

# Norwich Housing Strategy 2020-2024

Approved November 21, 2019  
Norwich Planning Commission

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This document is based on a draft developed by the Affordable Housing Subcommittee of the Norwich Planning Commission in 2019:

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## Summary

This document describes the housing strategy for the town of Norwich for the five-year period beginning January 1, 2020 and ending December 31, 2024. The strategy articulates the town's interest in this important issue and provides guidance to town officials on how to advance the town's housing objectives.

This strategy has been adopted by the Norwich Planning Commission based on a draft developed by the Affordable Housing Subcommittee. It was informed by input from a series of Affordable Housing Listening Sessions, an Affordable Housing Education Series, town surveys, stakeholders, and the Selectboard. Its adoption fulfills an action item specified in Norwich's 2018 town plan.

To achieve the three core housing objectives of affordability, diversity, and environmental sustainability, this document outlines a series of action items to advance four strategies:

1. Encourage the development of dedicated affordable housing;
2. Facilitate the development of lower-cost housing types;
3. Reduce barriers to the development of new housing; and
4. Expand public understanding of housing issues.

To facilitate tracking of the town's progress in achieving its goals, the strategy has identified the following numeric goals for the five-year period of 2020 - 2024:

- Construct at least 10 Accessory Dwelling Units;
- Construct at least 10 units of "missing middle" housing (duplexes, triplexes, etc.); and
- Construct at least 25 units of dedicated affordable housing

These goals will be revisited from time to time to ensure they remain relevant and appropriate.

## Background

Housing affordability is on the minds of many Norwich residents. Families that have lived here for decades or even generations express nostalgia for the greater economic diversity that once characterized the town. Newer arrivals know what a scramble it was to put an offer in for the one suitable house that came on the market or respond to the one listserv post advertising a rental with enough bedrooms. And the school community understands how climbing housing costs threaten families' ability to remain in Norwich and keep others out of Norwich altogether. A more robust, dynamic housing market – serving a range of housing needs and income levels – is essential to the sustainability and vibrancy of the town.

The Norwich Selectboard has identified housing affordability as a high priority for the town, as did a majority of the town in a 2018 town survey. To inform the strategy, the subcommittee sought out broad public input during subcommittee meetings and in five affordable housing listening sessions:

- Two of the sessions (on May 5 and May 10, 2018) were public meetings, held at Marion Cross Elementary School and Tracy Hall
- Two of the sessions involved joining previously planned meetings of the Norwich Business Roundtable (January 12, 2018) and Energy Committee (February 27, 2018).
- The fifth session was hosted by the Congregational Church on April 15, 2018.

The roundtables helped identify topics for a speaker series on affordable housing held in the fall of 2018, which in turn informed the development of this strategy. The speaker series included sessions on Government funding of Affordable Housing (August 7, 2018), Developing Housing by the Private Sector (September 17, 2018), and Alternative Septic Systems to Facilitate Affordable Housing (October 22, 2018)

The planning commission held a public meeting on September 12, 2019 to consider input on this draft strategy before it was finalized, followed by a publicly-advertised teleconference on October 8, 2019.

### Objectives

Through this housing strategy, the town seeks to advance the following objectives:

- **Affordability** -- Ensure that people of all incomes can find quality housing they can afford in Norwich.
- **Diversity** – Increase the diversity of the housing stock so that it includes a range of housing types suitable for people of different incomes and backgrounds and at different stages of their life. Increased numbers of both rental and for-sale homes are needed in Norwich. Among other needs, housing efforts should support:
  - **Older adults who wish to age in place** in a safe and energy-efficient home as well as those who want or need a communal living environment.
  - **Families with children** who are in the market for rental housing or homeownership.
  - **The town workforce**, including teachers, police, and other employees of the town.
- **Environmental sustainability** – Reduce energy use and greenhouse gas emissions by increasing housing in areas served by public transit and with easy access to employment and retail centers, as well as through the use of green building materials and practices.

Some housing plans or strategies provide strict definitions of affordable housing, sometimes distinguishing between “affordable” and “workforce” housing, and breaking out the population that cannot afford market-rate into a number of different segments, such as low-income, very low-income,

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and extremely low-income. While definitions are necessary to implement specific policies, in this broad housing strategy document, the town prefers to focus on the full spectrum of housing needs. The strategies proposed in this document are designed to encourage the development of housing at a range of different price points to meet the needs of people with a range of different incomes. The ultimate goal is to ensure that people of all incomes can find housing they can afford in Norwich.

### Housing Needs

Very few homes come on the market in Norwich every year, and those that do tend to sell for prices that far exceed what the typical household in Windsor County can afford. In 2018, just 35 single family homes were sold (to be used as either primary or secondary residences), and the median value for those homes was \$649,000. This price was a sharp jump from the medians in 2015 (\$480,000), 2016 (\$431,000), and 2017 (\$500,000),<sup>1</sup> but even the 2015-2017 levels were largely unaffordable to the typical household in the region. As shown in Figure 1, only about a quarter of the homes sold in Norwich over the past five years – and no more than one-third in any given year – sold at levels affordable to a family at the median income for Windsor County.<sup>2</sup> Since older homes in Norwich are often upgraded at the time of sale, these home sale data provide a more realistic yardstick of the affordability of home purchases than Norwich’s Grand List, which is based on current property values.

While the cost of entering the town through homeownership is high, the cost of remaining a homeowner is also high. Much of the housing stock is aging (55 percent of units were built in 1970 or before), with implications for septic systems, weatherization and heating, and general maintenance that can present tough choices for households struggling with mortgage payments (31% of homeowners in Norwich with a mortgage spend 30% or greater of their household income on housing).<sup>3</sup>

Rental housing in Norwich is more affordable than for-sale housing, with an estimated 43 percent of units renting for less than \$1,000 per month (including utilities). Rental housing in Norwich is still more expensive than in Windsor County, however, where an estimated 59 percent of units rent

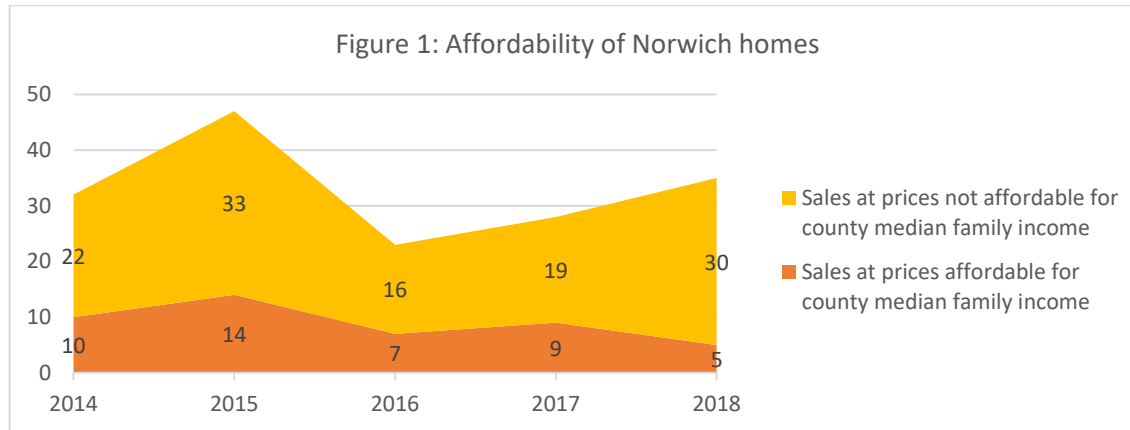
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<sup>1</sup> These statistics do not include property sold as open land, and they do not include condominiums or mobile homes. In other areas, these other forms of homeownership may be significant components of the housing stock, but they are not in Norwich. In the period 2014-2018, just 9 condominium units sold, and zero mobile homes sold.

<sup>2</sup> Income data are from five-year averages of American Community Survey data, inflated to the end year, accessed using <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> on May 30, 2019. The American Community Survey is an annual survey administered by the U.S. Census Department and is a replacement for the long form previously administered every ten years. The most recently available American Community Survey data as of July 1, 2019 are for the 2013-2017 period. Homeownership affordability calculations assume a family can afford to spend 30% of monthly income on mortgage payments, a 30-year fixed-rate mortgage at 4.5%, and down payments of 10% of purchase price. County income estimates are not available yet for 2018 from the American Community Survey, so the 2017 figure has been adjusted for inflation for 2018. To illustrate the methodology, in 2017, the median family income in Windsor County was \$74,662, which under the assumptions specified here would allow for the purchase of a home of about \$409,316.

<sup>3</sup> 2013-2017 American Community Survey, accessed on June 25, 2019, [https://factfinder.census.gov/bkmt/table/1.0/en/ACS/17\\_5YR/DP04/0600000US5002752900](https://factfinder.census.gov/bkmt/table/1.0/en/ACS/17_5YR/DP04/0600000US5002752900).

for this level. Moreover, only about one in five (21.3 percent) households in Norwich are renters, which means that most households who wish to live in Norwich will need to purchase a home. Renters make up a modestly higher share of occupied households (28.3 percent) in the County.<sup>4</sup>



According to the 2013-2017 American Community Survey, an estimated 16.5 percent of the 3,341 individuals in Norwich are 65 years of age or older. This is up from 11.0 percent as of the 2000 census, tracking a broader U.S. trend toward the aging of the population.<sup>5</sup>

For additional background on housing in Norwich, see the Housing Chapter of the 2020 Town Plan.

### Strategies

Over the five-year period from 2020 to 2024, the town will work to advance its housing objectives through four strategies:

1. Encourage the development of dedicated affordable housing;
2. Facilitate the development of lower-cost housing types;
3. Reduce barriers to the development of new housing; and
4. Expand public understanding of housing issues.

<sup>4</sup> 2013-2017 American Community Survey Tables B-25063 (Gross Rent) and DP-04 (Selected Housing Characteristics), accessed using <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> on June 23, 2019. Tables

<sup>5</sup> 2013-2017 American Community Survey Table DP-05 (Demographics and Housing Estimates) and 2000 Census Table DP-1 (Profile of General Demographic Characteristics), accessed using <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> on June 23, 2019.

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This section provides a brief overview of these four strategies. The next sections specify the action items the town will undertake to advance each of these strategies.

### Overview

There are two main ways to increase housing affordability. The first is to expand the stock of housing that is reserved over the long-term for people with low or moderate incomes. These homes are known as “dedicated affordable housing” because they come with legal covenants that regulate the rent or sales prices of the units in order to ensure they are and remain affordable over time, even as the rents and sales prices of market-rate units increase. Norwich currently has two developments that provide dedicated affordable housing: Norwich Senior Housing, a 24-unit development of rental homes for seniors in the village center and Starlake, a 14-unit development of for-sale homes kept affordable over time through a “shared equity” arrangement.<sup>6</sup> The first of Norwich’s four housing strategies focuses on encouraging the development of more homes that provide dedicated affordable housing.

The second way to expand housing affordability is to increase the overall supply of housing, and in particular the supply of lower-cost housing types, such as duplexes, triplexes, and multifamily housing developments. The second and third of Norwich’s four strategies focus on these approaches.

To make these efforts possible, Norwich land owners and the region’s housing developers need to be aware of the town’s interests in developing a diverse and affordable housing stock as well as the incentives Norwich provides to encourage this outcome. The fourth and final strategy focuses on expanding public understanding of housing issues.

### Strategy #1. Encourage the development of dedicated affordable housing

The most common approach for developing dedicated affordable housing is to use subsidies provided by the federal or state government. In Vermont, most housing subsidies are obtained by nonprofit housing developers through applications to the state (most notably, for an allocation of federal Low-Income Housing Tax Credits). Municipalities may also apply for grants from the state, which typically are used to supplement the larger subsidies that nonprofits obtain. Another way to create dedicated affordable housing is to require that a share of newly developed housing units be provided at a price or rent that is affordable for a certain income level, or to create incentives for this outcome.

Norwich’s strategy focuses on both of these approaches. Specifically, Norwich will do the following to encourage the development of dedicated affordable housing:

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<sup>6</sup> In “shared equity” housing, a for-sale home is kept affordable to future buyers through provisions specifying for the sharing of home price appreciation. Typically, upon sale, a portion of the appreciation is retained by the owner while the balance stays in the home to keep it affordable to subsequent homebuyers.

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**A. Formalize and grow the affordable housing revolving fund.** In November 2018, Norwich voters approved the re-instatement of Norwich’s \$45,000 revolving fund for housing<sup>7</sup>, which had lapsed. The town encourages applications for use of the funds to produce dedicated affordable housing under the terms approved by the Norwich Selectboard on April 24, 2019. While the fund amount is modest, it provides a tangible signal to developers that the town is interested in the development of dedicated affordable housing. In addition to maintaining and administering this fund, the town will conduct outreach to advise developers of its availability and to solicit contributions from private citizens to grow the fund. To donate to the fund, contact the town planner at [planner@norwich.vt.us](mailto:planner@norwich.vt.us).

**B. Review Norwich’s density bonus.** A density bonus allows a property owner to develop more homes or housing units on a particular parcel than would otherwise be permitted. Norwich’s Zoning Code provides a density bonus of 25 percent (i.e., ten units instead of eight) for planned developments in which at least 20 percent but less than half of the units are affordable, and a density bonus of 50 percent (i.e., twelve units instead of eight) for developments in which at least half of the units are affordable. (A larger bonus applies to the Village Residential II district). To date, this provision has not been used. During the period covered by this housing strategy, the Planning Commission and its Affordable Housing Subcommittee will review the town’s density bonus policy to determine whether and if so how it should be adjusted to increase the likelihood that it is used to produce dedicated affordable housing. The town will also conduct outreach to advise owners and developers of its availability.

**C. Consider whether developments of a certain size should be required to include affordable units.** For such requirements to be effective, they need to be structured in a way that does not undermine the financial feasibility of new development. Therefore, they are typically adopted in conjunction with density bonuses or other provisions that make development more financially feasible. In addition, they generally only apply to developments over a certain size, such as 10 or 15 units. The current version of the regional plan for the Two Rivers Ottauquechee Regional Commission requires that a share of homes in developments of 10 or more units be affordable, but does not provide specific details on how this requirement can be satisfied. During the period covered by this housing strategy, the Planning Commission and Affordable Housing Subcommittee will consider whether Norwich should adopt its own affordable housing requirement and how best to implement the provision of the regional plan, should it be included in the final adopted plan.

**D. Investigate the use of land owned or controlled by the town of Norwich for dedicated affordable housing.** The high cost of land is widely understood to be a key obstacle to the development of dedicated affordable housing in Norwich. Accordingly, the town will investigate whether and to what extent land owned or controlled by the town might be used for this purpose. The town will develop an inventory of all publicly owned land in Norwich, including land owned by the town as well as by the Norwich Fire District, Dresden School District and any other governmental bodies. The town will also explore the mechanisms by which it could make land available for the development of affordable homes.

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<sup>7</sup> Specifically, a majority of voters answered “yes” to this question: “Shall the voters of the Town of Norwich re-establish a revolving Affordable Housing Reserve Fund with previously appropriated funds approved by Norwich voters to be distributed and administered according to a process adopted by the Selectboard in consultation with the Town Manager, the Norwich Planning Commission, and the Affordable Housing Subcommittee?”



**E. Encourage the donation of land for dedicated affordable housing.** The town encourages residents to donate suitable parcels, either vacant or with homes, for use as affordable housing. Property sales at below-market levels can also help facilitate the development of affordable homes, as the reduced cost of acquisition can be passed along to buyers or renters. In some cases, such donations can be made as part of an effort to preserve open space – for example, housing units may be clustered in one section of a larger parcel. To explore donating or selling land at a below-market-price for purposes of developing dedicated affordable housing, contact the town planner at [planner@norwich.vt.us](mailto:planner@norwich.vt.us).

**F. Conduct outreach to encourage developers of affordable homes to focus on Norwich.** The development of dedicated affordable housing will require an organization or business to assemble the land, apply for public subsidies, identify and manage the construction of the development, and operate the development as affordable housing. The town will conduct outreach to encourage developers to develop affordable homes in Norwich.

#### Strategy #2: Facilitate the development of lower-cost housing types

The overwhelming majority of structures in Norwich are single-family homes. These homes provide a considerable amount of privacy, but tend to rent or sell at levels higher than other forms of housing, such as duplexes, triplexes or multifamily housing. These alternative housing types typically rent or sell at levels that fall below that of single-family homes but above that of dedicated affordable housing. While the town is not a developer and cannot construct these types of lower-cost housing directly, there are a number of steps it can take to promote their development.

To facilitate the development of lower-cost housing types, the town will do the following:

**A. Facilitate the creation of Accessory Dwelling Units.** Accessory Dwelling Units (or ADUs) are housing units located on the same parcel as a principal unit. Familiar names for ADUs include “granny flats” and “in-law suites.” An ADU may take the form of an apartment in or over a garage, barn or other outbuilding. Vermont state law requires municipalities to allow ADUs, and Norwich’s zoning rules expressly permit them. When not used to house a relative, ADUs are often rented out to members of the public. Because they tend to be small, ADUs often rent for levels below that of other rental homes, providing a source of lower-cost housing and increasing the stock of rental housing. ADUs also provide a stream of revenue to their owners, which can help defray the costs of property taxes and building maintenance.

There is no list of ADUs currently being rented or available for rent within Norwich. It is likely, however, that the number of ADUs can be increased. To help promote the development of ADUs, the Affordable Housing Subcommittee will work to educate residents about ADUs and the process for obtaining financing and contractor services to make an ADU possible. The Subcommittee will also investigate the potential barriers to the development of ADUs and consider how they could be addressed by town action.

**B. Facilitate the creation of duplexes, triplexes and other “missing middle housing.”** Missing middle housing is a term for the many different forms of housing that fall in between single-family housing and mid-rise construction.<sup>8</sup> These include, among other housing types, duplexes, triplexes, quadraplexes, town homes, and garden style apartments. Historically, these housing types were included within the mix of housing in many towns

<sup>8</sup> More information on the concept of missing middle housing may be found here: <https://missingmiddlehousing.com/>.

around the U.S., but in recent decades, housing construction has tended to focus either on single-family development or (in larger communities) larger multifamily structures. Duplexes are already permitted on all parcels in Norwich, but this may not be well understood by property owners and developers. The Planning Commission will examine the town’s zoning code to determine whether there might be opportunities for zoning changes that facilitate the development of triplexes, quadraplexes and other missing middle housing types. And it will conduct outreach to educate property owners and developers about these housing options.

**C. Ensure that zoning rules permit the development of multifamily housing.** Multifamily housing is an important part of the housing stock in all communities, including Norwich. Multifamily housing is an important source of rental housing and tends to rent or sell at lower levels than single-family housing. It can also be useful for meeting the services needs of older adults and persons with disabilities who prefer a congregate living environment. Under Vermont state law, all municipalities must ensure the town’s bylaws “designate appropriate districts and reasonable regulations for multiunit or multifamily dwellings” and not have the effect of excluding multiunit or multifamily dwellings from the municipality (24 V.S.A. § 4412). Norwich’s zoning code already permits the development of multifamily housing in all zoning districts. The town will increase efforts to educate residents and potential partners that this is the case.

### Strategy #3. Reduce barriers to new development

The Upper Valley has a shortage of housing units, which has led to low vacancy rates and rising rents and home prices. While the high demand for housing in Norwich means that most new development in Norwich will likely continue to be fairly expensive, new development in Norwich may free up spaces in older homes that rent or sell at prices that are affordable to more people. New development in Norwich also helps to expand the supply of housing in the Upper Valley, which is important for improving housing affordability in the region.

The town will work to reduce barriers to new development by doing the following:

**A. Reduce the cost of developing new housing.** The Planning Commission will take a number of steps to investigate options for reducing the cost of developing new housing, including: (a) considering whether there might be appropriate areas in town in which to increase the allowable density<sup>9</sup> and (b) inviting input from the public, the Development Review Board, and from area developers on whether there are changes the town should consider to the regulations governing new development that might reduce development costs without undermining the objectives underlying these regulations.

**B. Consider how to address barriers to development related to limitations on septic capacity.** Many sites in Norwich have limited septic capacity due to their underlying geology. This can make development difficult at the densities needed for new projects to be financial feasible. One option to address this limited capacity is to take advantage of shared septic systems, including alternative systems that allow more people to be served. Norwich has already held a forum on alternative septic systems and will take further steps during the period covered by this strategy to educate property owners and developers about the available options.

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<sup>9</sup> The allowable density in a zone determines how many housing units can be built on a given parcel. It applies to all housing that is developed, and not just to housing that includes dedicated affordable housing. By contrast, the affordable housing density bonus increases density only for properties that include affordable homes.

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While alternative systems can be helpful, they will not be sufficient to meet the wastewater needs of many of the properties that are needed to advance the town's housing objectives. Therefore, in consultation with the Dresden School District, area businesses and other stakeholders, the Planning Commission will re-examine the feasibility of providing community wastewater service to the village and adjacent areas, updating an investigation of this issue completed in 2005 and make recommendations to the Selectboard.

#### Strategy #4 Expand public understanding of housing issues

Increased public understanding of Norwich's housing challenges and planned approach for meeting them is important for building support for this housing strategy and dispelling misperceptions that may arise. Increased understanding of Norwich's goals and housing policies by developers and residents is also important for ensuring that the different participants in the housing market are aware of the available opportunities to take action to increase the diversity of Norwich's housing stock, such as developing more affordable homes or adding an ADU.

To advance this strategy, Norwich will:

- A. **Make it easier for developers and the public to understand Norwich's zoning rules and affordable housing policies.** Publication of this housing strategy as a stand-alone document will help to improve understanding of Norwich's housing objectives and policies. In addition, the affordable housing subcommittee will prepare a series of educational materials related to different aspects of Norwich's housing strategy, including a guide to creating an ADU and a guide for developers underscoring Norwich's interest in a diverse and affordable housing stock that meets the needs of people of different incomes, older adults, families and others, and the policy options available for facilitating this outcome. The materials will also reference Norwich's interests in promoting sustainability through energy-efficient building practices and the prioritization of development locations close to retail and job centers. The subcommittee will also conduct personal outreach to area developers to make them aware of these materials and encourage them to develop a diverse mix of housing in Norwich.
- B. **Develop educational materials that address frequently asked questions about affordable housing in Norwich.** Participants in the September 12, 2019 public session identified a number of questions they would like to see addressed in these educational materials, including the following: How do we define affordability in the Norwich and regional context? What stops us from building affordable housing? Is it true that septic and other infrastructure needs represent the most problematic barrier? Are there sufficient builders in the area who could or would take on projects that address affordability? What is the menu of legal mechanisms that can preserve housing affordability over the long-term? How do you ensure that those who are in affordable housing eventually have the means to move on, either in Norwich or elsewhere? What could affordable housing in Norwich look like, in terms of building design and scale, given today's practices and known constraints?
- C. **Increase public understanding of how new development will affect town and school property taxes.** To reduce confusion about the implications of new development for property taxes in Norwich, the affordable housing subcommittee will produce educational materials on this topic. Among other points, these materials will highlight the fact that most of the property taxes paid by Norwich residents are for school taxes, rather than municipal taxes; for example, in FY 2018, approximately 77% of the property taxes paid by Norwich residents went for school taxes, rather than

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municipal taxes.<sup>10</sup> The materials will also highlight the unique formula in Vermont for setting school property taxes in which the school property tax rate is based on the level of per-pupil spending. Under this formula, decreases in per-pupil spending lead to a reduction in the property tax rate while increases in per-pupil spending lead to an increase in the property tax rate. As a result, increases in the number of children in the school can actually lead to reductions in property taxes by allowing the school district to amortize fixed expenses over a larger student body. The relationship between the school population and the education tax rate is not perfectly linear, since some increases can require the addition of new teachers, but in general, a larger student body helps to keep school taxes from rising, and may even allow taxes to be reduced, so long as the physical limits of the Marion Cross building are not reached. With enrollment at Marion Cross below capacity and projected to decline, the capacity limits of the building are not expected to be reached any time soon.

- D. **Investigate models for improving public understanding of the housing stock.** The subcommittee will also seek to learn about successful models implemented elsewhere for improving public understanding of the housing stock and housing issues generally. In particular, the subcommittee is interested in policy options – such as rental registries – that can help increase knowledge of the town’s rental market and encourage all owners of residential rental property to provide safe and well-maintained homes for their tenants. Such learning will be shared with the Planning Commission for consideration as future actions.
- E. **Undertake research to better understand the town’s housing challenges and how best to address them.** Among other issues, the subcommittee will:
- a. Research the current status and potential impact of short-term rentals and consider whether to recommend the adoption of a town policy on this issue.
  - b. Research the needs of owners of manufactured housing or mobile homes (that predate HUD building codes) in Norwich and explore options for supporting rehabilitation and/or replacement.
  - c. Compile information on new building techniques (e.g. tiny homes) and materials that could lower the costs of homeownership and make housing in Norwich more environmentally sustainable and make the results available to builders, developers and others in the housing industry.

Encourage participation in community conversations around housing from groups that are less well represented, such as low-income families and renters generally. The more inclusive the town’s conversations about housing, the more complete and informative they will be. It is important to hear from as many segments of the Norwich population as possible as well as from individuals who would like to live in Norwich but cannot afford to do so.

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<sup>10</sup> Norwich Annual Report for Fiscal Year 2018.

## Goals

Specific, measurable goals are an important part of any strategy as they help ensure that progress can be measured and a determination made of whether the strategy is on track. For the five-year period of 2020 – 2024, Norwich’s housing goals are as follows:

## Outputs

- Complete the policy actions specified in this strategy
- Complete the educational materials and outreach specified in this strategy

## Outcomes

- Construct at least 10 Accessory Dwelling Units;
- Construct at least 10 units of “missing middle” housing (duplexes, triplexes, etc.); and
- Construct at least 25 units of dedicated affordable housing

These goals will be revisited from time to time to ensure they remain relevant and appropriate.

## Discussion

These goals are informed by a number of factors, including the 2018 town survey and the practical realities associated with developing housing in Norwich.

In the 2018 survey, a majority (56 percent) of respondents identified affordable housing as a high (or the highest) priority for the use of tax dollars, but a majority (53 percent) also expressed a desire to see the population remain relatively stable, as opposed to “grow[ing] some” (42 percent). When asked how many units of affordable housing should be built in the next five years, the top two responses were 8-16 units (22 percent) and 17-25 units (22 percent), followed by 26-100 units (16 percent) and 8 units or less (12 percent). 11 percent said no units of affordable housing should be built, while 4 percent said 100 or more units should be built and 12 percent were not sure.

These survey results, together with the strong vote in favor of restoring funding for the housing trust fund, confirm the town’s desire to make progress in expanding the affordability of housing. At the same time, the results suggest a desire for incremental rather than transformative change. While annual housing development in Norwich in the 2005-2007 period ranged from 14 to 18 units per year, fewer than 10 units a year have been developed since that time. Achieving the goals specified in this Plan would likely mean restoring development in Norwich to the development level seen in the 2005-2007 period, or perhaps slightly higher, but would not take Norwich back to the level of development seen in the 1990s, when Norwich’s population grew by 15 percent, or in the 1980s, when the population grew by 29 percent.

According to a local developer of affordable housing, the economics of developing housing with low-income housing tax credits in Vermont means that a project in Norwich would generally need to have around 25-30 units to be viable. While more difficult, it may also be possible to combine somewhat

smaller developments into a single “project.” The goal for the five-year period is to complete at least one development providing at least 25 units of dedicated affordable housing.

The goals for ADUs and missing middle housing have been set at modest levels that reflect the challenges associated with developing housing in Norwich and the limited options available to the town for facilitating it.

During the September 12, 2019 public session, some of the participants felt the goals were ambitious but achievable during the five-year life of the strategy, while others felt they would be difficult to achieve within this time frame as it will take time for the actions specified in the plan to be implemented. In other venues, some residents have advocated for bolder goals to help address a larger share of the regional need. While acknowledging that the achievement of these goals will require concerted action on the part of the affordable housing subcommittee and other town officials and committees, the planning commission believes the goals are appropriate for marking the achievement of meaningful progress during the 2020-2024 period.

#### Conclusion

There is a significant need for a more diverse housing stock in Norwich that includes housing options affordable to people of all incomes and promotes environmental sustainability through energy-efficient construction and the location of housing near job and retail centers. Implementation of this Housing Strategy will help the town make progress towards achieving these goals.

## Municipal Template - Energy Data

The following is an explanation of the information displayed in the Municipal Template for Norwich.

The intent of the Municipal Template is to provide the municipality with data that can be used to ensure compliance with the requirements of Act 174 and “Enhanced Energy Planning” (24 V.S.A. 4352). The spreadsheet contains data that estimates current energy use and provides targets for future energy use across all sectors (transportation, heating, and electricity). It also sets a target for renewable energy generation within the municipality.

This data is meant to be a starting point for the municipality to begin planning its energy future and to talk about the changes that may need to occur within the municipality to ensure that local, regional and state energy goals are met. This includes the goal that 90% of all energy demand be met by renewable sources by 2050.

Estimates of current energy use consist primarily of data available from the American Community Survey (ACS), the Vermont Agency of Transportation (VTrans), the Vermont Department of Labor (DOL), and the Vermont Department of Public Service (DPS). Targets for future energy use are reliant upon the Long-range Energy Alternatives Planning (LEAP) analysis for the region completed the Vermont Energy Investment Corporation (VEIC). Targets for future energy generation have come from the regional planning commission and DPS. Targets for both future energy use and energy generation have been generally developed using a “top down” method of disaggregating regional data to the municipal level. This should be kept in mind when reviewing the template. It is certainly possible to develop “bottom up” data. For those municipalities interested in that approach, please see the Department of Public Service’s Analysis and Targets Guidance.

There are some shortcomings and limitations associated the data used in the Municipal Template. For instance, assumptions used to create the LEAP analysis are slightly different than assumptions used to calculate current municipal energy use. Regardless, the targets established here show the direction in which change needs to occur to meet local, regional and state energy goals. It is important to remember that the targets established by LEAP represents only on way to achieve energy goals. There may several other similar pathways that a municipality may choose to take in order to meet the 90x50 goal.

### Figure 1 - Data Sources

American Community Survey (ACS)  
Vermont Department of Labor (DOL)  
Vermont Department of Public Service (DPS)  
Energy Information Administration (EIA)  
Efficiency Vermont (EVT)  
Long-range Energy Alternatives Planning (LEAP)  
Vermont Energy Investment Corporation (VEIC)  
Vermont Agency of Transportation (VTRANS)



Below is a worksheet by worksheet explanation of the Municipal Template spreadsheet:

## 1. Municipal Summary

The Municipal Summary worksheet summarizes all data that is required to be in the Municipal Plan if the plan is to meet the “determination” standards established by the Vermont Department of Public Service.

### 1A. Current Municipal Transportation Energy Use

Transportation Data	Municipal Data
Total # of Vehicles (ACS 2011-2015)	2,258
Average Miles per Vehicle (VTrans)	11,356
Total Miles Traveled	25,641,848
Realized MPG (VTrans)	18.6
Total Gallons Use per Year	1,378,594
Transportation BTUs (Billion)	166
Average Cost per Gallon of Gasoline (RPC)	2
Gasoline Cost per Year	3,184,552

This table uses data from the American Community Survey (ACS) and Vermont Agency of Transportation (VTrans) to calculate current transportation energy use and energy costs.

### 1B. Current Municipal Residential Heating Energy Use

Fuel Source	Municipal Households (ACS 2011-2015)	Municipal % of Households	Municipal BTU's	Municipal BTU (in Billions)
Natural Gas	69	5.1%	6,606,900,000	7
Propane	243	18.0%	26,523,600,000	27
Electricity	61	4.5%	5,494,800,000	5
Fuel Oil	713	52.9%	79,729,500,000	80
Coal	14	1.0%	1,680,000,000	2
Wood	227	16.8%	25,566,900,000	26
Solar	0	0.0%	0	0
Other	11	0.8%	1,320,000,000	1
No Fuel	11	0.8%	762,300,000	1
<b>Total</b>	<b>1349</b>	<b>100.0%</b>	<b>147,684,000,000</b>	<b>148</b>

This table displays data from the ACS that estimates current municipal residential heating energy use.

### 1C. Current Municipal Commercial Energy Use

	Commercial Establishments in Municipality (VT DOL)	Estimated Thermal Energy BTUs per Commercial Establishment (in Billions) (VDPS)	Estimated Thermal Energy BTUs by Commercial Establishments in Municipality (in Billions)
Municipal Commercial Energy Use	111	0.725	80

The table uses data available from the Vermont Department of Labor (VT DOL) and the Vermont Department of Public Service (DPS) to estimate current municipal commercial establishment energy use in the municipality.

### 1D. Current Electricity Use \*

Use Sector	Current Electricity Use
Residential (kWh)	11,791,614
Commercial and Industrial (kWh)	3,865,801
Total (kWh)	15,657,415

\*This table displays the current electricity use as of 2016 within the municipality with data from Efficiency Vermont's customer information and monthly usage.

### 1E. Residential Thermal Efficiency Targets

	2025	2035	2050
Residential - Increased Efficiency and Conservation (% of municipal households to be weatherized)	33%	67%	100%

This table displays targets for thermal efficiency for residential structures based on a methodology developed by DPS using data available from the regional Long-range Energy Alternatives Planning (LEAP) analysis and ACS. The data in this table represents the percentage of municipal households that will need to be weatherized in the target years.

### 1F. Commercial Thermal Efficiency Targets

	2025	2035	2050
Commercial - Increased Efficiency and Conservation (% of commercial establishments to be weatherized)	6%	9%	18%

This table shows the same information as Table 1E, but sets a target for commercial thermal efficiency. Information from the VT DOL is required to complete this target.



### 1G. Thermal Fuel Switching Targets (Residential and Commercial) - Wood Systems

	2025	2035	2050
New Efficient Wood Heat Systems (in units)	0	0	0

This target was calculated using data from LEAP and ACS. This table provides a target for new wood heating systems for residential and commercial structures in the municipality for each target year. Due to the LEAP model forecasting a large decrease in wood use resulting in a negative number of targets we have put zero in for this section. Towns are encouraged to use efficient wood heat.

### 1H. Thermal Fuel Switching Targets (Residential and Commercial) - Heat Pumps

	2025	2035	2050
New Heat Pumps (in units)	137	363	761

This table provides a target for new heat pump systems for residential and commercial structures in the municipality for each target year. This target was calculated using data from LEAP and ACS.

### 1I. Electricity Efficiency Targets

	2025	2035	2050
Increase Efficiency and Conservation	-0.6%	5.7%	9.9%

Data in this table displays a target for increased electricity efficiency and conservation during the target years. These targets were developed using regional LEAP analysis. Towns are encouraged to consider increased efficiency targets.

### 1J. Use of Renewables - Transportation

	2025	2035	2050
Renewable Energy Use - Transportation	9.6%	23.1%	90.3%

This data displays targets for the percentage of transportation energy use coming from renewable sources during each target year. This data was developed using the LEAP analysis.

### 1K. Use of Renewables - Heating

	2025	2035	2050
Renewable Energy Use - Heating	51.3%	63.4%	92.2%

This data displays targets for the percentage of heating energy use coming from renewable sources during each target year. This data was developed using information from the LEAP analysis.

### 1L. Use of Renewables - Electricity

	2050
Renewable Energy Use - Electricity (MWh)	19,167- 23,426

This data displays the target for electricity generation coming from renewable sources within the municipality for 2050. This data was developed using information from the regional planning commission and DPS. This data is the same as the data in Table 1Q.

### 1M. Transportation Fuel Switching Target - Electric Vehicles

	2025	2035	2050
Electric Vehicles	209	1482	3083

This tables displays a target for switching from fossil fuel based vehicles (gasoline and diesel) to electric vehicles. This target is calculated on Worksheet 2 by using LEAP and ACS data.

### 1N. Transportation Fuel Switching Target - Biodiesel Vehicles

	2025	2035	2050
Biodiesel Vehicles	368	692	1168

This tables displays a target for switching from fossil fuel based vehicles to biodiesel-powered vehicles. This target is calculated on Worksheet 2. by using LEAP and ACS data.

## 1O. Existing Renewable Generation

Renewable Type	MW	MWh
Solar	0.615	754
Wind	0.00	0
Hydro	0.00	0
Biomass	0.00	0
Other	0.00	0
<b>Total Existing Generation</b>	<b>0.615</b>	<b>754</b>

Table 1O shows existing renewable generation in the municipality as of Sept. 2016, in MW and MWh, based on information available from the Vermont Department of Public Service.

## 1P. Renewable Generation Potential

Renewable Type	MW	MWh
Rooftop Solar	2	2,335
Ground-mounted Solar	793	972,075
Wind	250	766,500
Hydro	0	151
Biomass and Methane	0	0
Other	0	0
<b>Total Renewable Generation Potential</b>	<b>1,045</b>	<b>1,741,061</b>

Renewable generation potential is based on mapping completed by the regional planning commission that is based on the Municipal Determination Standards and associated guidance documents developed by DPS. The renewable generation potential is expressed in MW and MWh by the type of renewable resource (solar, commercial wind, hydro, etc.).

## 1Q. Renewable Generation Target

	2050
Total Renewable Generation Target (in MWh)	19,167- 23,426

Renewable generation target for municipalities was developed by the town's population percentage within the region.

## 1R. Sufficient Land

	Y/N
Renewable Sources	Y
Surplus of Generation	8075%

This table shows whether or not there is sufficient land in the municipality to meet the renewable generation targets based on the renewable generation potential in the municipality.

PC Outreach and Research Effort by Date, Individual(s), Organizations, and PC member(s)/staff involved

Date	Name(s)	Organization(s)	chapter(s)	Outreach type	PC members	Location
4/11	Nancy LaRowe	Vital Communities	Economic Development	Subject matter interview	Allen	
4/12	Cheryl Lindberg, Charles Taylor, Jill and Joe Lavin, plus 5 others	Norwich Business Council	Economic Development	Subject matter interview	Allen	
4/17	Allison Colburn and Sara Kobylenski	Child Care Center in Norwich	Facilities and Services	Subject matter interview	Loeb, Thoms	
4/18	Bob Haynes	Green Mountain Economic Development Corp	Transportation	Subject matter interview	Lubell	
4/18	Andrew Winter	Twin Pines Housing Trust	Housing	Subject matter interview	Loeb	
4/23	Herb Durfee	Town Manager	Facilities and Services	Subject matter interview	Loeb, Thoms, Lubell	
4/23	Beth Hunstome	Consultant	Land Use	Subject matter interview	Brink, Ciccotelli	
4/25	Michael Goodrich	Fire District	Facilities and Services	Subject matter interview	Loeb, Thoms	
4/25	Douglas Kennedy	Consultant	Land Use	Subject matter interview	Brink, Ciccotelli	
4/26	Troy McBride	Energy Business	Energy	Subject matter interview	Horowitz, Brink	
4/29	Tom Candon and Lauren Rhim	Norwich School Board	Facilities and Services	Subject matter interview	Loeb, Allen	
5/1	Joan Goldstein and Josh Hanford	VT Dept. of Econ. Dev.	Housing	Subject matter interview	Loeb	
5/7	Berna Rexford	Four Seasons Southeby's Realty	Housing	Subject matter interview	Loeb, Romano	
5/7	Van Chestnut	Advance Transit	Transportation	Subject matter interview	Lubell	
5/8	Brie Swenson	Recreation Director	Facilities and Services	Subject matter interview	Loeb, Thoms	
5/10	Bill Hammond	MCS	Facilities and Services	Subject matter interview	Loeb, Thoms	

Date	Name(s)	Organization(s)	chapter(s)	Outreach type	PC members	Location
5/15	Tom Goins	DHMC	Housing	Subject matter interview	Loeb	
5/20	Brenda Torpy	Champlain Housing Trust	Housing	Subject matter interview	Loeb	
5/21	Conservation Commission/Layne	Norwich Conservation Commission	Land Use	Subject matter interview	Brink, Ciccotelli, Allen	
5/23	Peter Brink + NHPC	Norwich Historic Preservation Commission	Land Use	Subject matter interview	Allen, Ciccotelli	
5/23	Jolin Kish	Kish Consulting	Housing	Subject matter interview	Loeb	
5/30	Buff McLaughry	Four Seasons Southeby's Realty	Housing	Subject matter interview	Loeb, Romano	
5/31	Nancy Bloomfield	The Family Place	Facilities and Services	Subject matter interview	Loeb	
6/4	Mike Kiess and Tom Roberts	Vital Communities	Housing	Subject matter interview	Loeb	
6/13	Childcare forum for parents	Public	Facilities and Services	Public outreach	Thoms, Loeb, Romano, Allen	Tracy Hall meeting room
6/14	John Langhus	Norwich Solar Technologies	Energy	Subject matter interview	Brink, Allen	
6/18	Rob Adams	CEO Solaflect	Energy	Subject matter interview	Brink, Allen	
6/26	Lynne LaBombard	LaBombard Peterson Realty Group	Housing	Subject matter interview	Loeb, Romano	
7/2	Jennifer Fontaine	Haven	Housing	Subject matter interview	Loeb, Romano	
7/10	Economic Dev Roundtable	Public	Economic Development	Public outreach	Allen, Lubell	The Norwich Square
7/11	Lucinda Walker and Beth Reynolds	Norwich Public Library	Facilities and Services	Subject matter interview	Thoms, Loeb	
7/11	Facilitated Workshop 6:15-8pm	Public	Land Use Energy Transportation	Public outreach	Allen, Horwitz, Brink, Thoms, Francis	Tracy Hall meeting room

Date	Name(s)	Organization(s)	chapter(s)	Outreach type	PC members	Location
7/15	Conference Call 12-1pm	Public	Land Use Energy Transportation	Public outreach	Allen, Francis	Go to Meeting
8/1	Facilitated Workshop 6:15pm	Public	Land Use and Conservation	Public outreach	Allen, Brink, Francis	Tracy Hall meeting room
9/3	Conference Call 12-1pm	Public	Land Use and Conservation	Public outreach	Allen, Brink, Francis	Go to Meeting
9/12	Facilitated Workshop	Public	Housing Strategy	Public outreach	Loeb, Lubell, Allen, Romano, Francis	Tracy Hall meeting room
9/18	Tutorial 6:30-7:30pm	Public	Current Land Use Regs	Public outreach	Francis	Tracy Hall meeting room
10/3	Facilitated Workshop	Public	Land Use and Conservation	Public outreach	All, Francis	TBD
10/8	Conference Call 12-1pm	Public	Housing Strategy	Public outreach	Loeb, Lubell, Francis	Go to Meeting
10/15	Conference Call 12-1pm	Public	Land Use and Conservation	Public outreach	Allen, Francis	Go to Meeting
10/17	Repeopling Vermont	Public	Workshop with PC+Library	Public outreach	Brink, Allen, Romano, Francis	Norwich Library
11/7	Facilitated Workshop	Public	Future Land Use	Public outreach	Horowitz, Brink, Allen, Ciccotelli, Romano, Francis	Tracy Hall