Southeastern Connecticut Housing Needs Assessment 2018

Assessment of housing needs and regulatory environment for growth in southeastern Connecticut

SCCOG Southeastern Connecticut Council of Governments

SECHA Southeastern Connecticut Housing Alliance

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Executive Summary

This study was initiated to answer questions about the quantity and type of housing that will be needed by residents of southeastern Connecticut over the next 15 years. Existing conditions indicate that southeastern Connecticut is currently undersupplied with appropriate housing for its residents. Demographic and economic changes are expected that will further impact the amount and type of housing needed in the region. These changes provide an impetus for southeastern Connecticut's housing leaders to re-evaluate what type and quantity of new housing would best meet the region's existing and future needs.

- Continued decline in average household size as baby boomers age into retirement should mean that the need for housing will grow faster than population.
- As baby boomers age into retirement, they may respond by downsizing to homes within the region or relocate out of the region.
- Potential shift in housing preferences based on the preference of younger households for communities with more urban characteristics.
- Concern that anticipated hiring by General Dynamics Electric Boat will further exacerbate housing shortages.

Future Growth in Households: The number of households in the region is projected to increase by 7,200 between 2015 and 2030, or 6.3%. Unless otherwise noted, all data in this report is for the 22-municipality region served by the Southeastern Connecticut Council of Governments (SCCOG). The majority of household growth is expected in households headed by persons over the age of 65. This indicates a need for additional housing on the order of 500 units per year, a rate much lower than was achieved before and during the mid-2000s housing bubble.

The foundational data for this study's assessment of future household change and housing demand are population projections generated by the Connecticut State Data Center (CT SDC). The projections anticipate a rapid growth in the number of seniors aged 65+ as well as adults aged 25-44, as the large baby boomer and millennial generations shift into their next phase of life.

The expected increase in the number of senior households will not be due to new residents moving into the region but is instead an expected consequence of existing households aging, most staying in their current homes. Younger adults will be the ones more likely to form new households seeking out housing opportunities for the first time. Between 2015 and 2025, almost 23,000 new households will be formed by younger residents, offset by the loss of 18,000 older households. New housing construction is likely to target young, newly forming households and retirees wishing to stay in the region. Demand is likely to be especially high for lower-cost rental units as well as for single-level homes that can be adapted for handicapped-accessibility.

Projected Household Growth
By Age of Householder

Age	2015	2030	Change
<15	0	0	**0**
15-24	3,761	4,019	**258**
25-34	15,726	16,986	**1,260**
35-44	18,262	20,384	**2,122**
45-54	24,612	21,508	**(3,103)**
55-64	23,273	21,585	**(1,688)**
65-74	15,276	19,638	**4,363**
75-84	8,428	11,839	**3,411**
85+	4,224	4,782	**558**
	113,561	**120,742**	**7,180**

Existing Unmet Demand: Data on current housing conditions in southeastern Connecticut shows an unmet need for lower-cost and rental housing. Affordability challenges have increased for both owners and renters over the last fifteen years, with the share of renters who are cost-burdened growing from 32% in 2000 to 48% in 2015 and the share of cost-burdened homeowners increasing from 25% to 30%. Overall, about 29,000 low-income households in southeastern Connecticut live in housing they can't afford. This is one in four of all southeastern Connecticut households and 70% of all of the region's low-income households.

Characteristics of Future Households: Additional households in the region will be slightly more likely to rent than in the past. Of the almost 7,200 additional households, over half will be renters, higher than the current 35% of households in the region who rent. The increase in renters should have a negligible effect on the region's rental/homeownership rate.

The growth in young households and shift from middle-aged to senior households will increase the number of lower-income households by 2030. Rough projections state that over 4,000 of the 7,200 additional households will earn less than $50,000, the approximate threshold for a two-person household to qualify as "low-income" under most government housing programs. The growth in the number of low-income households will put pressure on an already unaffordable housing market for low-income households.

Young households are more likely to rent in their twenties, but home ownership rates climb quickly as individuals enter their thirties. The large size of the millennial generation has already made millennials the largest share of home buyers nationally. Homes that appeal to younger buyers will be affordable to workers just beginning their careers, while being located closer to employment and amenities than previous generations may have desired.

Seniors are projected to represent 19% of southeastern Connecticut's population by 2030 but 30% of all households. Most seniors want to stay in their homes as long as possible. Research conducted by the National Association of Realtors showed that the top three reasons cited by seniors 62-70 years old for purchasing a new home were to be closer to friends or family, the desire for a smaller home, and retirement. Seniors are also slightly more likely to purchase a condo, townhouse, or other alternative to the detached, single-family home than are younger home buyers. National housing researchers expect that increased disabilities among seniors will drive growth in remodeling as homeowners modify their homes to meet current needs.

Existing Regulatory Environment: A review of undeveloped land and regulations governing future land use shows considerable variety among the region's municipalities. All of the region's cities and towns allow construction of single-family housing, while fewer permit multi-family housing or have regulations in place to encourage the development of affordable housing. Lack of public sewer infrastructure limits new construction in many parts of the region.

Residential Uses Permitted in Areas With Vacant/Undeveloped Land

	Bozrah	Colchester	East Lyme	Franklin	Griswold	*Jewett City (B.)*	Groton (City)	Groton (Town)	Lebanon	Ledyard	Lisbon	Montville	New London	No. Stonington	Norwich	Preston	Salem	Sprague	Stonington	*Stonington (B.)*	Waterford	Windham
Vac. Areas with Sewer	n/a																n/a					
Single-Family		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓
Two-Family		✓	✓		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓			✓	✓	✓	✓
Multi-Family		✓				✓	✓	✓		✓		✓	✓		✓	✓		✓	✓	✓	✓	✓
Mixed-Use		✓	✓		✓	✓	✓	F				✓	✓		✓	✓		✓	✓	✓	✓	✓
Accessory Apartments		✓			R	✓		✓		R			✓		✓	✓		R	✓		✓	✓
Clustered Development		✓	✓		✓			✓		✓	✓	✓	✓		✓			✓	✓		✓	✓
Inclusionary (Affordable)		✓	✓									F	✓		✓							✓
Other (see town sections		✓						B			✓				✓			✓	✓		✓	✓

	Bozrah	Colchester	East Lyme	Franklin	Griswold	*Jewett City (B.)*	Groton (City)	Groton (Town)	Lebanon	Ledyard	Lisbon	Montville	New London	No. Stonington	Norwich	Preston	Salem	Sprague	Stonington	*Stonington (B.)*	Waterford	Windham
Vac. Areas without Sewer						n/a	n/a						n/a							n/a		
Single-Family	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓
Two-Family	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓		✓	✓		✓			
Multi-Family	✓								✓	✓				✓		✓	✓	✓				
Mixed-Use	✓		✓	✓	✓				✓	✓				✓		✓	✓	✓				✓
Accessory Apartments	R	✓			R			✓	✓	R				✓	✓	✓	✓	R	✓		✓	✓
Clustered Development		✓	✓		✓			✓	✓	✓	✓			✓	✓		✓	✓	✓		✓	✓
Inclusionary (Affordable)		✓										F		F	✓							
Other (see town sections)		✓									✓			✓	✓				✓		✓	

* Includes properties within ¼ mile of existing sewer systems.

Note: East Lyme, the Town of Groton, Montville, and Ledyard contain small areas with separate zoning powers. Those areas were not included in this assessment.

B: Density bonus awarded for affordable housing as part of mixed-use development in the MX floating zone.
R: Accessory apartments allowed for occupancy by relatives only.
F: Allowed with use of a floating zone (a floating zone does not exist on a map until an application is made for its use).

Recommendations: The profile of future regional housing need and review of existing land use regulations suggests that local land use plans and regulations should be re-evaluated to better meet the changing needs of the region's residents, and that additional actions by SCCOG and Southeastern Connecticut Housing Alliance (SECHA) can inform local communities and stakeholder organizations.

Communities should consider their capacity to accommodate and encourage lower-cost, multi-family housing that can serve low-income households, seniors looking to downsize, and young households establishing themselves locally. Potential actions include: forming local housing committees to lead community-wide conversations about housing goals and shepherd local actions; adopting plans of conservation and development and zoning regulations that accommodate a diversity of housing choices; and revising zoning regulations to allow and encourage lower-cost housing options and capitalize on the growth potential of areas served by utilities.

SECHA should continue its work publicizing successful affordable-housing development projects and initiatives and developing educational materials on ways to satisfy the regional need for quality affordable housing.

SCCOG should continue to develop guidance on issues concerning housing. Additional information regarding the fiscal impact of different types of housing development can help municipalities make decisions on local policies and regulations. SCCOG can also support coordinated planning to expand public sewer availability in the region to enable growth.

The projected housing need in this report *does not* include demand for housing from workers expected to move to the region for employment at General Dynamics Electric Boat, which has announced plans to hire up to 18,000 employees by 2030 to fill new positions and replace retirees. SCCOG and SECHA should work with Electric Boat to develop a strategy to meet the housing needs and preferences of these new employees and their families.

Ribbon-cutting at Spruce Meadows, Stonington, March 2017 (Mixed-Income Rentals). Source: SCCOG.

1. Study Context

This study is intended to provide guidance to the Southeastern Connecticut Housing Alliance (SECHA), the Southeastern Connecticut Council of Governments (SCCOG) and its 22 member municipalities, and policy makers state-wide as to the quantity and characteristics of new housing that would best serve households in southeastern Connecticut. The study provides estimates of future housing need through the year 2030, makes recommendations for new housing construction, provides analysis of the region's physical and regulatory capacity to accommodate new housing, and makes recommendations for regional and municipal actions.

Housing is the greatest recurring expense borne by a household. The U.S. Department of Housing and Urban Development (HUD) defines affordable housing as housing for which the rental or ownership costs, including taxes, insurance, and utilities, are no more than 30% of the occupying household's gross income.[1] In the SCCOG region, about 51% of renters and 30% of owners pay more than 30% of their income for housing and are considered to be "housing cost-burdened," a rate similar to the State of Connecticut and the nation.[2] The share of all households in the region who are cost-burdened rose from 25% in 2000 to an average of 37% from 2011 to 2015.[3] Renter-household burdens have increased the most, jumping from 32% of renters in 2000 to 51%. Affordability problems can be at least partially attributed to an under-supply of housing types affordable to cost-burdened households.

Looking forward, several factors suggest that the need for housing will grow faster than population, and that there may be a mismatch between future housing preferences and the existing housing inventory:

- Household sizes will continue to decline as baby boomers become empty nesters, meaning more homes will be needed for fewer people. The region will house fewer families with children and more one- and two-person households.
- Baby boomers may seek to downsize from large, single-family homes to lower-cost, lower-maintenance living arrangements.
- Nationally and locally, younger residents are putting off home ownership and seeking housing that is amenity-rich and close to urban centers.
- Connecticut has recovered slowly from the national "housing crisis."

This study is also an important first step in proactively planning to meet the housing needs of new residents attracted to the region by job growth at General Dynamics Electric Boat, one of the region's largest employers. With locations in Groton and New London, Electric Boat expects to accelerate hiring through 2030, hiring up to 18,000 workers at their sites in southeastern Connecticut and Quonset, RI. The majority of hiring will be to replace retirees.[4] Electric Boat recently announced that the company would hire around 1,200 employees in Groton and New London in 2018.[5]

Past Housing Studies

This study follows two previous housing needs assessments prepared by SCCOG in 2002 and 2004, which led to the creation the Southeastern Connecticut Housing Alliance.

Housing a Region in Transition: An Analysis of Housing Needs in Southeastern Connecticut, 2000-2005 (the "2002 study") examined how regional housing needs were affected by the construction of the region's two tribal casinos, Foxwoods and Mohegan Sun. The study used population projections from Connecticut Department of Transportation as a basis for calculating projected changes in households. Findings included:

- Limited supply of units, limited choice, and lack of affordability were issues in the region, but were more severe for rentals.
- New housing units were built between 1990 and 2000 at a rate of about 550 per year, mostly located in suburban and rural towns.
- 4,300 to 5,100 new housing units would be needed between 2000 and 2005 (about 1,000 per year).
- 1,500 to 1,800 new rental units would be needed between 2000 and 2005.
- Recommendation that 15% of new units constructed by 2005 be deed-restricted affordable (about 700 units).
- Overly restrictive land use regulations contributed to lack of housing supply.
- A regional response to affordability was needed; *suggested formation of SECHA.*

Analysis of Selected Data and Updated Forecasts of Housing Need for the Southeastern Connecticut Planning Region, 2000-2010 was an update to the 2002 study, completed in 2004. The analysis used population projections from the Connecticut Economic Resource Center and extended the study's forecast to 2010. The study found that:

- The rate of housing production had recently accelerated, and construction would likely meet predicted demand.
- New construction was expected to yield 5,000 units between 2000 and 2005.
- Production trends indicated a shortage of new rental housing. Public-sector involvement would be needed to stimulate rental-housing production.
- 5,200 and 8,000 new housing units would be needed between 2000 and 2010 (about 500-800 units per year).
- Even if production provided the needed number of new units, affordability would remain an issue.

SECHA was incorporated in 2006 to facilitate a regional approach to meeting housing needs. The 2002 and 2004 housing reports underestimated how much the region would grow in population, with the region adding 14,000 people between 2000 and 2010 instead of the predicted 11,000. Actual housing production from 2000-2010 exceeded the projected need (9,300 units produced vs. up to 8,000 predicted), but rental production lagged (2,600 new rental units), and presumably the additional population growth substantially increased overall need. Construction peaked in 2004 with 1,268 permitted units, but fell to 141 building permits issued in 2008. Permitting activity has recovered to 562 and 427 units permitted in 2014 and 2015.

Existing Conditions and Trends

Current Housing Inventory

Recent census estimates show that southeastern Connecticut contains roughly 124,000 housing units for 110,000 households (Table 1). Median home values range from $159,900 (Windham) to $326,600 (Stonington). Median home values in 14 of 19 towns were below the Connecticut median of $270,500. Median monthly gross rent ranges from $771 (Windham) to $1,528 (Franklin), and rents in most towns are higher than the state median of $1,075. Roughly 25% of the housing stock was built before 1940.[6]

Home Ownership and Renting

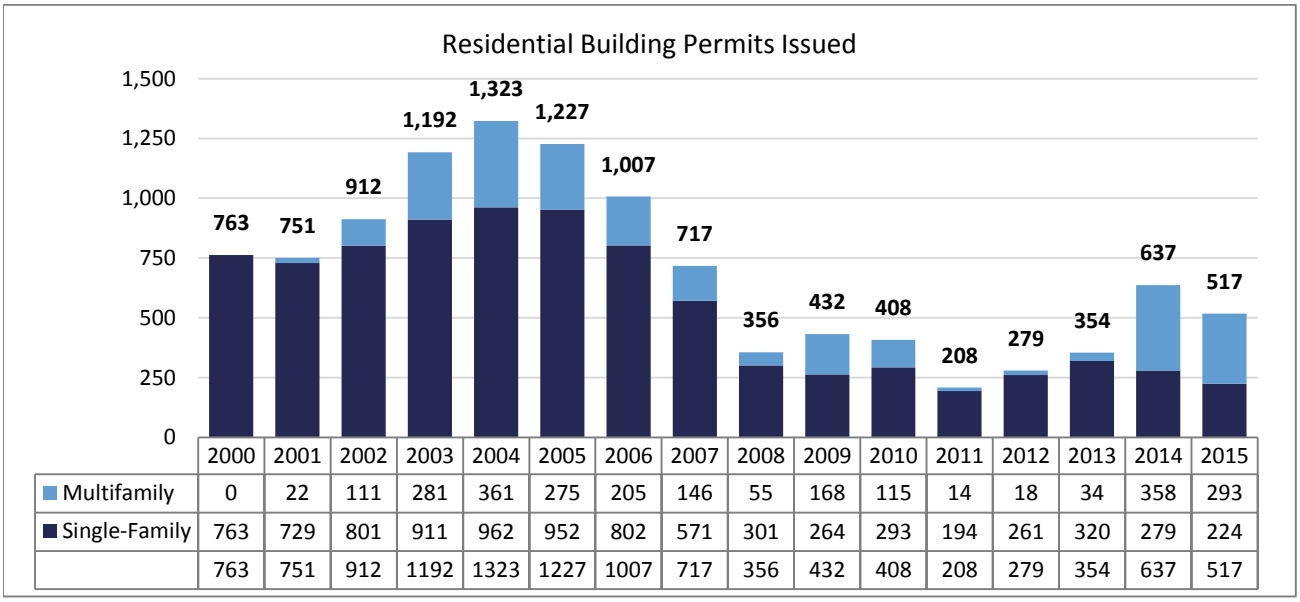
Households in the SCCOG region are composed of about 65% owner-occupied households and 35% renter-occupied households.

Household Size

The average household size in the region is 2.45 (2011-2015 American Community Survey). The most common household size is two persons (35% of total), with 29% of households being single-person and 36% having three or more members. The likelihood of belonging to a one- or two-person household increases as an individual ages into senior years.[7]

Building Trends

Prior to the housing crisis of the late 2000s, building permits for new housing were well in excess of 500 units per year in southeastern Connecticut, a rate that would have satisfied the level of demand projected by the 2002 and 2004 housing studies. Building permit activity slowed considerably after about 2007, however, and single-family-home permit activity has been slow to recover (Figure 1). Recent housing developments like The Sound at Gateway Commons in the Town of East Lyme (280 rental units) and Spruce Meadows/Spruce Ridge in Stonington (85 market-rate and affordable rentals) can have a major impact on annual production in a small region like southeastern Connecticut. While multi-family construction in most years has lagged behind single-family development, permitting activity in 2014 and 2015 may indicate greater developer interest in building multi-family housing.



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Multifamily	0	22	111	281	361	275	205	146	55	168	115	14	18	34	358	293
Single-Family	763	729	801	911	962	952	802	571	301	264	293	194	261	320	279	224
	763	751	912	1192	1323	1227	1007	717	356	432	408	208	279	354	637	517

Figure 1. Building Permits Issued since 2000. Source: Connecticut Department of Economic and Community Development.

2015 Housing Conditions

	Housing Units	Households (Occupied HU)	Owner Households	Renter Households	Vacancy Rate	Median Home Value
SCCOG Region	***123,701***	***110,185***	***64.3%***	***35.7%***	***10.9%***	***NA***
Bozrah	1,087	1,012	84.2%	15.8%	6.9%	$ 236,800
Colchester	6,209	5,734	77.4%	22.6%	7.7%	$ 274,400
East Lyme	8,226	7,228	79.7%	20.3%	12.1%	$ 307,800
Franklin	772	710	88.2%	11.8%	8.0%	$ 242,000
Griswold	4,936	4,487	69.3%	30.7%	9.1%	$ 206,100
Groton	18,506	16,260	48.3%	51.7%	12.1%	$ 253,300
Lebanon	3,097	2,661	89.7%	10.3%	14.1%	$ 265,400
Ledyard	6,160	5,704	82.0%	18.0%	7.4%	$ 242,900
Lisbon	1,640	1,580	85.4%	14.6%	3.7%	$ 226,400
Montville	7,589	6,868	82.0%	18.0%	9.5%	$ 196,500
New London	12,254	10,770	35.2%	64.8%	12.1%	$ 185,400
N. Stonington	2,222	1,955	82.1%	17.9%	12.0%	$ 292,800
Norwich	18,310	16,080	52.7%	47.3%	12.2%	$ 176,400
Preston	2,042	1,935	82.6%	17.4%	5.2%	$ 244,400
Salem	1,672	1,506	93.0%	7.0%	9.9%	$ 270,700
Sprague	1,294	1,209	67.5%	32.5%	6.6%	$ 215,400
Stonington	9,281	7,749	71.2%	28.8%	16.5%	$ 326,600
Waterford	8,728	7,839	84.9%	15.1%	10.2%	$ 253,600
Windham	9,676	8,898	48.9%	51.1%	8.0%	$ 159,900

	Median Gross Rent	Total Cost-Burdened Households	Cost-Burdened Homeowners	Cost-Burdened Renters	Deed-Restricted Affordable Units	C.G.S. 8-30g Affordable Housing
SCCOG Region	***NA***	***37.2%***	***29.7%***	***51.3%***	***16,901***	***13.7%***
Bozrah	$ 1,307	29.2%	24.5%	55.7%	33	3.1%
Colchester	$ 1,150	28.1%	26.1%	35.0%	531	8.6%
East Lyme	$ 1,201	29.9%	27.5%	39.7%	534	6.3%
Franklin	$ 1,528	24.6%	22.9%	39.4%	48	6.2%
Griswold	$ 949	34.6%	31.3%	42.2%	431	8.4%
Groton	$ 1,149	38.2%	30.9%	45.4%	4,076	22.7%
Lebanon	$ 1,110	31.7%	28.1%	65.0%	109	3.5%
Ledyard	$ 1,137	27.4%	25.2%	38.0%	260	4.3%
Lisbon	$ 1,078	24.4%	21.2%	45.6%	60	3.5%
Montville	$ 1,035	33.2%	28.9%	54.2%	375	5.1%
New London	$ 879	53.4%	38.1%	62.2%	2,777	23.5%
N. Stonington	$ 1,118	33.6%	31.0%	49.6%	31	1.3%
Norwich	$ 941	40.3%	31.0%	50.9%	3,576	19.2%
Preston	$ 1,151	31.7%	23.7%	72.3%	90	4.5%
Salem	$ 1,388	32.5%	31.3%	54.3%	32	2.0%
Sprague	$ 1,077	30.6%	25.0%	44.0%	72	5.8%
Stonington	$ 1,049	34.8%	30.3%	46.6%	471	5.0%
Waterford	$ 1,162	32.7%	30.0%	50.9%	403	4.7%
Windham	$ 771	48.4%	35.8%	60.8%	2,992	31.3%

Table 1. Local Housing Statistics. Source: 2011-2015 American Community Survey (United States Census Bureau); 2015 Affordable Housing Appeals List (Connecticut Department of Housing).
Notes: Renters and owners paying more than 30% of income on housing costs are considered "cost-burdened."

Affordability Challenges

About 37% of all households in the region are cost-burdened, meaning that nearly 40,000 owners and renters live in housing they cannot afford. Sixty-nine percent of all "low-income" households are cost-burdened, comprising one in four of all households in the region (Figure 4). "Low-income" households are defined by HUD as those earning 80% of the Area Median Income (AMI) or less per year. In southeastern Connecticut, 80% AMI is approximately $50,000 for a family of two.[8] Households earning less than $35,000 per year are the most likely to face housing affordability issues (Figure 2, Figure 3). Affordability challenges have gotten worse for both renters and owners, with the share of households with housing-cost challenges rising from 25% to 37% since 2000.

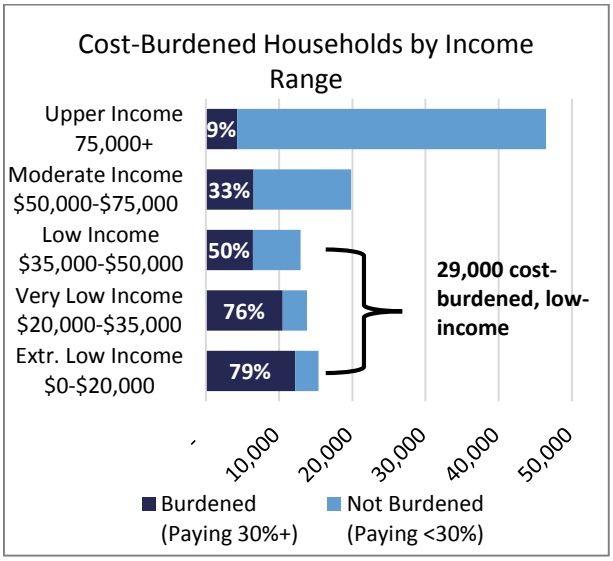


Figure 2. Southeastern Connecticut Housing Affordability. Source: 2011-2015 American Community Survey.

Affordable Housing

Nearly 17,000 units of deed-restricted assisted or otherwise cost-subsidized housing are available in the region, with 80% of this housing concentrated in Groton, New London, Norwich, and Windham (Figure 5). The number of subsidized or deed-restricted affordable units is similar to the number of low-income households in southeastern Connecticut that are *not* cost-burdened, demonstrating the importance of this housing stock to low-income households. Deed-restricted affordable housing differs from other low-cost housing in that it must be affordable *to its occupants*. Many of the region's non-regulated lower-cost units are still too expensive for the families that live in them.

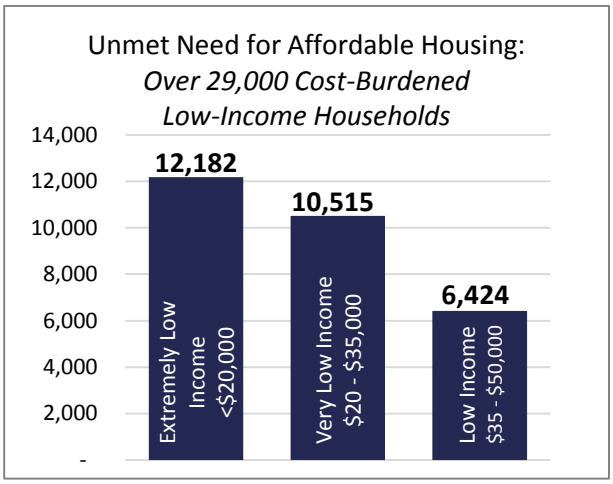


Figure 3. Cost-Burdened Low-Income Households. Source: 2011-2015 American Community Survey.

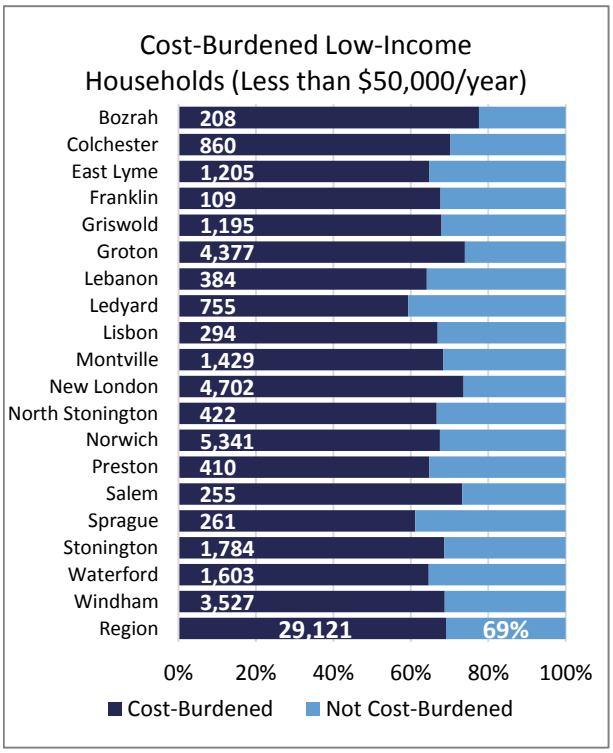


Figure 4. Affordability Status of Low-Income Households by Municipality. Source: 2011-2015 American Community Survey.

Percentage of Housing Affordable per 8-30g Program (Deed-Restricted or CHFA/USDA Mortgages)

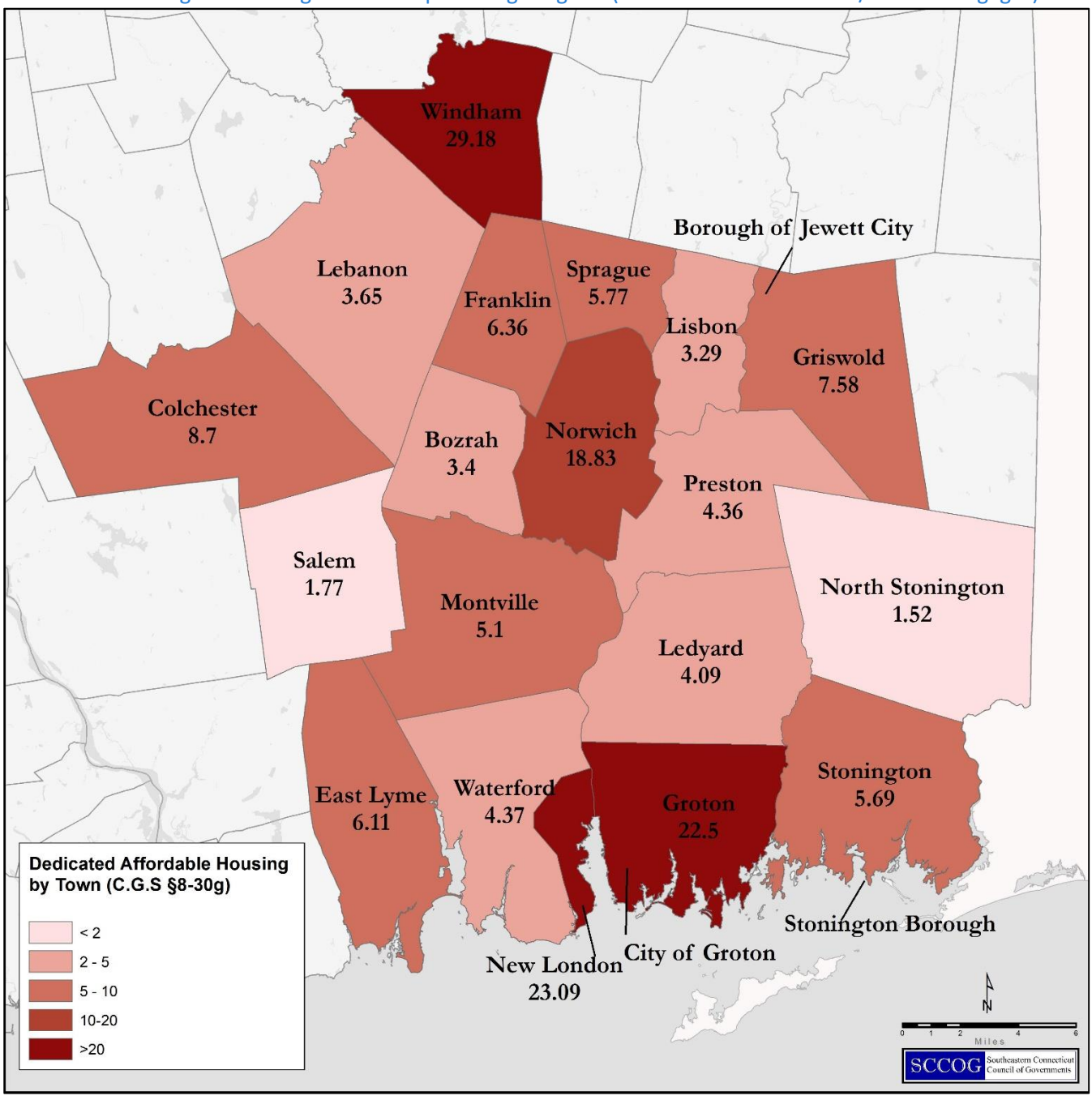


Figure 5. Percentage of Dedicated Affordable Housing as Defined by Section 8-30g of the Connecticut General Statutes (2017). Source: Connecticut Department of Housing. Note: Dedicated affordable housing under §8-30g includes Governmentally Assisted units, Tenant Rental Assistance, CHFA/USDA mortgages, and deed-restricted non-subsidized units.

2. Estimating Household Growth

The number of households in the region is projected to grow faster than population over the next few decades as baby boomer households transition from being families with children to being senior households, and the number of young adult households increases. While population is projected to grow only 4.1% between 2015 and 2030, households should grow by 6.3%. The share of households headed by seniors will grow to nearly 30% of total households, while middle-aged households will decline in number.

Population Growth

The Connecticut State Data Center's 2017 population estimates for southeastern Connecticut project that the region will grow by 11,860 persons, or 4.1%, between 2015 and 2030. Projections for the region are calculated by advancing the current regional population through expected births, deaths, and in- and out-migration to future years. The Connecticut State Data Center calculated fertility and mortality rates using 2005-2011 data and expected that migration would follow similar patterns as experienced between 2005 and 2011 (domestic) and 2010 and 2015 (international). Because in-migration to the region was relatively low during much of these years due to the recession, estimates for population growth are fairly conservative. These projections do not reflect expected hiring at Electric Boat, which has Navy contracts to design and/or build Virginia- and Columbia-class submarines over the coming decades. Hiring at Electric Boat will likely surge around 2025, when Electric Boat will ramp up production of Columbia-class submarines while continuing to produce two Virginia-class submarines per year.

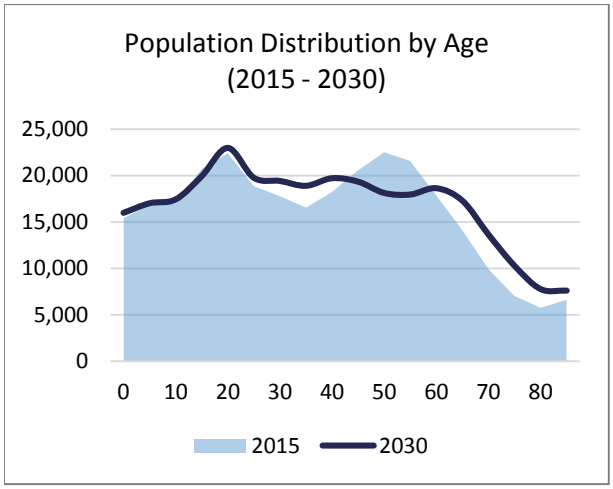


Figure 6. Projected Population Distribution, 2015-2030. Source: Connecticut State Data Center.

Age	2015	2030	Change
<15	49,275	50,423	**1,148**
15-24	43,113	42,898	**(214)**
25-34	36,647	39,167	**2,520**
35-44	34,813	38,597	**3,784**
45-54	43,090	37,456	**(5,634)**
55-64	39,455	36,583	**(2,872)**
65-74	24,055	30,932	**6,877**
75-84	12,788	18,059	**5,271**
85+	6,636	7,615	**980**
	289,872	**301,731**	**11,860**

Table 2. Projected Population Growth, 2015-2030. Source: Connecticut State Data Center..

Demographic Shifts

Baby boomers, those born between 1945 and 1964, were between 51 and 70 years old in 2010, becoming empty nesters or parents of young adult

children. By 2030, the youngest baby boomer will have turned 65 and this group will form the bulk of the senior population. Meanwhile, millennials will advance from young adulthood (currently aged 17-34), approaching middle age (32-49 in 2030) while the number of older middle-aged households shrinks. The number of school-aged children will remain stable region-wide and the number of young adults in the region is expected to increase, with a great deal of variation in these patterns among individual communities (Table 3). *Where* new housing is built will impact where actual population growth is experienced in the region.

Household Growth

The number of future households in the region can be estimated from population by calculating the likelihood of any one individual at a given age to head a household ("headship rate"). The likelihood of heading a household increases throughout life: one-half of the region's 35-year-olds are heads of households, reflecting that some live with spouses, some as singles, and some as dependents. By age 75, two thirds of residents are likely to head a household, reflecting the increased likelihood that an older person may live alone. Higher headship rates among seniors can explain why demand for new housing can be high even as overall population falls. For this report, SCCOG staff calculated headship rates based on 2010 census data and projected households using the population projections generated by the Connecticut State Data Center. A summary of the methodology is included on page 14. A more detailed description is available as an appendix.

The number of households in the region is projected to increase by about 7,200 between 2015 and 2030, or 6.3%. The majority of household growth is expected in households headed by persons over the age of 65. Senior households are expected to rise from 25% to 30% of all households by 2030 with an increase of more than 8,000 senior households from 2015. Conversely, the share of

	2015-2030 Change
Young Children (<5)	568
School-Aged Children (5-19)	(194)
Young Adults (20-44)	6,863
Middle-Aged Adults (45-64)	(8,506)
Seniors (65+)	13,128

Table 3. Population Change by Age Group, 2015-2030.
Source: 2015 to 2040 Population Projections for Connecticut.

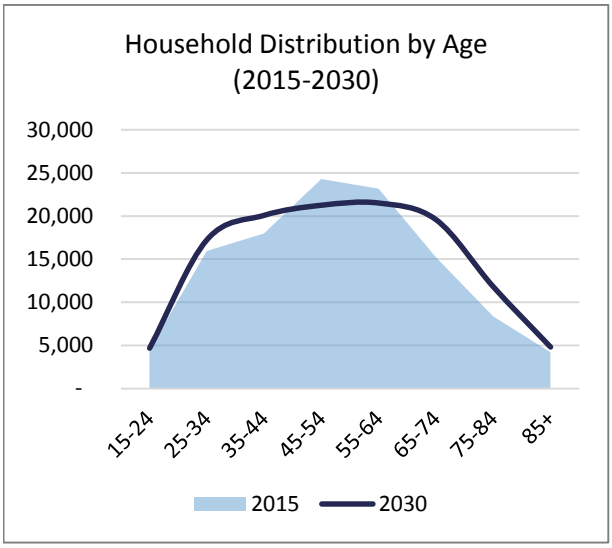


Figure 7. Projected Household Distribution, 2015-2030.
Source: SCCOG calculations based on CT State Data Center Population Projections.

Age	2015	2030	Change
<15	0	0	**0**
15-24	3,761	4,019	**258**
25-34	15,726	16,986	**1,260**
35-44	18,262	20,384	**2,122**
45-54	24,612	21,508	**(3,103)**
55-64	23,273	21,585	**(1,688)**
65-74	15,276	19,638	**4,363**
75-84	8,428	11,839	**3,411**
85+	4,224	4,782	**558**
	113,561	**120,742**	**7,180**

Table 4. Projected Household Change, 2015-2030.
Source: SCCOG calculations based on CT State Data Center Population Projections.

middle-aged households will shrink from 42% of all households in 2015 to 35% in 2030.

Household Formations and Losses

It is important to note that the expected increase in the number of senior households will not be due to new older residents moving into the region but is instead an expected consequence of existing households aging, most staying in their existing homes. Younger adults will be the ones more likely to form new households that must seek out housing opportunities, while housing units will be vacated when elderly households dissolve due to death or other life events. Household formation/dissolution patterns can be assessed for ten-year periods. Between 2015 and 2025, younger households will form over 23,000 new households (and seek housing), while 18,000 older households will dissolve (vacating housing), for a net increase of about 5,400 households (Figure 8).

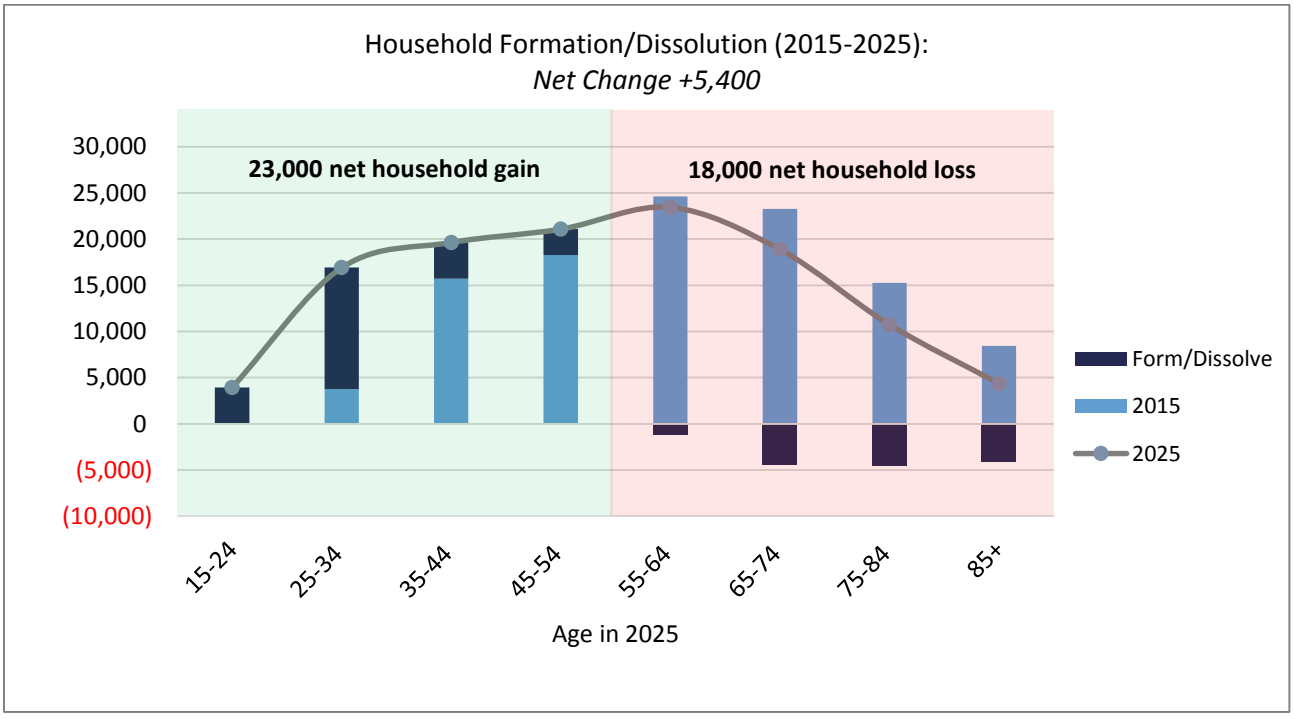


Figure 8. Net Formation and Dissolution of Households, Based on Changes over Time in Ten-year Age Cohorts. Source: SCCOG calculations based on CT State Data Center Population Projections.

Methodology for Projecting Households

Calculations also factor in expected changes in nursing-home population due to changes in senior population.

Data

Population Projections

The Connecticut State Data Center provides town-level population projections, by age and sex, for the years 2015, 2020, 2025, 2030, 2035, and 2040, calculated using 2010 Decennial Census population data, migration rates, and birth and fertility rates from the Connecticut Department of Public Health.

Headship Rate

Headship rate is the likelihood of any individual to be a head of household and is derived from population and household counts by age from Census 2010.

Calculations

Calculating Headship Rate

Headship rate is a simple value, calculated by dividing the number of households headed by persons in a given age cohort by the total population of the age cohort. In this study, town-level headship rates were applied to each town's projected population.

Calculating Headship Rate by Age Cohort

Heads of Household by Adult Age Cohort

	15-24	25-34
Town A	500	1500
Town B	700	2000

÷

Population by Adult Age Cohort

	15-24	25-34
Town A	5000	3200
Town B	7800	4650

=

Headship Rate by Adult Age Cohort

	15-24	25-34
Town A	10%	47%
Town B	9%	43%

Anticipating Future Household Growth

The estimated number of new households by age of head of household is determined by multiplying the projected population of each age cohort by its respective headship rate.

Calculating Expected Households by Age Cohort

2010 Headship Rate by Adult Age Cohort

	15-24	25-34
Town A	10%	47%
Town B	9%	43%

X

2030 Population by Adult Age Cohort

	15-24	25-34
Town A	6250	3200
Town B	6900	3000

=

Expected Households by Adult Age Cohort

	15-24	25-34
Town A	625	1500
Town B	620	1290

Detailed description of methodology used in this study is located in the appendix.

3. Changing Needs of Future Households

Given the expected growth in new households, the region will need about 500 units of new housing per year to keep up with projected demand. Slightly more than half of new households will be more likely to rent than own and/or will earn less than $50,000. New housing construction should target young, newly forming households and retirees wishing to stay in the region, as well as affordable housing. Demand is likely to be especially high for lower-cost rental units as well as for single-level homes that can be adapted for handicapped-accessibility.

Demand for Housing

Just under 7,200 additional households are expected to form in southeastern Connecticut between 2015 and 2030. Production of about 7,600 units, or 500 units per year, over those 15 years would satisfy expected demand while allowing for normal rates of vacancy.

Housing Tenure

The likelihood of a household owning a home increases from 38% at ages 25 to 34 to 79% at ages 65 to 74, before declining slightly. The rising age of overall householders in the region is offset by the expected growth in younger households, particularly in the region's urban communities. Because ownership rates are lowest in the region's cities, for the purpose of calculating expected tenure of future households, municipal homeownership rates were applied to town-level projections and then renter and homeowner households counts aggregated to a regional total.

Additional households will be slightly more likely to rent than in the past (Figure 9). The share of new households expected to rent is 54%, significantly higher than the current 35% of households that rent. The increase in renters should have a negligible effect on the regional homeownership rate, declining only slightly from 65.3% in 2015 to 64.4% in 2030.

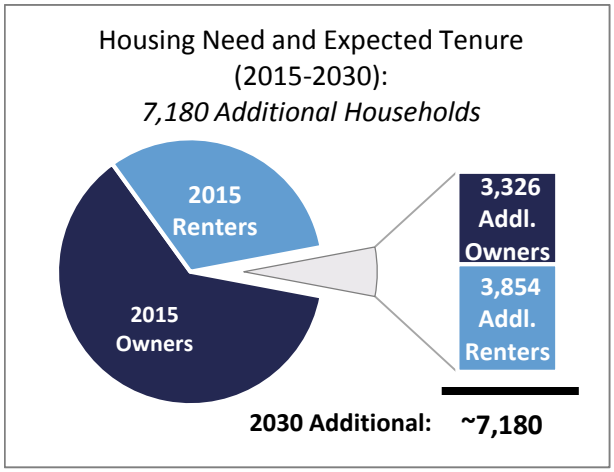


Figure 9. Tenure of Existing Households and New Households. Source: SCCOG calculations based on CT State Data Center Population Projections.

Age	Owners	Renters
15-24	11%	89%
25-34	38%	62%
35-44	63%	37%
45-54	73%	27%
55-64	78%	22%
65-74	79%	21%
75-84	76%	24%
85+	64%	36%
	65%	35%

Table 5. 2010 Housing Tenure by Age Group. Source: 2010 Decennial Census.

Household Income

Projections indicate that over 4,000 of the 7,200 additional households will earn less than $50,000, the approximate threshold for a two-person household to currently qualify as "low-income" under most government housing programs (Figure 10). Additional households will fall within "moderate-income" (80%-120% AMI, $50,000-$75,000), and "upper-income" (120% AMI+, >$75,000) categories. Senior households headed by persons 65 and older are more likely to be low-income than younger households, while middle-aged households are least likely. Household incomes were projected by applying current income distributions of households by age of head of household to expected future households.

For low- and moderate-income households, housing is affordable if monthly costs are less than $1,250 and $1,875 per month, respectively. Figure 11 shows the expected incomes of the additional low-income households, divided further into categories of low-income (50-80% AMI), "very low-income" (30-50% AMI) and "extremely low-income" (<30% AMI). Low-income households will be distributed somewhat evenly among extremely low-, very low-, and low-income categories. Monthly housing budgets for these categories are roughly <$500, <$875, and <$1,250 per month, respectively.

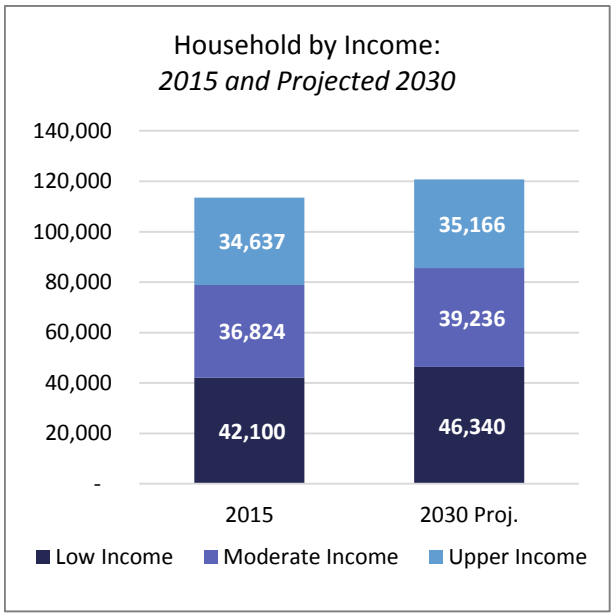


Figure 10. Income Distribution of Households, 2015-2030. Source: 2011-2015 American Community Survey (New London County); SCCOG calculations based on CT State Data Center Population Projections.

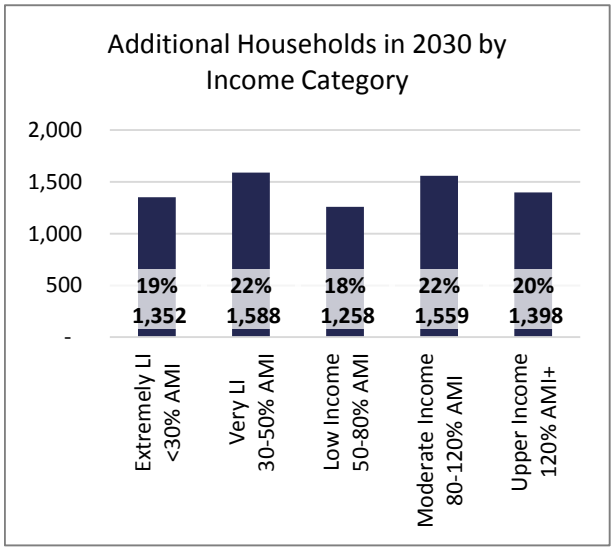


Figure 11. Expected Incomes of Additional Households. Source: 2011-2015 American Community Survey (New London County); SCCOG calculations based on CT State Data Center Population Projections.

Characteristics of Newly Forming Households

As discussed in Chapter 2, household change is a combination of new households forming and existing households dissolving for reasons such as marriage or death. While the share of senior households in the region will increase, *new* households will still be formed largely by young adults. Younger households form as young adults enter the workforce and become gainfully employed. Older households dissolve as their occupants die, enter health facilities, or seek other housing arrangements. Price and flexibility will be important housing characteristics for young adults in the early stages of their careers who earn low incomes and must remain mobile to take advantage of job opportunities.

Tenure of Forming and Dissolving Households

In 2010, 52% of the region's households headed by 25-44 year-olds owned their own homes, a decline from a high of 55% in 2000.[9] A profile of household formation/dissolution by age of head of households and their likely tenure shows the predicted pattern of household change: very young households renting, then transitioning to ownership in their thirties, forties, and fifties, while older households dissolve ownership units in greater numbers than rentals (Figure 12).

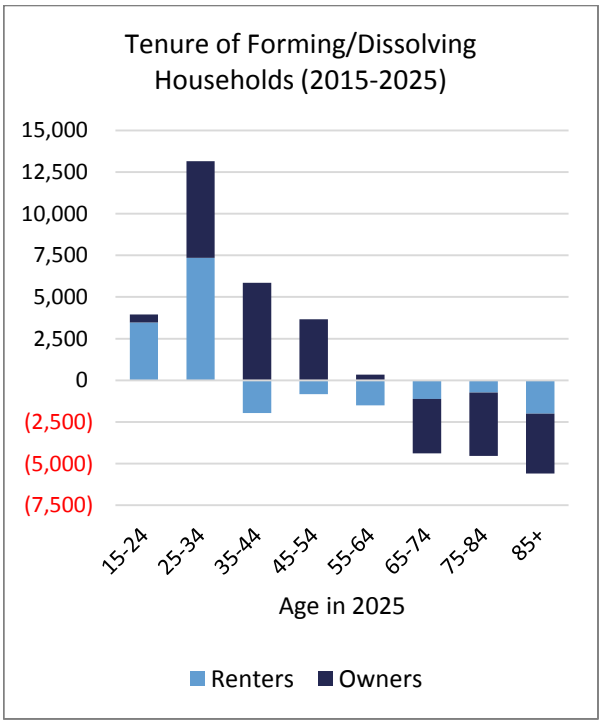


Figure 12. Expected Household Formations/Dissolutions by Age and Tenure, 2015-2025. Source: SCCOG calculations based on CT State Data Center Population Projections.

Income Levels of Newly Forming Households

The income of newly forming households mirrors the overall distribution of income in the region, with 40% of newly formed households being low-income (<80% AMI) (Figure 13). The large number of upper-income households that will be seeking housing for the first time may be a market for privately financed new housing. The 40% of newly formed households that are low-income will be challenged to find affordable housing in a region that already sees most lower-income households paying more for housing than they can afford.

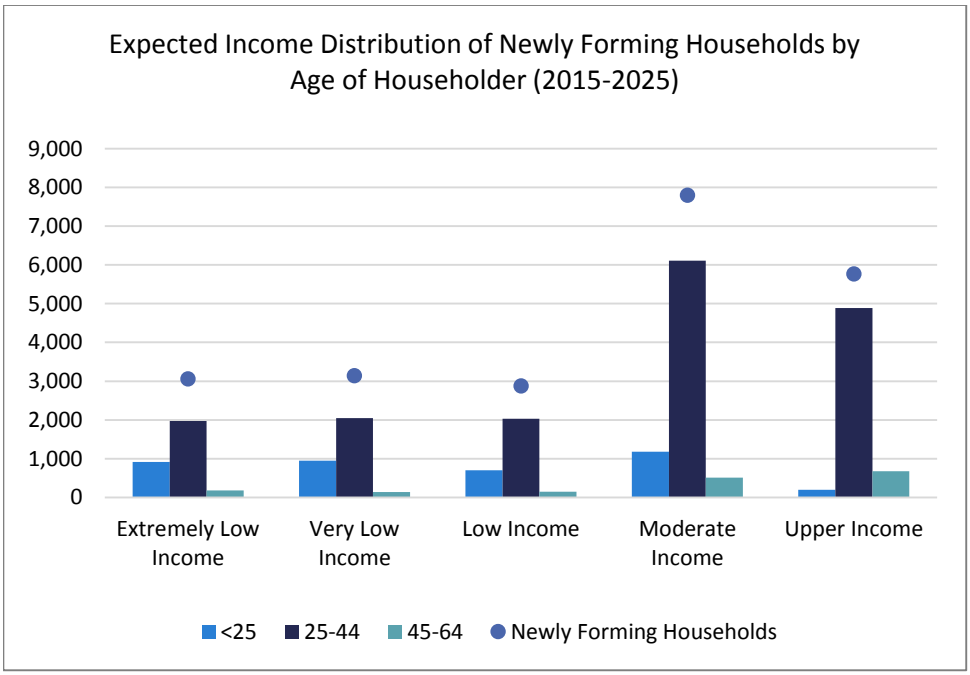


Figure 13. Income Levels of Newly Forming Households, 2015-2025. Source: SCCOG calculations based on CT State Data Center Population Projections.
Note: Extremely Low Income = <30 % AMI; Very Low Income = 30-50% AMI; Low Income = 50-80% AMI; Moderate Income = 80-120% AMI; Upper Income = >120% AMI

Populations of Special Focus

Housing Needs of Young Adults

As previously discussed, younger residents will be the ones most likely to be forming households and seeking housing for the first time. Much has been made of the reduced interest in homeownership by millennials. Explanations include student loan debt, fear of the financial risks associated with owning a home, and delayed marriage and childbearing.[10] The rate of homeownership increases dramatically as heads of households age into their 30s and 40s, and declines slightly in retirement. Despite young households' reduced likelihood of owning a home, the sheer size of the millennial generation and the mobility of young households has made millennials the largest share of homebuyers nationally.[11] Many lenders and lending programs allow borrowers to allocate more than 40% of their income to ongoing debt payments, including housing costs, car payments, and student loans.

Young homebuyers are more likely to value a home's convenience of commute, overall neighborhood quality, proximity to friends and family, parks, schools, and entertainment and leisure activities, as well as the quality of the local school district.[12] Homes appealing to younger buyers will be located closer to employment and amenities than previous generations may have desired. According to the Demand Institute, which tracks consumer preferences:

> *"The suburbs are going to remain important destinations for young families, but the ideal suburban location for millennials may not be the same as it was for previous generations. Communities that can offer the best of urban living (e.g., convenience and walkability) with the best of suburban living (e.g., good schools and more space) will thrive in the coming decade..."*

-The Demand Institute, Millennials and Their Homes: Still Seeking the American Dream (2015).

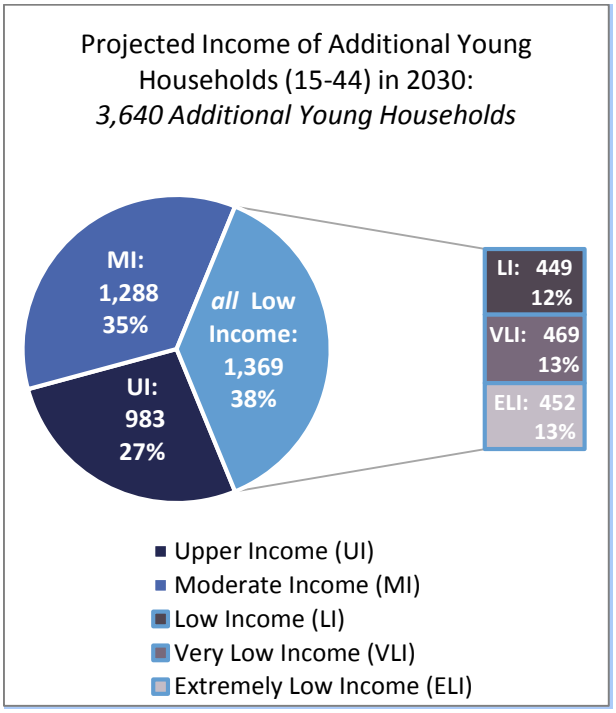


Figure 14. Income of Additional Young Households. Source: SCCOG calculations based on CT State Data Center Population Projections.

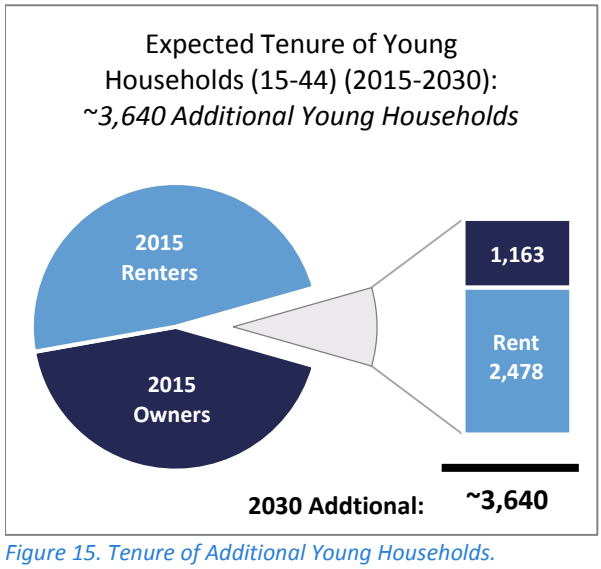


Figure 15. Tenure of Additional Young Households. Source: SCCOG calculations based on CT State Data Center Population Projections.

Housing Needs of Seniors

Seniors are projected to represent 19% of southeastern Connecticut's population by 2030, but 30% of all households. Census data on migration into and out of the region by age contradicts the popular notion that seniors move to warmer climates in large numbers when they retire. Most seniors want to stay in their homes as long as possible. Senior households are the least likely of all age groups to move, and are also the most likely to own their own homes, at 81%.[13] A 2015 survey of residents in the New London area also showed that local seniors hope to age in place, with 56% of respondents 65+ expecting to live in the same home in ten years, the highest percentage of any age group.[14] It is expected that the majority of baby boomers will choose to age in place until they are no longer able to live independently.

A nation-wide survey conducted by the National Association of Realtors found that the top three reasons cited for purchasing a new home by seniors 62-70 years old were to be closer to friends or family, the desire for a smaller home, and retirement. Seniors are also slightly more likely to purchase a condo, townhouse, or other alternative to the single-family home than are younger home buyers (36 and younger).[15]

Senior Housing Budgets

Senior households are more likely to have paid off their mortgages and built up home equity than younger households, but 37% of senior households still carry home mortgages. Retirees wishing to downsize from large family homes may be constrained by existing levels of debt and home equity.

Nationwide, the average home equity for all homeowners in 2015 was $150,000, and $230,000 for 70+ year olds who own their home free and clear.[16] Average home equity in New London County was $214,000, 42% higher than nationally, and one can assume that equity among the older

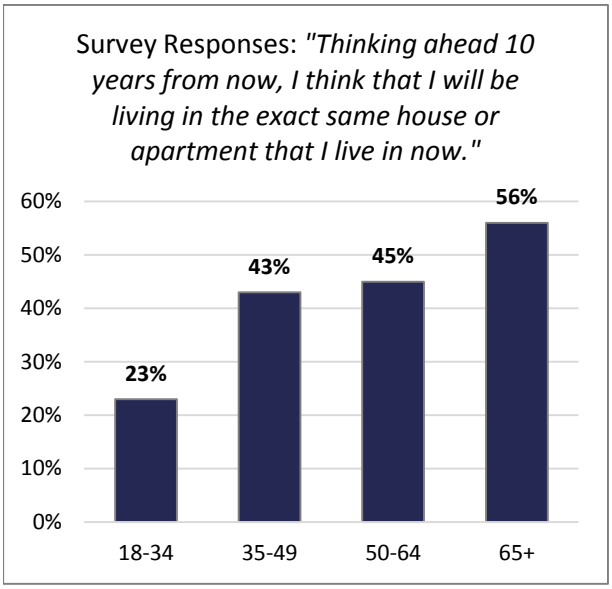


Figure 16. Survey Responses Regarding Future Housing, Greater New London. Source: Source: 2015 DataHaven Community Wellbeing Survey.
Note: Greater New London in this data set includes East Lyme, Groton, Ledyard, New London, and Waterford.

age groups is also proportionally higher than national figures. That home equity is available to fund the purchase of a new home but may also be needed to fund future living expenses.

Half of all senior renter households are currently housing-cost-burdened, and the number of cost-burdened senior renters can be expected to increase as the number of senior households increase.

Physical Disabilities

The number of residents with disabilities in the region will rise with the overall number of seniors and senior-headed households. Seniors living in multi-level single-family homes will face challenges as they age due to disabilities that make mobility within their homes and communities difficult. Currently, 11% of residents 65-74 years old and 32% of seniors 75+ report difficulty walking or climbing stairs.[17] By 2030, about 800 additional residents will face difficulties with "independent living," defined by the U.S. Census as having difficulty doing errands alone, such as shopping or

visiting a doctor's office. Transportation will also be a factor, given that nationally, persons over the age of 70 outlive their ability to safely drive by 7-10 years, on average.[18] As the number of senior household in car-dependent locations increases, communities and service providers will need to address the needs of home-bound senior residents.

Remodeling Activity

When seniors do decide to move, they may prefer single-level homes or homes with handicapped-accessible features. Housing researchers expect significant growth in home remodeling activity, with seniors aging in place or remodeling homes for sale. Nationally, remodeling activity of households with householders aged 55+ is expected to be 10% higher per household in 2025.[19]

Low-Income Households

Projections indicate that more than 4,000 of the 7,200 additional households expected in the region by 2030 will earn less than $50,000, earning less than 80% of Area Median Income for a two-person household and likely eligible for subsidized affordable housing if it were available. Households earning $50,000 per year should spend no more than $1,250 of their monthly income toward rent in order to stay within the recommended 30% share of income towards housing and have funds left for other uses.

The growth in the number of low-income households will put pressure on an already unaffordable housing market for these households, with 70% of the region's existing low-income households paying more than 30% of their income toward housing (29,000 cost-burdened of a total 41,000 existing low-income households).

Impact of Hiring at Electric Boat

The projected increase of 7,200 households by 2030, stated in this report, does not include households that may be formed by new Electric Boat employees moving into the region. As previously mentioned, Electric Boat has stated that the company anticipates hiring 14,000 to 18,000 workers by 2030 to replace retirees and fill 4,000 new positions. The company hired between 3,000 and 4,000 people in 2016 and 2017 and plans to add 1,200 workers in New London and Groton in 2018. New residents moving to the region to work at Electric Boat have likely strengthened home prices and rental rates.

The largest increase in hiring will come around 2025 when Electric Boat ramps up construction of Columbia-class submarines in addition to Virginia-class submarines.

4. Opportunities for Housing Development in Southeastern Connecticut

The extent to which land use regulations and public infrastructure support the construction of new housing varies among the region's municipalities. All of the region's cities and towns allow construction of single-family housing, while fewer permit multi-family housing or have regulations in place to encourage the development of affordable housing.

Factors Affecting Development Capacity

Future housing development will be impacted by restrictions on land use that differ between municipalities and by the presence or lack of supportive infrastructure. This chapter examines the *existing* opportunities for housing development in southeastern Connecticut given current land use regulations. A summary of findings is shown in Table 6, with more detail for each town on the following pages.

The capacity of each town for different types of housing development has been reviewed based on the presence of undeveloped land, the regulations in place governing the development of that land, and whether that land is served by or is within the potential service area of a public sewer system. Zoning regulations control the location, intensity, and impact of structures and uses and are established by Zoning or Planning and Zoning Commissions in each municipality.

The absence of sewers is usually the greatest factor limiting potential housing production. Areas without sewers are typically suburban or rural in nature, usually supporting less than one residential unit or small business per acre. While 80% of homes in the region's suburban and rural towns are detached, single-family units, some towns also permit two-family homes and multi-family developments that are able to utilize on-site wastewater disposal systems. The zoning review in this report should provide a starting point for municipalities to self-assess their municipal housing goals and development capacity.

Top: Duplex "mill housing" in Fitchville, Bozrah.
Bottom: Large multi-family housing developments in Groton.
Source: CRCOG Orthoimagery

Opportunities for New Development in Southeastern Connecticut

Single-Family Homes

Over 60% of the region's current housing stock is single-family homes. Large-lot, residential zoning is the most common in the region, based on overall land area. New opportunities for single-family homes exist in all towns.

Two-Family Homes

Two-family homes are often allowed in single-family neighborhoods in many areas, having similar needs in terms of on-site water and sanitary septic.

- 14 municipalities allow two-family homes in at least one zoning district that is predominantly single-family.
- Seven municipalities limit zoning for two-family homes to commercial or dedicated multi-family zones.
- Three municipalities only allow two-family homes in areas served by sewer.

Multi-Family Developments

"Multi-family" typically describes any housing with three or more units.

- 14 municipalities have undeveloped land in or near public sewer service areas, on which multi-family structures are a permitted use..
- Seven municipalities offer new opportunities for stand-alone multi-family housing outside of areas served by sewer.
- Four municipalities do not provide for any multi-family housing on undeveloped land; except that one town allows for an Incentive Housing Zone to be established, which would allow multi-family housing.

Mixed-Use Development

Mixed commercial and residential development is often encouraged in downtown areas with high pedestrian activity. These areas typically lack large amounts of vacant land. Nearly all of the region's municipalities have undeveloped areas zoned for mixed-use development.

Accessory Apartments

Accessory apartments or stand-alone accessory dwelling units are small housing units attached or adjacent to single-family homes. They are an opportunity to enhance housing diversity, especially in rural or suburban areas, with minimal effect on housing density or neighborhood character.

- 16 municipalities allow accessory apartments.
- Four of these 16 municipalities limit occupancy to relatives of the property owner.

Clustered Development

Cluster-style subdivisions site homes in a cluster while preserving surrounding open space. Cluster subdivisions are allowed in most of the region's towns. These developments are typically single-family but may also allow two- and multi-family homes at greater densities than would be allowed in conventional subdivisions.

- 16 municipalities have provisions for clustered development.

Affordable Housing

Common tools in Connecticut for increasing affordable housing are inclusionary zoning, which requires a portion of homes in a development to be deed-restricted affordable, and Incentive Housing Zones (IHZs), which commonly offer density bonuses to developers of mixed-income developments.

- Six municipalities have Incentive Housing Zones.
- Three other municipalities use other inclusionary zoning practices. For instance, the Town of Colchester requires 10% of new units to be affordable in *all* multi-family developments over three units and all single-family developments over six units.

Residential Uses Permitted in Areas With Vacant/Undeveloped Land

	Bozrah	Colchester	East Lyme	Franklin	Griswold	*Jewett City (Bor.)*	Groton (City)	Groton (Town)	Lebanon	Ledyard	Lisbon	Montville	New London	No. Stonington	Norwich	Preston	Salem	Sprague	Stonington	*Stonington (Bor.)*	Waterford	Windham
Vac. Areas with Sewer*	n/a																n/a					
Single-Family		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓
Two-Family		✓	✓		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓			✓	✓	✓	✓
Multi-Family		✓				✓	✓	✓		✓		✓	✓		✓	✓		✓	✓	✓	✓	✓
Mixed-Use		✓	✓		✓	✓	✓	F				✓	✓		✓	✓		✓	✓	✓	✓	✓
Accessory Apartments		✓			R	✓		✓		R			✓		✓	✓		R	✓		✓	✓
Clustered Development		✓	✓		✓			✓		✓	✓	✓	✓		✓			✓	✓		✓	✓
Inclusionary (Affordable)		✓	✓									F	✓		✓							✓
Other (see town sections)		✓						B			✓				✓			✓	✓		✓	✓

	Bozrah	Colchester	East Lyme	Franklin	Griswold	*Jewett City (Bor.)*	Groton (City)	Groton (Town)	Lebanon	Ledyard	Lisbon	Montville	New London	No. Stonington	Norwich	Preston	Salem	Sprague	Stonington	*Stonington (Bor.)*	Waterford	Windham
Vac. Areas without Sewer						n/a	n/a						n/a							n/a		
Single-Family	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓
Two-Family	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓		✓	✓		✓			
Multi-Family	✓								✓	✓				✓		✓	✓	✓				
Mixed-Use	✓		✓	✓	✓				✓	✓				✓		✓	✓	✓				✓
Accessory Apartments	R	✓			R			✓	✓	R				✓	✓	✓	✓	R	✓		✓	✓
Clustered Development		✓	✓		✓			✓	✓	✓	✓			✓	✓		✓	✓	✓		✓	✓
Inclusionary (Affordable)		✓										F		F	✓							
Other (see town sections)		✓									✓			✓	✓				✓		✓	

* Includes properties within ¼ mile of existing sewer systems unless known to be in sewer avoidance areas.

Note: East Lyme and the Towns of Groton, Montville, and Ledyard contain small areas with separate zoning powers. Those areas were not included in this assessment.

B: Density bonus awarded for affordable housing as part of mixed-use development in the MX floating zone.

R: Accessory apartments allowed for occupancy by relatives only.

F: Allowed with use of a floating zone (a floating zone does not exist on a map until an application is made for its use).

Table 6. Housing Development Opportunities in Southeastern Connecticut by Municipality. Allowed Uses on Undeveloped Land. Source: SCCOG Analysis of Local Zoning Regulations.

Municipal Details

Town of Bozrah- *No sewer is present*

Single-Family: Permitted in the R-1 and R-2 residential and the Commercial/Residential (C/R) zones.
Two-family: Permitted in the R-2 zone and the Village Overlay Zone in the Village of Fitchville.
Multi-Family: Permitted in the Village Overlay Zone, overlaying the R-2 zone.
Mixed-Use: Permitted in the Village Overlay Zone, overlaying the R-2 or C zones.
Accessory Apartments: Permitted for occupancy by relatives only, in zones permitting single-family.

Town of Colchester

Single-Family: Permitted in the Rural Use (RU) and Suburban (SU) residential zones and the Westchester Village/Town Center (WV/TC) districts.
Two-family: Two-family allowed in the RU, SU, and WV/TC zones.
Multi-Family: Permitted in the WV/TC zones and allowed by Special Permit in the SU zone. Requires access to sewer.
Mixed-Use: Permitted in TC/WV zones and allowed by Special Permit in the Future Development (FD) zone, with access to sewer.
Accessory Apartments: Allowed by Special Permit in the RU zone. Permitted in all other districts.
Clustered Development: Allowed by Special Permit in the RU zone.
Affordable Housing Opportunities: Developments of more than six single-family housing units or more than three multi-family units require 10% of units to be deed-restricted at affordable rents or prices.
Other: "Planned Development" allows for creative development of single-, two-, and multi-family neighborhoods, served by sewer.

Town of East Lyme

Single-Family: Permitted in all residential zones (5) and the CA commercial zone.
Two-family: Permitted in the R-10 and R-12 residential zones and the CA commercial zone.
Mixed-Use: Allowed by Special Permit in the CA zone, CM commercial zone, or as part of a planned development in the Gateway Planned Development District (GPDD).
Clustered Development: Allowed by Special Permit in the R-40, R-80, and R-120 residential zones, with additional density awarded if sewer is present.
Affordable Housing Opportunities: Four Incentive Housing (overlay) Zones exist, requiring 20% of units to be deed-restricted at affordable rents or prices. Units may be mixed-use, multi-family, or single-family.
Other: The Special Use (SU) district is an overlay zone that allows additional uses, including multi-family housing (with access to sewer).

Town of Franklin- *Sewer service is extremely limited*

Single-Family: Permitted throughout most of town, in the R-80 and R-120 residential zones and the Light Commercial (C-1) zone.
Two-family: Allowed by Special Permit as part of a Golf Course Community in the Planned Recreation Development District.
Mixed-Use: Allowed in the C-1 zone by Special permit.

Town of Griswold

Single-Family: Permitted throughout most of town, in the R-40, R-60, and R-80 residential zones.
Two-family: Permitted in the R-40, R-60, and R-80 residential zones.
Mixed-Use: Allowed by Special Permit in the Industrial District (I) as part of a planned development.
Accessory Apartments: Permitted for occupancy by relatives only, in zones permitting single-family.
Clustered Development: Allowed by Special Permit in the R-40, R-60, and R-80 residential zones.

Borough of Jewett City (Griswold)- *Almost all of Jewett City is served by sewer*

Single-Family: Permitted in the Residential (R), Residential Multi-family (RM), and Residential Commercial (RC) zones, allowed by Special Permit in the Commercial (C) zone.
Two-family: Permitted in the R, RM, C, and RC zones. All units located at street level in the Commercial zone require a Special Permit (this applies to mixed-use and multi-family developments).
Multi-Family: Permitted in the RM and C zones, allowed by Special Permit in the RC zone.
Mixed-Use: Permitted in the C zone.
Accessory Apartments: Permitted in the R zone only.

City of Groton- *Almost all of the City of Groton is served by sewer*

Single-Family: Permitted in all residential zones (5) and the Waterfront Business Residence (WBR) zone.
Two-family: Permitted in the R-5.2 residential zone, Residential Multi-Family (R-M), and WBR zones.
Multi-Family: Allowed by Special Permit in the R-M, WBR, and Five Corners (FC) zones.
Mixed-Use: Permitted in the FC and WBR zones. Allowed by Special Permit in the General Commercial and Technology Campus zones.

Town of Groton

Single-Family: Permitted throughout most of town, in all residential (11) zones, all commercial zones (4), the Office Multi-Family (OMF) zone, and the Waterfront (WF-20) zone. Allowed by Special permit in the IP-80C industrial zone and Residential Multi-family (RMF) zones.
Two-family: Allowed by Special Permit in the Rural Use (RU) zones, IP-80C zone, and RMF-16, RMF-12, and RMF-8 zones. Permitted in all other residential zones (8), except for Residential Single-Family zones (RS-20, RS-12, and RS-8). Permitted in the OMF, WF-20, and all commercial zones (4)
Multi-Family: Allowed by Special Permit in the RMF, IPC, Commercial Retail (CA-40 and CA-12) zones, and the WF-20, Downtown Development District (DDD) and OMF zones. Sewer service is required.
Mixed-Use: Floating mixed-use zone (MX) allowed for new mixed-use development. Sewer service is required.
Accessory Apartments: Permitted in all zones permitting single-family homes.
Clustered Development: Allowed by Special Permit in single-family residential zones. Sewer service is required.
Other: The Planning and Zoning Commission, in its discretion, may award a density bonus to developments in the MX floating zone if "additional units promote affordable housing objectives".

Town of Lebanon- *Sewer service is extremely limited*

Single-Family: Permitted throughout most of town, in all zones except for the Light Industrial zone.
Two-family: Permitted in the Residential-Agricultural (RA) and Business (B) zones.
Multi-Family: Allowed by Special Permit in the RA and B zones.
Mixed-Use: Allowed by Special Permit in the Village Business District and B zones.
Accessory Apartments: Permitted in zones permitting single-family homes, except for the Lake and B zones.
Clustered Development: Allowed by Special Permit in the RA zone and Village Green District.

Town of Ledyard*

Single-Family: Permitted in all residential zones except for the Mobile Home Retirement Village (RM-40) zone. Allowed by Special Permit in the three mixed-use zones, Ledyard Center Village District 3 (LCVD-3) and the Gales Ferry Design Districts 1 and 2 (GFDD-1 and GFDD-2).
Two-family: Allowed in by Special Permit in the GFDD-2 zone and residential zones except for RM-40.
Multi-Family: Allowed by Special Permit in the R-40 residential zone, the LCVD-1, LCVD-2, LCVD-3, GFDD-1, GFDD-2, Multi-Family Village District, and Resort Commercial Cluster Districts 1 and 2.
Mixed-Use: Allowed by Special Permit in the LCVD-1, LCVD-2, LCVD-3, GFDD-1, and GFDD-2 zoning districts.
Accessory Apartments: Allowed by Special Permit for occupancy by relatives only, in zones permitting single-family, except for the GFDD.
Clustered Development: Allowed in all zoning districts by Special Permit, with additional density awarded to areas served by sewer.
**The Town of Ledyard Planning & Zoning Commission is currently considering a comprehensive amendment to the zoning regulations and zoning map, which would have the partial effect of increasing housing opportunities.*

Town of Lisbon

Single-Family: Permitted in all the R-40, R-60, and R-80 residential zones (all residential zones).
Two-family: Permitted in all residential zones.
Clustered Development: Allowed in residential zones by Special Permit.
Other: The Golf Course Community floating zone allows for the creation of multi-family units for persons 55 and older by Special Permit.

Town of Montville

Single-Family: Permitted in all residential zones except for the Residential Multi-Family (R-20M) zone.
Two-family: Permitted in the R-20M zone and allowed by Special Permit in the R-20 and R-40 residential zones.
Multi-Family: Permitted in R-20M zone or as part of mixed-use development in the C-2 Commercial zone. Allowed by Special Permit in the R-20 zone. Allowed only in areas with sewer.
Mixed-Use: Permitted in the C-1 zone and allowed by Special Permit in the C-2 Commercial zone.
Clustered Development: Allowed in all residential zones by Special Permit, with additional density awarded to areas served by sewer.
Affordable Housing Opportunities: Housing Opportunities Development floating zone. Requires 15% of units to be deed-restricted at affordable rents or prices.

City of New London- *Almost all of the City of New London is served by sewer*

Single-Family: Permitted in all residential zones and the Neighborhood Business (NB) zone. Allowed by Special Permit in the Central Business Districts 1 and 2 (CBD-1 and CBD-2), Light Industrial-Office (LI-O) zone, and the Maritime District (MD).
Two-family: Permitted in the R-2 and R-3 Residential zone, and allowed by Special Permit in the CBD-1, CBD-2, MD, and LI-O zoning districts.
Multi-Family: As a stand-along use (i.e. not mixed-use), allowed by Special Permit in the CBD-2, MD, LI-O, and Limited Commercial District (C-2) zones. Permitted in the R-3 zone.
Mixed-Use: Allowed by Special Permit in all zones except for the R-1, R-1A, and R-2 zones, and the C-1 Commercial zone.
Clustered Development: Allowed by Special Permit in the R-1, R-1A, and R-2 zones.
Affordable Housing Opportunities: The Incentive Housing Zone (IHZ) (overlay). Requires 20% of units to be deed-restricted at affordable rents or prices.

Town of North Stonington- *Sewer service is extremely limited*

Single-Family: Permitted throughout the majority of town, in the R-40, R-60, and R-80 residential zones (all residential zones).
Two-family: Permitted in all residential zones.
Mixed-Use: Allowed by Special Permit in the Commercial, Highway Commercial, Village Preservation Overlay Area, and Economic Development zones.
Accessory Apartments: Permitted in all residential zones.
Clustered Development: Allowed in all residential zones.
Affordable Housing Opportunities: Affordable Housing Overlay District (AHOD) requires 15% of units to be deed-restricted at affordable rents or prices. This zone is also a floating zone.
Other: The Design Development District is an overlay zone that allows planned development, which may include single-family units and mixed-use development.

City of Norwich

Single-Family: Permitted in all residential zones, accounting for most the town.
Two-family: Permitted in the Multi-Family (MF) zone, only.
Multi-Family: "Garden apartments" permitted in the MF zone allowed by Special Permit in the Neighborhood Commercial (NC), General Commercial (GC), Waterfront Development, and Chelsea Commercial (CC) districts. "High Rise" apartment complexes allowed by Special Permit in the MF, WD, and CC Districts.
Mixed-Use: Permitted in the Planned Commercial (PC), NC, GC, WD, and CC districts. A Special Permit may be required, depending on the zoning district and the number of residential units.
Accessory Apartments: Require a Special Permit in all residential zones. Required to be deed-restricted to rents affordable for a person or family earning less than the Area Median Income.
Clustered Development: Allowed by Special Permit in single-family residential zones (R-80, R-40, and R-20).
Affordable Housing Opportunities: Incentive Housing Overlay District (IHOD). Requires 20% of all units to be deed-restricted at affordable rents or prices.
Other: The Mill Reuse Overlay District, Adaptive Reuse Overlay District, Neighborhood Redevelopment District are tools that may be used by developers to increase housing opportunities through creative reuse of deteriorating and/or historic properties and neighborhoods.

Town of Preston

Single-Family: Permitted throughout the majority of town, in the R-40, R-60, R-80, and R-120 residential zones (all residential zones), the C-1 commercial district, and the Preston City Village District (PCVD).
Two-family: Allowed by Special Permit in the C-1 and R-40 zones, and as part of mixed-use development in the Thames River Design District (TRDD).
Multi-Family: Allowed by Special Permit in the C-1 and R-40 zones, and in mixed-use development in the TRDD.
Mixed-Use: Allowed as part of a planned development, by Special Permit, in the TRDD.
Accessory Apartments: Permitted in all residential zones.

Town of Salem- *Sewer is not present*

Single-Family: Permitted in the Rural Zone A, Rural Zone B, and Residential Zone B (all residential zones).
Two-family: Permitted in Rural Zones A and B.
Multi-Family: Allowed by Special Permit in Rural Zone A
Mixed-Use: Allowed by Special Permit in the Business Zone (BZ).
Accessory Apartments: Permitted in all residential zones
Clustered Development: Allowed by Special Permit in Rural Zones A and B

Town of Sprague

Single-Family: Permitted throughout most of town, in the R-80 and R-120 residential zones, and the Baltic Village (BV), Hanover Village (HV), and Versailles Village (VV) zones.
Two-family: Not allowed; however there is a large, existing stock of two-family homes.
Multi-Family: Allowed by Special Permit in the Baltic Village (BV), Versailles Village (VV), and BED zones.
Mixed-Use: Allowed by Special Permit in the BV, VV, and BED zones.
Accessory Apartments: Permitted for occupancy by relatives only, in zones permitting single-family.
Clustered Development: Permitted in all zones permitting single-family.
Other: The Baltic Economic Development (BED) zone is creative to allow adaptive reuse of a mill property, and permits single-family uses and allows multi-family housing by Special Permit.

Town of Stonington

Single-Family: Permitted throughout most of town, in all districts except for the Light Industry (LI-30), Manufacturing (M-1), and Highway Interchange (HI-60) zones.
Two-family: Permitted in the RM-20, RA-40, RR-80, and RH-10 Residential zones, the General Commercial (GC-60) zone, and the Convenience Shopping (CS-5) zone. Allowed by Special Permit in the Tourist Commercial (TC-80) zone.
Multi-Family: Allowed only in areas served by sewer. Allowed by Special Permit in the RH-10, RM-20, and RM-15 zones. The PV-5 zone (see *Other*) allows Multi-family as well.
Mixed-Use: Mixed-use is allowed by Special Permit in the LS-5 zone and three other zones that do not currently have vacant land: the DB-5, PV-5, and HM zones (see *Other*). Mixed-use in the PV-5 zone does not require a Special Permit if fewer than 10 housing units are built.
Accessory Apartments: Permitted in all residential zones. Sewer service is required.
Clustered Development: Allowed by Special Permit in all residential zones except for RA-15.
Other: The Pawcatuck Village (PV-5) and Heritage Mill (HM) zones allow for adaptive reuse of village and mill areas, including mixed uses and multi-family residential uses. The Industrial Heritage Re-use District (IHRD), Neighborhood Development District (NDD), Greenway Development District (GDD), and Agricultural Heritage District (AHD) are floating zones that allow for additional creative housing options.

Borough of Stonington- *Almost all of the Borough of Stonington is served by sewer*

Single-Family: Permitted in all zones. All zones with vacant land are residential in nature: the Rural Residence District (RR), Planned Multi-Family Housing District (PMFH), Residence Preservation District (RP), and Residence District (R).
Two-family: Allowed by Special Permit in the RR, PMFH, RP, and R zones.
Multi-Family: Allowed by Special Permit in the RR, PMFH, RP, and R zones.
Mixed-Use: Allowed by Special Permit in the PMFH zone.

Town of Waterford

Single-Family: Permitted in all residential districts, as well as the General Commercial (C-G) and Open Space (OS) zones.
Two-family: Allowed only in areas served by sewer. Permitted in the Residential Multi-Family (R-MF), Industrial Multi-Family (I-MF) zone and Mago Point District (MPD). Allowed by Special Permit in the Waterfront Development District (WD).
Multi-Family: Allowed only in areas served by sewer. Permitted in the Residential Multi-Family (R-MF), Industrial Multi-Family (I-MF) zone and Mago Point District (MPD). Allowed by Special Permit in the Waterfront Development District (WD).
Mixed-Use: Allowed only in areas served by sewer. Permitted in the Civic Triangle and WD zones.

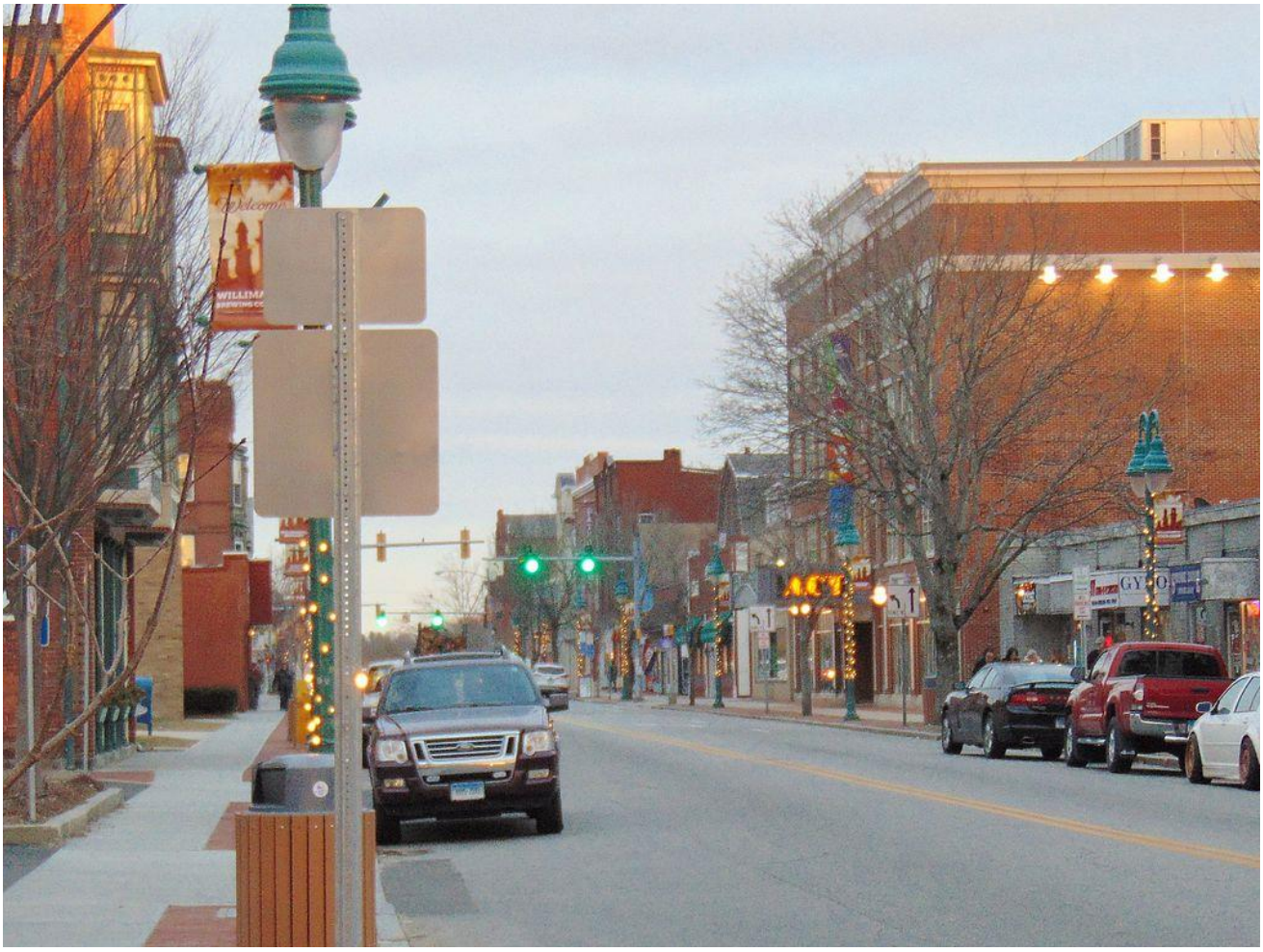
Accessory Apartments: Permitted in all zones permitting single-family.
Clustered Development: Allowed by Special Permit in the R-20, R-40, and RU-120 Residential zones.
Other: Adaptive Reuse Development is allowed by Special Permit in the R-20, R-40, MPD, Village Residential (VR), Neighborhood Business (NB), Neighborhood Business Professional Office (NBPO), or Civic Triangle (CT) zoning districts. Adaptive Reuse Development permits multi-family and mixed-use development, in a certain locations along Rope Ferry Road, served by sewers.

Town of Windham

Single-Family: Permitted in all residential zones and the Business District (B-3).
Two-family: Allowed only in areas served by sewer, by Special Permit in the R-6 and R-5 Residential zones, the B-3 zone, the Downtown Business District (B-1), and the General Downtown Business District (B-1A).
Multi-Family: Allowed only in areas served by sewer, by Special Permit in the R-6 and R-5 Residential zones, the B-3 zone, the Downtown Business District (B-1), and the General Downtown Business District (B-1A).
Mixed-Use: Permitted in the B-1A zone, C-4 Commercial zone, and the General Business Districts (B-2 and B-2A). Allowed by Special Permit in the B-3 zone. Also allowed in the Incentive Housing Overlay Zone.
Accessory Apartments: Allowed by Special Permit in zones permitting single-family.
Clustered Development: Allowed by Special Permit in the R-1, R-2, and R-3 Residential zones, with additionally density awarded in areas served by sewers.
Affordable Housing Opportunities: Windham has four Incentive Housing Overlay Zones in the downtown area of Willimantic. Zones requires all units to be deed-restricted affordable.
Other: Multiple zoning districts allow residential uses, including single-family, two-family, multi-family, and mixed-use development, mostly in the Downtown area of Willimantic; however these districts lack vacant land. Three floating zones: ArtSpace Windham Planned Development District, Frog Bridge Planned Development District, and Windham Mills Planned Development District all for adaptive reuse of structures or planned neighborhood development, with the goal of creatively increasing housing opportunities

5. Recommendations

Data suggests there will be additional demand for rental housing, as well as affordable housing, handicapped-accessible housing, and housing convenient to amenity-rich downtowns and neighborhood centers. The region and its municipalities have an opportunity to recalibrate development regulations to meet these needs. Municipalities should include an examination of housing policies as part of local plans and adjust zoning as needed. Local affordable housing committees can provide leadership and ongoing support. SCCOG should provide additional data on housing needs and development impacts, for use by its member municipalities. SECHA should continue to lead events highlighting best practices and focusing attention on the need for housing.



"The Center of Willimantic, One Winter Evening", JJBers (Wikipedia)

Municipal Strategies for Addressing Housing Needs

Establishing municipal housing goals and a supportive regulatory framework will require a series of actions by residents and municipal elected officials, which can include the following steps:

Study the Issue

- Study expected growth and demographic change in the municipality and region.
- Study the existing housing stock, economic indicators, and current opportunities for housing growth.
- Survey residents as to the preferred types and locations of new housing.
- Identify best practices and methods used elsewhere.

Build Community Interest

- Work with the Planning and Zoning Commission(s) and existing housing advocates or organizations.
- Hold a forum to gauge community interests and attitudes.
- If possible, form a dedicated affordable housing committee to explore possible actions and advance regulatory changes. Otherwise operate through the Planning or Planning & Zoning Commission.

Address the 'Low-Hanging Fruit' First

- Decide what changes can be implemented immediately to increase housing options, such as permitting accessory apartments or two-family homes in single-family zones.

Implement Plans

- Address housing in the municipal plan of conservation and development as directed by CGS §8-23.
    - Adopt recommended zoning amendments.
- Adopt an affordable housing plan as directed in PA 17-170 that sets municipal goals and identifies necessary implementation actions.
    - Adopt recommended zoning amendments.

Opportunities for Increasing Housing Choice

The following regulatory actions can be adopted to increase opportunities for lower-cost and multi-family housing:

Encourage Additional Housing Diversity in Rural Areas

- Eliminate minimum floor-area requirements.
- Reduce minimum lot sizes and minimum buildable area requirements where smaller lots are capable of supporting well and septic.
- Permit two-family homes in zones that permit single-family housing. (Towns may consider requiring additional lot area for two-family homes.)
- Allow multi-family developments on larger parcels of land that can accommodate on-site community septic systems.
- Investigate the use of small community water systems or wastewater disposal systems in rural village centers to increase housing opportunities.
- Encourage or require clustered development, including the development of two- and multi-family homes, in order to balance goals of housing production and open space preservation.

Right-Size Allowed Uses in Areas Served by Water and Sewer

- Reduce minimum lot sizes to increase housing density, consistent with capacity of existing sewer system and availability of public water systems.
- Encourage larger multi-family developments in areas served by water, sewer, and transit.

Reinforce Downtown Areas and Nodes

- Allow multi-family, mixed-use, and in-fill development in existing nodes and areas where utilities, transportation systems, and existing development create the potential for cohesive neighborhood centers.

Connecticut state laws require municipal plans and local regulations to address housing in several ways. These required elements codify community goals and implement regulatory changes:

- Section 8-23 of the Connecticut General Statutes (CGS) requires municipal plans of conservation and development to provide opportunities for multi-family housing and to promote housing for low- and moderate-income households.
- Public Act 17-170 recently added a new requirement for municipalities to adopt an "affordable housing plan" every five years, which specifies how the municipality intends to increase the supply of affordable housing.
- CGS §8-2 directs municipalities to adopt zoning that encourages housing opportunities and promotes economic diversity in housing.

Regional Strategies

The 2002 Study conducted by SCCOG to assess needed housing growth in response to the construction of two tribal casinos recommended the formation of a "regional housing coalition," which became SECHA, the Southeastern Connecticut Housing Alliance. Today, SECHA operates in partnership with SCCOG, and SCCOG provides staff support to SECHA.

Increase Depth of Knowledge

SCCOG	• Perform a 'Cost of Community Service' study, which includes estimates of the number of new school children attracted by different housing types (demographic multipliers), to determine the community cost of new housing and other land uses, based on regionally specific data. • Work with Electric Boat to define how hiring will impact housing demand. • Update needs assessment as new population projections or other data becomes available.	**Outcomes:** **Sound data and studies will assist ongoing municipal housing efforts, land use regulation changes, housing plans, and plans of conservation and development, which create the foundation for changes to municipal land use regulations.**
SECHA	• Continue to highlight best practices and local successes. • Develop community profiles that demonstrate local housing needs and identify local opportunities for housing development.	**Outreach and education will help to build awareness amongst community leaders and local planners of the housing challenges *specific* to the region.**

Proactively Plan for Development

SCCOG	• Incorporate data used in this study into regional planning and zoning referrals that pertain to housing. • Coordinate the regional planning of sewer investments, which would include future growth areas, sewer avoidance areas, and locations of treatment facilities.	**Outcomes:** **Planning for appropriate expansion of sewer service will increase the 'developability' of future properties to be served, and guide housing growth to appropriate areas.**

Endnotes

[1] United States Department of Housing and Urban Development. (2018). Affordable Housing. Retrieved from https://www.hud.gov/program_offices/comm_planning/affordablehousing/

[2] United States Census Bureau / American FactFinder. (2017). 2011-2015 American Community Survey 5-year Estimates. Census Bureau.

[3] United States Census Bureau / American Fact Finder. (2003). 2000 Decennial Census. Census Bureau.

[4] Moser, E. (2018, January 11). In hunt for a career, hundreds flock to EB fair in Westerly. The Day. New London. Retrieved from https://www.theday.com/article/20180111/nws01/180119854

[5] Bergman, J. (January, 22 2018). EB's workforce surpasses 16,000, a number not seen in nearly 25 years. The Day. New London. Retrieved from http://www.theday.com/article/20180122/NWS09/180129847

[6] United States Census Bureau / American FactFinder. (2017). 2011-2015 American Community Survey 5-year Estimates. Census Bureau.

[7] United States Census Bureau / American FactFinder. (2017). 2011-2015 American Community Survey 5-year Estimates. Census Bureau.

[8] United States Department of Housing and Urban Development. (2017). Income Limits. Retrieved from https://www.huduser.gov/portal/datasets/il.html

[9] United States Census Bureau / American Fact Finder. (2003). 2000 Decennial Census. Census Bureau.

[10] Xu, Y., Johnson, C., Bartholomae, S., O'Neill, B., & Gutter, M. S. (2015). Homeownership Among Millennials: The Deferred American Dream? Family and Consumer Sciences Research Journal, 44(2).

[11] National Association of Realtors. (2017). 2017 Home Buyers and Sellers Generational Trends Report.

[12] National Association of Realtors. (2017). 2017 Home Buyers and Sellers Generational Trends Report.

[13] Demand Institute. (2015). Millennials and Their Homes: Still Seeking the American Dream.

[14] DataHaven and Siena College Research Institute. (2016). 2015 DataHaven Community Wellbeing Survey New London Crosstabs.

[15] National Association of Realtors. (2017). 2017 Home Buyers and Sellers Generational Trends Report.

[16] Li, W., & Goodman, L. (2016). How Much House Do Americans Really Own? Measuring America's Accessible Housing Wealth by Geography and Age. Urban Institute.

[17] United States Census Bureau / American Fact Finder. (2017). 2016 American Community Survey 1-year Estimates. Census Bureau.

[18] Foley, D., Heimovitz, H., Guralnik, J., and Brock, D. Driving Life Expectancy of Persons Aged 70 Years and Older in the United States. American Journal of Public Health, August 2002, 92(8).

[19] Joint Center for Housing Studies of Harvard University. (2017). Improving America's Housing 2017: Demographic Change and the Remodeling Outlook. Harvard University.

Other Cited Sources

Benham, Shawn; The Sanborn Map Company. (2017, 01 17). CRCOG Orthoimagery. Retrieved from http://www.cteco.uconn.edu/metadata/dep/document/ortho_2016_fgdc_plus.htm

Connecticut Department of Economic and Community Development. (2017). Connecticut Housing Information. Retrieved from State of Connecticut: http://www.ct.gov/ecd/cwp/view.asp?a=1106&q=250640

Connecticut Department of Housing. (2015). 2015 Affordable Housing Appeals List. State of Connecticut.

Connecticut Fair Housing Center and Connecticut Department of Housing. (2015). State of Connecticut Analysis of Impediments to Fair Housing Choice. Connecticut Department of Housing.

Connecticut State Data Center at the University of Connecticut Libraries Map and Geographic Information Center – MAGIC. (2017). 2015 to 2040 Population Projections for Connecticut. University of Connecticut. Retrieved from https://ctsdc.uconn.edu/2015_2040_projections/