



Nugget Theaters in Downtown Hanover

Fostering Inclusive Economic Resilience

4

We will work to build a more resilient, sustainable, and diverse economy for our region with emphasis on ensuring equitable access to economic resources and opportunity. The economy of our future will be resilient to future shocks and stresses and be consistent with our renewable energy vision.

GOALS:

- 4-1. Hanover will be a place where business owners want to locate and where their businesses will thrive.
- 4-2. The nexus of property tax, housing and transportation costs, and income will be balanced to assure sustainable living.
- 4-3. The diverse economy will support many types of lifestyles and needs.
- 4-4. Hanover will prosper in the regional economy.
- 4-5. The local labor force will meet the needs of employers.
- 4-6. Economic centers will continue to be located in the water and sewer service area; residences will accommodate people working from home, business start-ups, and traditional home occupations.

- 4-7. The Town's economic resiliency policies and regulations will foster a stable and sustainable economy.
- 4-8. The Town's economy-supporting infrastructure will be enhanced.
- 4-9. Hanover will achieve a circular, low carbon economy, focusing on material selection, source reduction, and material reuse, with recycling as a last resort.
- 4-10. Hanover will support the development of jobs and businesses that align with the principles of a Green Economy.

Introduction

Hanover is a participant in an economic system that is international in scope and functions regionally to provide goods, services, and jobs to the town's residents. Hanover's economy is the product of centuries of free market decisions, which have resulted in a relatively stable mix of employment primarily in educational services, health care and scientific and technical services set within a regional labor market.

As we learned during the COVID-19 pandemic, a healthy economy must be a resilient economy, one that can adapt to local and national situations to keep businesses open and residents employed. In addition to economic resilience, desirable economic activities are those that contribute to sustainable goals to reduce carbon pollution, enhance energy and resource efficiency, and protect ecosystem services. Further, rather than continuing to contribute to a global economy of unsustainable material consumption, emphasis is shifting to a "zero waste" mentality wherein choices are made with the goal that all buildings, products, and materials are renovated, refurbished, reused, and recycled or composted.

The Town has no control over how businesses are run, which businesses locate in Hanover, or where its residents work. So, much of this chapter is focused on concrete measures the Town can take to foster inclusive economic resiliency without negative impacts to the town's character and natural resource base. More details about the economy are contained in [Appendix D](#).

Goal 4-1: Hanover will be a place where business owners want to locate and where their businesses will thrive.

Take a look around Hanover and consider the variety of businesses located here. While Hanover's downtown and adjacent Dartmouth College campus may be what first come to mind, the businesses along Great Hollow Road, Buck Road, Route 120, and Lyme Road and in Etna Village contribute significantly to Hanover's economic engine. Other businesses and employment take place in residences all over town.

In developing ways to support business owners, the Town must account for this range of employment situations. A person working at home may need fast and reliable internet and convenient, affordable childcare; an employer on Great Hollow Road might need well-maintained roads as well as water and sewer service; downtown retail and service providers rely on the Town for a wider range of services, such as public parking, sidewalk amenities, and pedestrian activated crossing signals.

Communication is key. The Town Manager attends a monthly gathering of downtown business owners. This Downtown Hanover Working Group provides current and potential business owners with direct access to the Town Manager so that the Town can be responsive to business owners' needs. In this way, the Town can address specific important issues, such as maintaining a streetscape that is inviting for downtown visitors.

Business owners outside downtown are not as well supported locally as those in downtown. The Upper Valley Business Alliance offers a suite of resources and services, such as marketing and outreach, but cannot respond in the way the Town can to individual requests.

Advance Transit operates free bus service on weekdays until 9 PM and Saturdays until 5:30 PM. Advance Transit and other public transportation providers are important to both shoppers and employees. Public transportation and carpooling reduce traffic congestion, improve air quality, and relieve the reliance on a fixed supply of parking spaces.

Land use regulations apply equally to all property owners. The Town is always available to assist with explaining these rules and providing guidance through the development and improvement process.

By focusing business activity in specific areas of town, a more complete bundle of services can be made available to support businesses, their clientele, and employees. Moreover, the distinctive needs of different types of businesses, e.g., research and manufacturing businesses compared to retail, office and service-oriented businesses, has resulted in different zoning districts established to accommodate those businesses.



Creare Engineering Research and Development founded in 1961

Zoning allows for more densely developed housing near the services most often needed by people. Continuing to focus residential density in the water and sewer service area allows people to walk, bike, or use public transit to access businesses and provides a ready market for the goods and services the businesses offer.

Goal 4-1: Supporting Strategies¹

- ▶ **Strategy 4-1.1:** Continue to convene current and potential business owners and address their concerns.
- ▶ **Strategy 4-1.2:** Support Advance Transit and other transit providers and their expansion into longer periods of service.
- ▶ **Strategy 4-1.3:** Encourage shopping locally because of the direct benefits to the local economy.
- ▶ **Strategy 4-1.4:** Assist business owners in navigating the permitting process to get established and expand their businesses.
- ▶ **Strategy 4-1.5:** Locate housing in and near economic centers with walkable accessible connections to enable car-free shopping and commuting.

Goal 4-1: Performance Metrics

- ▶ Initiatives generated by Downtown Working Group
- ▶ Hours and days of Advance Transit service

¹ Strategies accompanied by an icon are those that enable greenhouse gas emissions reduction.

- Number of new housing units within a 5-minute walk of an Advance Transit stop or within a 15-minute walk of the borders of the Business (B), Downtown (D), Office and Laboratory (OL), and Service Business and Limited Manufacturing (BM) zoning districts

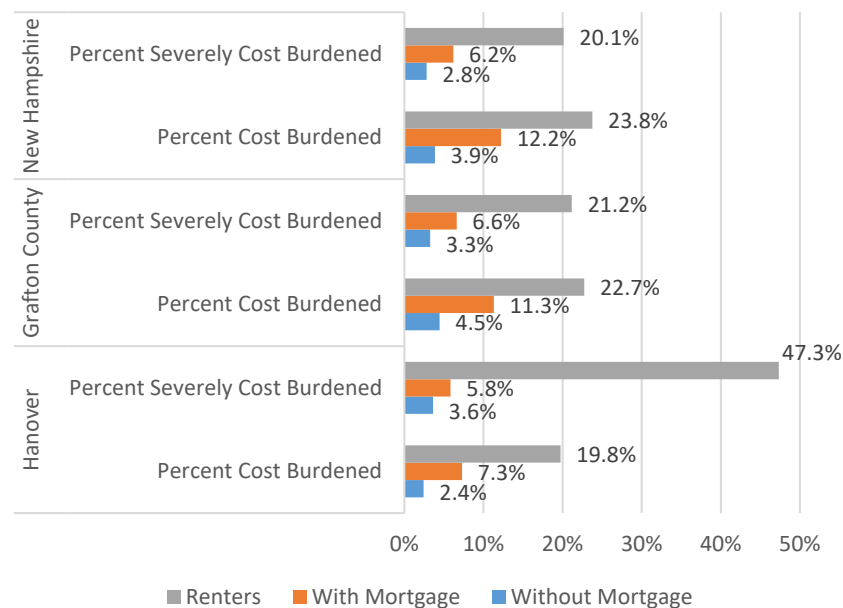
Goal 4-2: The nexus of property tax, housing and transportation costs, and income will be balanced to assure sustainable living.

The future is not sustainable if a diverse group of people cannot afford to live in Hanover, populate its workplaces, and patronize its businesses. For many reasons (see [Chapter 3, Expanding Housing Opportunity](#)), housing and rents in Hanover are among the most expensive in the state and Upper Valley. The rental situation is especially bleak with extremely high percentages of renters in Hanover finding themselves cost burdened (i.e., households paying more than 30 percent of their income for housing) or severely cost-burdened (i.e., households paying more than 50 percent of their income for housing) (see [Figure 4-1](#)).

Finding ways to encourage homes to be built, the Town can help augment the supply of homes; however, only by intervening in the market can the Town assure that housing costs are affordable. Thus, the Town will continue to work with regional housing trusts to see that workforce and [affordable housing](#) is produced in Hanover.

The median income of Hanover residents is eighth highest in the state, comparable to towns in the southern tier of the state. Lyme is ranked 15th and Lebanon 141st. Even so, there are many households that are cost-burdened (see [Figure 4-1](#)) and people who live in poverty.

Figure 4-1: Cost-Burdened Households as Percent of Total



Source: 2016-2020 American Community Survey.

One potential explanation for the higher percentage of cost-burdened households in Hanover could be the town's large higher education student population, residents with limited incomes. Data from the 2021 American Community Survey show that the incidence of poverty is greatest, 32 percent, for the 18-34 age group. In 2021, 13 percent of Hanover residents were deemed to be in poverty. Of these, roughly 67 percent are part of our resident population aged 18 to 34. Additional research into who and why 1 in 10 people in Hanover live in poverty is needed.

The people in Hanover have some control over the property taxes in that they vote each year to approve the school and town budgets, nearly 90 percent of their tax bill. In any year, the portion of property tax levied in Hanover is mostly school tax, 62 percent. The Town portion of the tax bill is about 29 percent. County taxes make up the remainder. While Hanover's tax rate is consistently lower than any of the surrounding towns, total property taxes paid reflect the relatively high assessed values of homes in the town, contributing to the cost of living.

The mix of land uses in town creates a tax base with some properties generating more revenue than the costs to provide services to that property. Typically, properties with school-aged children require more tax revenue to support their needs than properties without school-aged children. The tax burden is spread between owners of residences and of businesses and institutions. Between 2017 and 2021, the ratio of residential property value to business/institutional property value has been between 2.6 and 3.4 with the median at 3.2. To remain affordable to residents, this ratio must be maintained to keep the tax burden distributed. Also, the payments in lieu of taxes received from owners of tax-exempt property must be kept up to date with the costs of providing municipal services to offset such costs.

Transportation expenses also add to cost of living. As estimated by the Center for Neighborhood Technology's H + T Index, Hanover's households pay between 22 percent and 35 percent for transportation costs, more than the typical 15 percent of a household's income. The Center includes the costs to own and maintain a vehicle and of gasoline (at \$3.50 per gallon for this estimate). This additional element of cost of living highlights the importance of reducing auto-dependence, promoting non-automotive modes of transportation and proximity of residence to workplace for a sustainable economy.

Goal 4-2: Supporting Strategies

- ▶ **Strategy 4-2.1:** Review land use regulations to assure a mix of land uses and housing types can be developed so that there is a large enough non-residential tax base to support municipal facility and service expenses.

Goal 4-2: Performance Metrics

- ▶ Number of people below the poverty level
- ▶ Percent of owners and renters cost burdened by housing expenses
- ▶ Annual assessment of the [full value tax rate](#)
- ▶ Analysis of groups in poverty
- ▶ Ratio of residential to business/institutional property values

Goal 4-3: The diverse economy will support many types of lifestyles and needs.

Employment opportunities offered by a variety of business types appeal to a diverse range of people bringing with them different needs. The mix of commercial tenants in the downtown is limited due to the high rents that property owners must charge in order to pay their property taxes and keep up with labor and material costs. These high rents drive business start-ups and lower margin retail sales to other communities necessitating shopping trips out of town for many goods and services. The more local the business, the more money stays in the community, a positive contribution to a greener economy.

Assisting business start-ups enables the Town to have an influence on tenant mix. Hanover can also enrich the quality of the downtown experience by instituting art and performance events to draw in clientele to benefit local businesses.

Dartmouth College and its graduate school programs could be key players in stimulating new business development and retaining graduates to join the Upper Valley labor force. The University of New Hampshire has established the “55% Initiative” in collaboration with employers across the state with the goal of 55 percent of their graduates launching their careers in New Hampshire. The Dartmouth Regional Technology Center is a nonprofit economic development incubator located just south of Hanover. It offers start-up businesses laboratory and office space with flexible lease terms, as well as access to shared resources like meeting space.

Just as the Town has made Appalachian Trail hikers feel especially welcome, accommodating visitors by creating opportunities for water-based sports, pop up events, walking tours of the downtown and Dartmouth campus, and easy access to open space lands, enriches the experience. Public infrastructure and downtown businesses should be welcoming and accessible to accommodate people of different abilities.

Goal 4-3: Supporting Strategies

- ▶ **Strategy 4-3.1:** Work with commercial property owners to recruit a variety of tenants with an emphasis on locally-owned businesses providing goods and services.
- ▶ **Strategy 4-3.2:** Create a fund to assist start-up businesses which provide jobs and diversify the business types in Hanover.

- ▶ **Strategy 4-3.3:** Utilize cultural offerings as a boost to local businesses.
- ▶ **Strategy 4-3.4:** Position Hanover as a destination for outdoor enthusiasts and visitors who want to experience the ambience of a small New England town.
- ▶ **Strategy 4-3.5:** Collaborate with educational partners to stimulate the development of business.
- ▶ **Strategy 4-3.6:** Implement [universal design](#) so the downtown is accessible and can accommodate everybody.

Goal 4-3: Performance Metrics

- ▶ Number of locally owned businesses
- ▶ Startup business fund
- ▶ Number of local business promotions tied to cultural events
- ▶ Number of “access for all” improvements

Hanover’s shape and character are significantly impacted by the presence of Dartmouth College, one of the largest employers in New Hampshire. Hanover’s status as a regional employment center is largely attributable to the presence of this institution. The College not only provides employment opportunities but also contributes significantly to the town’s tax base and is the top taxpayer in Hanover.

Goal 4-4: Hanover will prosper in the regional economy.

To stay competitive in the regional residential and commercial markets, Hanover must continue to make itself desirable for employers and employees alike. Outreach and marketing are important, but only if there are locations for new businesses and homes for their employees. It is critical for Hanover not to become a bedroom community, but to host a variety of businesses to sustain the tax base and provide convenient employment, as well as goods and services for its residents.

Goal 4-4: Supporting Strategies

- **Strategy 4-4.1:** Provide employment and business opportunities, office, service, cultural and retail offerings, and housing options for Hanover and Upper Valley workers.
- **Strategy 4-4.2:** Link residents to jobs via ride share, transit, and employment support services.
- **Strategy 4-4.3:** Invest in organizations that strengthen Hanover businesses.



Goal 4-4: Performance Metrics

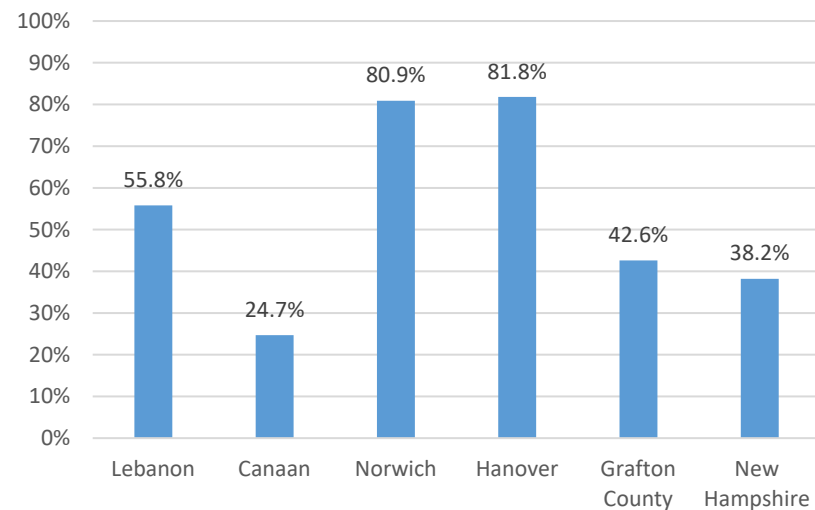
- Town backing for business-supporting organizations

Goal 4-5: The local labor force will meet the needs of employers.

Across New Hampshire, even before the COVID-19 pandemic, employees were in short supply. This situation continues and has influenced the ability of many businesses and institutions to resume pre-pandemic business levels or to attempt to expand.

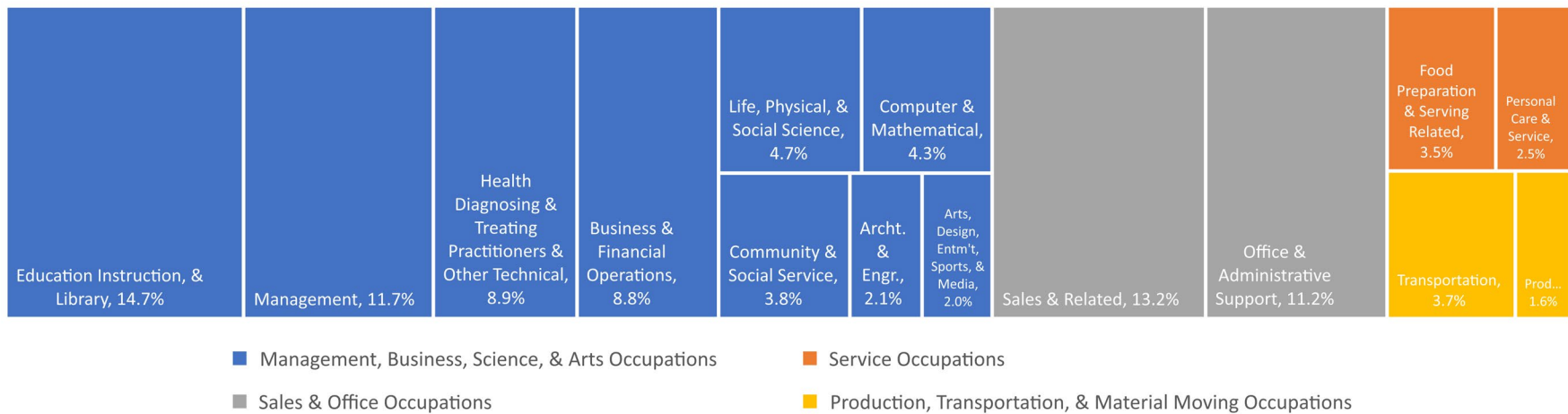
In 2021, nearly 8,200 people were employed in Hanover. With a resident labor force of 4,817 people, even if everyone who lives in town worked in town, there would be a 40 percent labor shortfall. Hanover has a low unemployment rate (1.1 percent, April 2023). The US Bureau of Labor Statistics reports that in May 2023, there are over twice the number of job openings in the state than there are available workers.

Figure 4-2: Percent of Population Holding a Bachelor's Degree or Higher



Source: American Community Survey, 2016-2020

Figure 4-3: Hanover Resident Labor Force Occupations



Source: Data USA

The first step the Town can take to address this situation is to create housing at all price points, but especially [workforce housing](#). To grow the labor force, the labor force must be housed. As the number of residents increases, the schools and service agencies must prepare to welcome people of all backgrounds to the community, particularly as climate migrants are expected.

Hanover residents as a group are highly educated (81.8 percent held a bachelor's degree or higher) (see [Figure 4-2](#)). This rate is higher than that for the County (43.6 percent) and the State (38.2 percent). However, not every employer requires an employee to have attained a bachelor's degree. This highlights a possible mismatch between labor force and employer needs.

By sector, Hanover's workers are primarily employed in educational services (48.7 percent), health care and social assistance (11.3 percent)

and professional, scientific, and technical services (10 percent). Another way of looking at employment amongst the Hanover labor force is by reviewing occupations as shown in [Figure 4-3](#). Each of the following categories claim over 10 percent of the Hanover labor force: Education Instruction & Library Occupations (14.7 percent), Sales & Related Occupations (13.2 percent), and Office & Administrative Support Occupations (11.2 percent).

Goal 4-5: Supporting Strategies

- ▶ **Strategy 4-5.1:** Publicize job counseling, education, and training opportunities.
- ▶ **Strategy 4-5.2:** Support a diverse housing stock to provide homes for employees of all types of businesses.



- **Strategy 4-5.3:** Welcome people of all backgrounds and provide services for them to integrate into the community.

Goal 4-5: Performance Metrics

- Initiatives to welcome new residents
- By economic sector, percent of people who live in Hanover compared to those who work in Hanover

Goal 4-6: Economic centers will continue to be located in the water and sewer service area; residences will accommodate people working from home, business start-ups, and traditional home occupations.

Hanover's zoning districts accommodate a few different types of economic centers, all served by water and sewer (see [Figure 4-4](#)). The Zoning Ordinance regulates much of the business activity in town:

- Home occupations are accessory uses of residences. The Zoning Ordinance allows a great deal of flexibility with what activities might be considered home occupations by just prescribing performance standards such as limits on vehicle trips, parking, signage and exterior displays and storage.
- Bed and breakfasts are allowed by special exception in the Single Residence (SR) and Rural Residence (RR) districts on 3 acre lots.

- Childcare is permitted in almost every zoning district.
- By generalizing the types of businesses that may wish to locate downtown, the Zoning Ordinance is crafted to be inclusive in terms of goods and services that can be offered.
- Drive-in establishments are contradictory to the desired pedestrian-oriented and interactive character of the downtown, so are only allowed in one zoning district.

Goal 4-6: Supporting Strategies



- **Strategy 4-6.1:** Ensure that a range of business uses are accommodated by the zoning districts in order to provide goods and services to satisfy a diverse clientele and jobs appropriate for workers with a variety of skills.



- **Strategy 4-6.2:** Facilitate provision of reliable high-speed internet to every home.



- **Strategy 4-6.3:** Assure that landscape-based businesses can be located in the rural areas.

Goal 4-6: Performance Metrics

- Service area of reliable high-speed Internet

Source: Town of Hanover, CAI Technologies - AxisGIS





Hypertherm pioneered plasma cutting

Goal 4-7: The Town's economic resiliency policies and regulations will foster a stable and sustainable economy.

Parking requirements limit some business creation and expansion, and therefore, such requirements should be evaluated as to whether they are too stringent or even necessary. Having a ready market of customers who live within walking distance of a business speaks to the desirability of increased residential density close to the business areas and of mixed residential and commercial development.

Commercial affordability is dependent on the rents set by the property owner. Since vacant storefronts in both downtown and Lyme Road are

not unusual, the Town might help by developing a program to support new businesses for the first year, especially for those that fit the Green Economy profile (discussed later in this chapter).

Working with the Upper Valley Business Alliance, Hanover's online presence could be broadened with links to the Town website. In this way, commercial real estate vacancies and key development opportunity sites can be highlighted.



South Main Street

The Downtown Hanover Working Group should be replicated as a roundtable for all businesses and institutions in the town to ensure that needs are identified and addressed.

Goal 4-7: Supporting Strategies



- **Strategy 4-7.1:** Reconsider zoning requirements for parking to facilitate business and mixed-use development.
- **Strategy 4-7.2:** Implement incentives to target commercial affordability and small business growth.
- **Strategy 4-7.3:** Enhance the Town's online presence and availability of marketing materials that promote its assets and resources to visitors, future residents, and investors.
- **Strategy 4-7.4:** Develop and maintain a list of key development opportunity sites and market these sites in a manner that is consistent with the town's vision for its future economy.

Goal 4-7: Performance Metrics

- Modification of zoning requirements for parking
- List of key development sites

Goal 4-8: The Town's economy-supporting infrastructure will be enhanced.

Without the appropriate supporting infrastructure, resiliency in the economic system is not possible. The Town is proactive in its planning

for upgrades of the municipal water and sewer systems within the service area of the southwest corner of town.

Of note, the Town's site plan regulations put forth stormwater management standards that regulate removal rates for pollutants of concern (e.g., Total Suspended Solids, nitrogen, and phosphorous) and ensuring that post-development peak flow rates do not exceed pre-development peak flow rates. Wherever possible, the Town encourages low-impact development and the implementation of green infrastructure working with nature to protect against flooding, improve air, and water quality.

While Hanover will not experience the same flooding and storm surge concerns as coastal New Hampshire, riverine flooding and intense, frequent storms pose a significant threat to both the stormwater and sewer infrastructure. Adapting infrastructure for increased flood risk can minimize future losses and impacts to Hanover's economic assets and activities. Per New Hampshire guidelines, if the design time period of new infrastructure is 2014–2050, designs should incorporate extreme precipitation intensities based on the most recent precipitation data. If the design period is 2051–2100, infrastructure should be designed to handle a 15 percent increase in precipitation.²

Communications including high-speed Internet have not been a function of Town government. Hanover could learn from the success in other communities, such as in Lyme, a town with very low residential density, where the fiber optic service area was extended to every residence with a private, community-funded effort.

² *Preparing New Hampshire for Projected Storm Surge, Sea-Level Rise, and Extreme Precipitation.* New Hampshire Coastal Risk And Hazards Commission, November 2016. <https://www.nh.gov/dot/climate-change/documents/2016-crhc-final-report.pdf>

Sustainable Hanover can be proactive in assisting businesses in transitioning to renewable energy. Further, as energy demand shifts from fossil fuel-based vehicles and equipment to electrified alternatives, the reliance on the electrical grid increases. Planning should occur with the three major energy providers, Eversource, Liberty Utilities, and NH Electric Cooperative, to ensure that their distribution systems are adequate for the anticipated increases in electrical demand in Hanover. Undergrounding utility lines is a way to avoid power interruptions. Home generators and battery storage are becoming necessary appliances in residences as storms are more severe and electrical outages are more widespread. Few businesses have these redundant systems.

As simple as it sounds, some businesses are not accessible to people with disabilities, be it visual, mobility, or some other impairment. A new special exception to apply to commercial sites to achieve accessibility should be added to the Zoning Ordinance.

Goal 4-8: Supporting Strategies

- ▶ **Strategy 4-8.1:** Consider expanding the Town's water and sewer infrastructure in a manner aligned with the community's desired future development patterns.



- ▶ **Strategy 4-8.2:** Improve access and reliability of high-speed Internet to support at-home work and education.



- ▶ **Strategy 4-8.3:** Continue to facilitate renewable energy procurement options for businesses.



- ▶ **Strategy 4-8.4:** Evaluate the capacity and resiliency of the electrical grid serving Hanover's major economic centers and assess whether this system is sufficient to meet increased demand. Plan accordingly for capacity upgrades and to improve the resilience of this service.
- ▶ **Strategy 4-8.5:** Provide a mechanism for zoning relief to make commercial space more universally accessible.

Goal 4-8: Performance Metrics

- ▶ Capacity and resiliency report on electrical system
- ▶ Implementation of recommendations for the electrical grid
- ▶ Zoning modification to provide relief to enable accessibility improvements to commercial space

Goal 4-9: Hanover will achieve a circular, low carbon economy, focusing on material selection, source reduction, and material reuse, with recycling as a last resort.

Led by the Selectboard and Sustainable Hanover, initiatives are possible to get a better understanding of waste generation so that a Zero Waste Plan can be implemented to reduce landfill-bound waste to 10 percent or less.

Goal 4-9: Supporting Strategies



- **Strategy 4-9.1:** On an ongoing basis, determine the total weight of waste by stream that is generated from Town facilities and track the Town's rate of diversion from landfills.



- **Strategy 4-9.2:** Prepare and adopt a Zero Waste Plan to enable the Town to reuse, recycle, and compost at least 90 percent of its solid waste.



- **Strategy 4-9.3:** Repair, reuse, exchange, or repurpose products, and donate useful but unwanted goods.



- **Strategy 4-9.4:** Implement a reusable take-out container program.



- **Strategy 4-9.5:** Implement targeted material limits or bans (e.g., single-use plastic, polystyrene).



- **Strategy 4-9.6:** Establish a municipal environmentally preferable purchasing policy that encourages or requires buying products that are energy efficient and otherwise environmentally responsible (e.g., recycled material content, sustainably harvested, low embodied carbon, etc.).

Goal 4-9: Performance Metrics

- Waste stream analysis for municipal operations
- Zero Waste Plan
- Initiation of a reusable take-out container program
- Ban on single-use plastics

Principles of A Green Economy

The Wellbeing Principle

All individuals may generate and enjoy prosperity thanks to the green economy.

The Justice Principle

Equity between generations and within them is encouraged by the green economy.

The Planetary Boundaries Principle

The green economy safeguards, restores, and invests in nature.

The Efficiency and Sufficiency Principle

The goal of the green economy is to promote sustainable production and consumption.

The Good Governance Principle

Institutions that are incorporated, accountable, and strong serve as the green economy's compass.

Source: Principles, Priorities, and Pathways for Inclusive Green Economies, UN High Level Forum Sustainable Development, 2019.

Goal 4-10: Hanover will support the development of jobs and businesses that align with the principles of a Green Economy.

Hanover can work with other communities in the region and the Upper Valley Business Alliance to position the regional economy as a participant in the Green Economy. Efforts must be made to ensure that a well-trained labor force is ready to populate green workplaces. Two Town initiatives could support recycling. Currently, curb side recycling is only available to residences. Encouraging businesses to recycle would help reduce the waste generated in town. So that visitors throw away less, recycling receptacles should be added to the downtown streetscape.

Residents make the economy greener by buying local and when given a choice, selecting B corporation businesses – for profit companies that are certified for their social and environmental performance. Both Hypertherm and Boloco are B corporations. More B corporations should be encouraged to locate in Hanover.

Subscribing to a community- supported agriculture program offered by a local farm is a great way to make weekly vegetable purchases and to support local agriculture. Some farms also offer eggs, flowers, meat, and dairy products. Keeping farmers in our community is the best way to conserve a working landscape and continue reaping the benefits of productive soils.

Goal 4-10: Supporting Strategies



► **Strategy 4-10.1:** Engage partners in the development of a green jobs training program that addresses the needs of the town and/or Upper Valley Region.



► **Strategy 4-10.2:** Create incentives to attract green industries and businesses to locate within Hanover to further promote a green local economy.



► **Strategy 4-10.3:** Support local farms and green economy businesses.



► **Strategy 4-10.4:** Assess the current system of curbside and Zero Sort recycling and compare to alternatives

Goal 4-10. Performance Metrics

- Identify a green jobs training program
- Annually track the number of green jobs
- Number of downtown recycling containers and volume diverted from landfill

HANOVER
SUSTAINABILITY
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