide public benefits, including enhancing the economic vitality of downtown, preserving culturally or historically significant structures, and increasing residential housing in urban centers. To qualify, rehabilitation costs must be at least 15% of the building's pre-rehabilitation assessed value or \$75,000, whichever is less. Approved projects may

receive tax relief for up to five years, with potential extensions if the project includes affordable housing or historic preservation. Property owners must also enter into a covenant with the city to ensure the public benefit is maintained throughout the tax relief period. The Orpheum Apartment Complex was the first 79-E approved project in the city. The adaptive reuse of Dover's Courthouse Apartment Complex was another approved project approved through the 79-E program.

## Federal Opportunity Zone

Dover features one federally designated Opportunity Zone located in census tract 33017081400. This area encompasses parts of the city with a population of approximately 2,000 residents—about 6% of Dover's total population. The median household income within this tract is around \$57,000, aligning with the state average for Opportunity Zones. Established under the 2017 Tax Cuts and Jobs Act, Opportunity Zones are designed to spur economic development in low-income communities by offering tax incentives to investors. Investments made through Qualified Opportunity Funds can defer capital gains taxes, and gains from long-term investments held over 10 years may be excluded from taxation.

## A Vision for Dover's Future Economy

Dover's recently adopted vision for 2035, Distinctly Dover, emphasized the importance of planning for a strong and resilient economy. This vision emphasized:

- **Establish Dover as a regional economic and innovation hub** by attracting diverse industries and maintaining a strong, resilient economic base.
- **Support a skilled and inclusive workforce** by offering quality of life, housing options, and career opportunities across all sectors.
- Foster a thriving downtown and small business environment with clear regulations, cultural diversity, and entrepreneurial support.
- **Redevelop and reuse underutilized properties** to maximize economic potential and support strategic growth.
- **Promote sustainable and tech-ready business practices** by expanding broadband access and encouraging environmentally responsible operations.

# Transportation

Dover's transportation system is critical to land use planning because it influences how the city functions, the quality of life of residents, and the potential for new development. Access to roads, transit, and other infrastructure influences development patterns, housing choices, and economic activity. Coordinated planning of this infrastructure ensures people can reach jobs, schools, and services efficiently while minimizing environmental impacts. By aligning transportation and land use, Dover can also support more sustainable, accessible, and efficient development activity in the future.

## **Transportation Today**

With a vibrant and growing downtown, a strong multimodal transportation foundation, and ongoing infrastructure improvements, Dover is building toward a more connected, accessible, and resilient future. As of 2023, the average annual daily traffic on Central Avenue near City Hall was 17,015 vehicles per day. Along the Spaulding Turnpike by the toll plaza, the average annual daily traffic has grown to 42,315 vehicles per day. This is a 15% increase since 2013 when the average annual daily traffic at the toll plaza was 36,930 vehicles per day.

Dover is also home to the second-busiest Amtrak station in New Hampshire. In FY24, the Dover Transportation Center served over 63,000 passengers with five daily Downeaster round trips. This number has been increasing over the years. Compared to the other Amtrak Stations, the Durham station serviced 54,000 passengers in FY24, and the Exeter

station serviced 74,000 passengers. Continued support for rail and regional transportation connections aligns with Dover's broader regional coordination goals.

Dover's commitment to multimodal transportation is also seen in its Downtown Transit Loop, which encourages intracity travel using public transportation. Initiated in collaboration with COAST in 2008–2009, the loop supports local mobility and reduces car dependency. The COAST ridership of the Dover Downtown Loop was 233,165 passengers in FY2024.

The continued expansion of the Dover Community Trail system also provides additional multimodal transportation opportunities year-round. This includes recreational access and non-motorized transportation alternatives for walkers, cyclists, and runners—further reducing vehicle trips in Dover and enhancing quality of life.

## Transportation Efficiency and Mobility

Downtown Dover is the center of land use, transportation, community, and economic activity. The compact land use pattern in the Downtown is the result of coordinated land use regulations, infrastructure investments, and private sector development activity. The result is a more productive use of land, higher land values, and a pattern that is easier to support with a variety of transportation options.

# What is multimodal transportation?

Multimodal transportation includes accommodations for automobiles, public transportation, bicycles and pedestrians. Multimodal access supports the needs of all users whether they choose to walk, bike, use transit or drive. It means more connections and more choices. This concentration of economic activity supports the case for continued investment in multimodal transportation in the Downtown, particularly walkable and transit-oriented infrastructure that reinforces the area's accessibility and performance. However, there is also a need to connect the Downtown to other areas of Dover and the surrounding region.

Efforts such as the *Downtown Pedestrian and Vehicular Access Study* (initiated in 2013) aim to enhance connectivity between the Transportation Center and central business district, as well as improve pedestrian flow between the Upper and Lower Squares. This work directly supports land use goals by enabling denser development patterns and more efficient land utilization through improved circulation.

A key challenge remains *last-mile access*—the distance between a home and the nearest transit stops. The city, in collaboration with the Strafford Regional Planning Commission (SRPC), is currently developing a *Transit Access Study*, which evaluates Pedestrian Level of Traffic Stress (PLTS) based on sidewalk quality and other walkability factors. This data will guide targeted improvements near identified transit corridors in Dover so that future investments address needed last-mile access improvements.

Electric bikes (e-bikes) are emerging as a significant component of micromobility, offering a viable and sustainable alternative for short-distance travel, particularly for "first-and-last-mile" connections to public transit and for minimizing congestion. Electric Vehicle (EV) infrastructure is another evolving aspect of the future of mobility within Dover and into the surrounding region. Dover has begun integrating electric vehicles into its municipal fleet and has installed several public charging stations to support EV adoption. Its also part of a broader economic strategy to attract and retain visitors to Dover's downtown, especially if they have to explore while their vehicles charge. Dover requires all private developers to either be EV charger ready or to install chargers if they want extra parking. To fully transition toward sustainable transportation, Dover is planning for the strategic expansion of public EV charging infrastructure. Prioritized locations include:

- **Downtown areas and public transit hubs**, to support multimodal use and to drive local economic activity.
- Shopping centers, enabling convenient vehicle charging during errands or work hours.

Proposed chargers include both Level 2 (longer duration) and DC Fast Chargers (quick turnover), ensuring compatibility with diverse trip patterns and further encouraging adoption of cleaner vehicles.

## **Multimodal Access and Investment**

Dover constructed the first complete street project in New Hampshire in 2016 when it reconstructed Silver Street. This project serves as an example of the Complete Streets and Traffic Calming Policy adopted by the City. Recent roadway and streetscape projects reflect Dover's continued efforts to modernize its infrastructure in ways that support safe, complete streets and improved land use compatibility. These projects include:

- **Court Street & Union Street Reconstruction**: New sidewalks, bike lanes, water main replacement, and improved drainage.
- **Fifth & Gove Street Upgrades**: Focused on roadway and sidewalk conditions, as well as utility modernization.
- Whittier Street Sidewalk Improvements: Added pedestrian access on upper Whittier Street and filled connectivity gaps.

These investments support walkability, multimodal connections, and neighborhood revitalization and are core components of sustainable land use planning. Additionally, Pointe Place is a thoughtfully designed mixed-use community in Dover that offers a blend of residential, commercial, and recreational spaces, creating a vibrant neighborhood atmosphere. Its been noted that this area is not connected well to Dover's Downtown and improvements are neeed to enhance its multi-modal connectivity.

## **Upcoming Transportation Projects**

Dover's Capital Improvement Plan identifies several transportation improvement projects planned for the next five years. These include:

- A CMAQ-funded project to reconstruct Durham Road, following recommendations that were made in a 2016 Route 108 South Corridor Study. In New Hampshire, "CMAQ" (Congestion Mitigation and Air Quality) funding is a federal program, administered by the New Hampshire Department of Transportation (NHDOT), that provides up to 80% reimbursement for projects aimed at improving air quality by reducing congestion and promoting alternative transportation modes.
- The next phase of the Community Trail is in the design and engineering phase with potential construction occurring in 2026 or 2027. This project was referenced in the Statewide Transportation Improvement Program.
- Several Complete Streets projects for various roadways in town.

A pedestrian access improvement project for Chestnut Street was also just entered into the state's four-year Transportation Improvement Program.

## Transportation Tomorrow

Building on the work completed under the 2000 and 2016 Transportation Master Plans, Dover's recently adopted vision for 2035, Distinctly Dover, prioritizes a "robust transportation system" that supports:

- **Complete Streets**: Infrastructure for walking, biking, and transit to reduce congestion and reliance on personal vehicles.
- **Traffic Calming**: Managing volumes and speeds through urban design, making streets safer and more pleasant for all users.

- **Enhanced Transit**: Expanding access and improving reliability to ensure equitable mobility for all residents.
- **Multimodal Resilience**: Promoting systems that reduce greenhouse gas emissions and improve adaptability to climate impacts.

This solidifies transportation planning as a central pillar of Dover's land use strategy. Dover is also working on a city-wide bicycle and pedestrian plan that will identify needed transportation policy and infrastructure improvements. By enhancing multimodal infrastructure, supporting a vibrant urban center, and expanding access to sustainable transportation, the city is positioning itself to meet the demand for future growth while preserving quality of life, economic productivity, and environmental health.

## Natural Resources, Open Space, and Conservation

Dover's natural resources and network of open spaces and conserved land have influenced the city's character and development over time, while enhancing resident's quality of life. Whether it's the Cochecho River downtown, or the larger swaths of protected land in the outskirts of the city, Dover has a variety of natural resources that exist in both the developed and rural areas of the city. Dover's diverse ecosystems, including wetlands, forests, and water bodies, provide essential services to the city's residents, such as water filtration, wildlife habitat, and recreational opportunities. Recognizing and preserving these resources within future land use planning ensures that development respects the natural environment, mitigates flood risks, and supports biodiversity.

#### **Dover's Natural Resources**

Currently, 22% of Dover's land area (or 3,700 acres) are permanently protected. About twothirds of these conserved lands are northwest of Routes 4 and 155, in the more rural parts of our city. Nearly 90% of all conserved lands are within a quarter of a mile of the main stem and tributaries of the Cochecho and Bellamy Rivers. Dover's conservation lands include wildlife management areas, subdivision set aside land, and state-owned open space, among others. Notable open space resources in the city include the Dover Community Trail, Willand Pond, the Bellamy River Wildlife Management Area, and the County Farm Road Conservation Land. The Bellamy River and Cochecho Rivers also have various access points where residents can enjoy the water for boating access, fishing, and more. As part of its water resources, Dover has wetlands, vernal pools, floodplains, lakes and ponds, estuarine, and coldwater, warmwater, and tidal

#### Key Definitions

**Open Space:** broadly refers to undeveloped public and private land offering scenic, natural, recreational, agricultural, or historical benefits. Open space lands could be developed at any time.

**Conservation Land:** refers to properties that have a legal agreement prohibiting future development protecting its conservation values including water quality, wildlife habitat, recreational offerings, scenic views, agricultural resources, and more.

**Natural Resources:** refer to the physical and ecological features of a parcel of land that provide essential services that support environmental health and human activity. These include water resources, soils, steep slopes, forests, fields, and more.

rivers and streams. The city also has aquifers and groundwater resources that provide drinking water to the residents and developments within the city.

#### A Legacy of Land Conservation

Dover has a long history of environmental protection, land conservation, and stewardship, with its current network of open spaces and recreational areas reflecting over 50 years of thoughtful planning and commitment by the city's residents and staff. Between 2000 and 2012, more than 1,000 acres of land were added to Dover's protected areas through conservation easements. Since 2012, the amount of permanently conserved land has grown by 22%, with nearly all of the 672 acres added since then expanding existing protected areas, much of which is now managed by the City of Dover.

The City of Dover oversees nearly half of all existing conserved lands. Other conservation organizations, such as New Hampshire Fish and Game, Society for the Protection of NH Forests, and Southeast Land Trust, oversee the remaining lands. Nearly 90% of conserved lands in Dover are protected through conservation easements and fee ownership. Other land protection tools used to conserve land in the city include flowage rights and protective easements (which help protect water supply resources), open space subdivision land set asides, and deed restrictions.

## **Regulatory Strategies**

Dover's land use regulations aim to direct development away from sensitive natural resources. They also ensure ecosystem services are produced or protected (through mechanisms like stormwater management and carbon sequestration through vegetation) during development and redevelopment projects. The city's wetland protection ordinance, stormwater management design standards, environmental review process, cluster subdivision regulations, floodplain protection regulations, and tree protection requirements are a few ways the city prioritizes natural resource protection when guiding future development.

One of Dover's regulatory strategies used to protect valuable open space, such as wetlands, groundwater recharge zones, forested areas, and farmland, is called Transfer of Development Rights (TDR). The TDR Ordinance encourages more intensive development in areas with public infrastructure but fewer conservation features, while preserving lands with significant environmental value. The ordinance currently applies broadly across the city, including in Rural Residential areas. As awareness of the TDR grows, there has been an increase in development proposals in these rural areas, raising concerns about intensification beyond the downtown's walkable limits. Periodic review of the TDR Ordinance will be necessary to balance open space protection with development needs, including the possibility of adjusting density allowances in certain areas. Examining both the open space subdivision ordinance and the TDR ordinance are high priority actions the City will be exploring in the near term and a TDR Ordinance Sub-Committee has been developed to begin this process.

#### **Recreation and Accessibility**

Public access to protected lands is important. Access to nature is linked to improved community health and wellbeing and leads to a collective sense of shared stewardship and appreciation for the natural lands that sustain us. Currently, one-third of all permanently protected land in Dover allow full public access for various types of recreation including walking, hiking, skiing, snowshoeing, cross country skiing, birding, and simply being in nature. Increasing public access will allow more opportunities for community members to utilize the open space assets currently available in Dover.

Dover's recently adopted Conservation and Open Space Master Plan chapter prioritizes public access improvements as a major component of Dover's future open space planning. Accessibility improvements ensure residents and visitors can access the city's open space properties safely and easily. Examples include publicizing lesser-known locations, developing and installing appropriate signage, ensuring trails are accessible to diverse users, ensuring sufficient parking, and ensuring the properties are physically accessible to those that visit. Dover's Conservation and Open Space

Chapter also identified as a high priority for future planning the connection of Dover's open spaces and conservation lands to existing neighborhoods to ensure all residents have safe access natural land and recreation opportunities.

The Community Trail is Dover's most well-known stretch of open space and recreation resource. Following a former railroad bed along sections of the Cochecho and Bellamy Rivers, the Community Trail is a popular greenway linking conservation and open space lands with the urban downtown and other key locations such as the Transportation Center Lot. Future plans for the Community Trail are already underway and include exploring expansion of the trail into more rural parts of Dover and eventually connecting with trail networks in surrounding communities.

Dover's open space network is part of the Economic Development Department's new "Discover Dover" website and a component of its economic strategy to promote Dover's quality of life to residents and visitors.

## Water Quality

Dover has identified groundwater quality and quantity as a primary focus in its future planning priorities. This emphasis is articulated in the city's Conservation and Open Space Master Plan update, which identifies groundwater protection as a key conservation priority. One of the high priority actions from this chapter is to invest in additional groundwater studies to identify potential locations for subsurface wells and to inform the protection of corresponding lands.

Dover is also an MS4 community under the Environmental Protection Agency's (EPA)

regulations. The goal of this program is to reduce pollutants in stormwater runoff to the maximum extent practicable, thereby protecting and improving water quality in the city's receiving waters. This designation requires the city to manage and regulate stormwater discharges to reduce pollution in local water bodies. Dover follows a Stormwater Management Program (SWMP) and an Illicit Discharge Detection and Elimination (IDDE) Plan to comply with these MS4 permit requirements.

Addressing nitrogen pollution is a priority for Dover to protect water quality and the health of ecosystems in the Great Bay estuary. The city is actively seeking collaborative solutions with neighboring communities to manage and reduce nitrogen discharges and collaborates with organizations like the Piscataqua Region Estuaries Partnership (PREP) to promote a healthy Great Bay estuary system.

## Economic Benefits of Open Space

Conserved land is less expensive for communities to maintain than developed areas, as undeveloped open space requires a lower level of municipal services. Conserved spaces also increase adjacent property value. Conserved land can also benefit the tourism economy. A recent study referenced by The Highland Center analyzed 1,500 New England cities and towns over 25 years and found that when conservation increased, employment increased. This may be due to a burgeoning tourism economy or by investing in quality of life factors, which result in employees being attracted to the area. There is opportunity to better understand the return on investment for conserved lands in the city.

#### Dover's Natural Resource and Open Space Network Tomorrow

In 2024, Dover updated its Natural Resource Inventory and its Open Space and Conservation Master Plan chapter which outlined clear directives for future open space protection efforts. This included mapping all natural resource types in the city and the development of co-occurrence maps to identify areas within Dover that have the highest concentration of important natural resources. These will serve as tools for future conservation planning and should directly inform the future land use strategy.

Dover's recently adopted vision for 2035, Distinctly Dover, and the recently adopted 2025 Open Space and Conservation Master Plan chapter envisions:

- Accessible Open Spaces: Ensuring Dover's open space network is accessible to the community for a variety of recreation purposes including walking, biking, and other activities.
- An Interconnected Conservation Network: Conserving parcels already adjacent to protected lands and connecting river corridors, trails, and green roadways to larger open spaces.
- **Protection of Critical Natural Resources:** Protecting ecosystems that provide critically important services including clean water, clean air, flood protection, and habitat. These include groundwater resources, floodplains, forests, and other resources.
- **Preservation of Rural Character:** Preserving natural resources and rural areas by focusing commercial activity in and around the urban core.

# **Community Climate Resilience**

As a coastal community, climate resilience is especially relevant to land use planning in Dover. This proactive planning will help the city, and its residents, adapt to and recover from climate-related challenges like flooding, heat, and extreme weather. By guiding development away from high-risk areas and investing in durable infrastructure, resilient planning protects people, property, and ecosystems. It also promotes long-term sustainability, supports the local economy, and addresses the needs of vulnerable populations by improving equity and public health. As climate impacts intensify, continuing to integrate resilience into Dover's land use decisions will ensure a safer, healthier, and more sustainable community for all.

## **Dover's Resilience Efforts**

As climate change increasingly affects the New England region, the City of Dover is advancing a land use approach that strengthens community resilience across environmental, economic, and social systems. This effort reflects a proactive stance guided by equity, sustainability, and fiscal responsibility, and is designed to prepare Dover for a future of climate uncertainty while improving the quality of life for all residents.

One of the key elements of this commitment is the Citywide Resilience Plan, launched in 2023. This plan defines Dover's approach to confronting climate-related challenges through collaborative governance, local innovation, and sustainable land use. The plan also supports the core goals of the City Council and highlights the integral role that land use decisions play in energy transition, ecosystem preservation, food security, and infrastructure planning. Key partners in this work include the Planning and Community Development Department, Planning Board, Conservation Commission, Energy Commission, and Open Lands Committee.

## Flooding, Equity, and Adaptation

Dover's vulnerability to climate hazards—especially flooding—is well documented in the 2018 Climate Adaptation Master Plan. The low-lying areas along the Bellamy, Piscataqua, and Cochecho Rivers, as well as Little Bay, which are particularly at risk were also identified in the 2025 Conservation and Open Space Chapter as priority lands for hazard mitigation. These and other areas in the city that are most likely to be impacted by climate change may result in disproportionate impacts on vulnerable populations including the elderly, disabled, and historically marginalized communities. Land use strategies that address these risks align with six guiding principles from the NH Coastal Risk and Hazards Commission (CRHC), emphasizing early action, coordinated planning, risk-informed design, and no-regrets solutions that deliver multiple community benefits. There are also financial benefits to being more resilient to natural hazards. The 2019 Natural Hazard Mitigation Saves Report produced by the National Institute of Building Sciences (NIBS), in collaboration with the Federal Emergency Management Agency (FEMA), determined that every \$1 spent on mitigation saves \$6 on future disaster losses.

#### **Energy Resilience and Emissions Reduction**

Dover is a founding member of the Community Power Coalition of New Hampshire, and as of October 2024, Dover Community Power has provided over 91,500 megawatt-hours of energy with

estimated customer savings of more than \$2 million. While recent rate shifts have narrowed the price gap with traditional utilities, the program remains a cornerstone of Dover's transition to a more resilient and independent energy future. Other related efforts include the establishment of Commercial Property Assessed Clean Energy (C-PACE) financing to support clean energy retrofits in commercial buildings; a planned solar array at the wastewater treatment plant that could save the City up to \$16.4 million over 25 years; and a second 1.5 MW solar project now advancing through city review processes.

## Local Food Systems and Urban Agriculture

Land use policies also directly impact the resilience of Dover's food systems. The Resilience Plan promotes establishing community gardens, practicing urban agriculture, and supporting food waste reduction strategies that enhance food security and reduce environmental impacts. Highlights of this work include:

- Dover Community Garden: A resident-driven initiative that promotes healthy eating and local food access.
- Municipal composting: A program operated in partnership with Mr. Fox Composting, which diverts organic waste and supports soil health.
- Zoning recommendations: To support urban agriculture, farmers' markets, and composting operations in more parts of the city.

Dover is also eligible to pursue grant funding through the Resilient Food Systems Infrastructure (RFSI) Program, which could support new infrastructure investments for food processing, storage, and distribution.

#### **Greening Urban Land and Forest Management**

Undeveloped parcels and healthy ecosystems are also central to climate resilience. Dover's urban forests filter air and water, reduce the heat island effect, and buffer storm impacts. As a Tree City USA community, Dover has embraced urban forestry through annual tree planting goals with a target of a 10% increase in canopy cover over the next decade. Implementing new strategies for invasive species management are also important to address habitat degradation. Ongoing community education initiatives and partnerships are also essential to encouraging stewardship and engaging residents in forest conservation efforts across the city.

Land use regulations will increasingly need to balance growth with habitat preservation and ecosystem function, ensuring that Dover's green infrastructure remains a fundamental component of the built environment.

#### A Resilient Tomorrow

Dover's path to resilience is guided by science, equity, and a long-term vision for sustainability. Through land use planning that promotes renewable energy, green infrastructure, and communityscale food and mobility systems, the city is laying the groundwork for a climate-ready future that works for everyone. Resilience is not only about preparing for what is next—it is about creating lasting value and shared prosperity through the way we shape and use our land today. It is also about the relationships and sense of community that are built in the process

To accomplish this Distinctly Dover, the city's recently adopted vision for 2035, prioritizes the creation of "resilient and environmentally focused infrastructure" that supports:

- Resilience plan goals and reducing long-term costs through climate adaptation, watershed management, and environmentally focused utilities.
- Renewable energy and innovation, with widespread adoption of solar power, community solar for public facilities, and new development designed for energy efficiency and future technologies like Electric Vehicle charging.
- Environmental stewardship and regeneration, including reducing solid waste and plastics, integrating nature-based infrastructure like stormwater infiltration and street trees, and responsibly managing the Cochecho River's ecological and cultural value.
- Land use planning, emergency response plans, and facilities that position the city as a regional hub for climate resilience and potential climate migration.