



# 2017

## **COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY**

*for the*

## **SOUTHEASTERN CONNECTICUT ECONOMIC DEVELOPMENT DISTRICT**



Plan prepared by  
The Southeastern Connecticut Enterprise Region  
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In partnership with and special thanks to  
The Southeastern Connecticut Council of Governments  
And The CEDS Strategy Committee

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Camoin Associates

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Approved by

The CEDS Strategy Committee on February 23, 2017

The Southeastern CT Council of Governments on March 22, 2017

The seCTer Board of Directors on March 29, 2017

The State of Connecticut Department of Economic and Community Development on \_\_\_\_\_, 2017

The State of Connecticut Office of Policy and Management on \_\_\_\_\_, 2017

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(**Bold: Executive Committee**)

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# TABLE OF CONTENTS

## COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY OVERVIEW

SECTION 1: INTRODUCTION AND OVERVIEW OF THE ECONOMY	1
1.1 THE "NEW NORMAL"	1
1.2 EMERGING FROM THE GREAT RECESSION	3
1.3 REGIONAL CONTEXT	5
1.4 REGIONAL ASSETS & ACTIVITY	7
1.4.1 TRANSPORTATION	9
1.4.2 UTILITIES	14
1.4.3 LAND USE & AGRICULTURE	17
1.4.4 TOURISM & THE CREATIVE ECONOMY	19
1.4.5 MANUFACTURING & DEFENSE	24
1.4.6 EDUCATION & WORKFORCE DEVELOPMENT	26
1.4.7 HEALTHCARE	30
1.4.8 INNOVATION	32
SECTION 2: LOCAL, REGIONAL AND GLOBAL IMPACT FACTORS	34
2.1 DEMOGRAPHIC TRENDS - SOCIOECONOMIC PROFILE	36
2.1.1 POPULATION GROWTH, AGE & DIVERSITY	37
2.1.2 MIGRATION & COMMUTER PATTERN	40
2.1.3 WORKFORCE AND EDUCATION	42
2.1.4 AFFORDABILITY	44
2.2 ECONOMIC PROFILE	46
2.3 INNOVATION PROFILE	48
2.4 FISCAL PROFILE	50
2.5 INDUSTRY CLUSTER PROFILES	51
2.5.1 TOURISM INDUSTRY	54
2.5.2 HEALTHCARE SERVICES INDUSTRY	56
2.5.3 DEFENSE INDUSTRY	59
2.5.4 ENERGY AND ENVIRONMENT INDUSTRY	61
2.5.5 BIOSCIENCE INDUSTRY	63
2.5.6 AGRICULTURE, FISHING & FOOD PRODUCTION	66
2.5.7 CREATIVE INDUSTRY	69
2.5.8 ADVANCED MANUFACTURING INDUSTRY	71
2.5.9 MARITIME INDUSTRY	73





SECTION 3: SUMMARY OF PUBLIC INPUT	75
3.1 SWOT ANALYSES- KEY FINDINGS	76
3.2 FOCUS GROUPS AND TARGETED INTERVIEWS	78
– KEY FINDINGS	
SECTION 4: STRATEGIC DIRECTION/ACTION PLAN	82
4.1 REGIONAL VISION AND IMPACT FACTORS	84
4.2 STRATEGIC PLAN/GOALS MAP	85
4.2.1 GOVERNANCE SYSTEMS AND STRUCTURES	85
4.2.2 RESILIENCE AND READINESS	88
4.2.3 INNOVATION AND COMPETITIVENESS	97
4.2.4 QUALITY OF LIFE	101
4.2.5 TRANSPORTATION	106
4.2.6 WORKFORCE DEVELOPMENT	109
4.2.7 EDUCATION	111
4.3 ALIGNMENT WITH STATE AND FEDERAL INITIATIVES	113
4.3.1 STATEMENT OF CONSISTENCY	114
SECTION 5: IMPLEMENTATION AND EVALUATION	116
5.1 PERFORMANCE MEASUREMENT	116
5.2 METRICS AND REGIONAL INDICES	117
5.3 SCORING AND REPORTING	120
5.4 CURRENT & ONGOING PROJECTS ALIGNED WITH CEDS GOALS	121
5.5 CONCLUSION	121
ADDENDUM: PROJECT LIST	

## APPENDICES

- APPENDIX A: Data Analysis: Comprehensive Economic Development Strategy, Southeastern Connecticut Enterprise Region (seCTer), December 2016, Camoin Associates
- APPENDIX B: Summary of Public Input, December 2016, Southeastern CT Enterprise Region
- APPENDIX C: Southeastern Connecticut Regional Resilience Vision Master Report. (Draft). Coastal Resilience Program, The Nature Conservancy. Publication 17-05. New Haven, Connecticut. White, C. and A.W. Whelchel (2017)

### LIST OF FIGURES

#### OVERVIEW

Figure 1 Southeastern CT Economic Development District (EDD); SCCOG

#### SECTION 1

Figure 2	Traditional Vs. Innovation-Based Economic Development	2
Figure 3:	Personal Income: Percent Change	4
Figure 4:	Comparative Prosperity Performance by County 1998-2013	4
Figure 5:	Percent Change in Jobs, seCTer Region	5
Figure 6:	Transportation Assets; SCCOG Land Use Data	9
Figure 7:	SEAT Route Map	10
Figure 8:	Admiral Harold E. Shear State Pier, New London CT Shipping Report 2004-2016	14
Figure 9	Energy Generation Sites in Southeastern Connecticut and NPU Service Territory Map	15
Figure 10	Undeveloped Land within Sewer Service Areas;	16
Figure 11:	Active Farmland and Prime Farmland Soils	17
Figure 12:	Southeastern CT Land Use, 2016	17
Figure 13:	Preserved Open Space and Recreational Resources	18
Figure 14:	Historic Sites and Recreation	19
Figure 15:	Housing in SECT 123,445 Units in Region	29
Figure 16:	Rental Housing in SECT; Number of Units and Monthly Rental Costs	29
Figure 17:	Thames River Innovation Place Boundary Map	33

### SECTION 2

Figure 18:	Population Density in SECT by Census Tract	36
Figure 19:	% Change in Population 2005-2015	
Figure 20:	Age Distribution	37
Figure 21:	% Foreign Born by Municipality Type	37
Figure 22:	Demographic Profile – Ancestry	38
Figure 23:	Education Attainment, Foreign Born Population and Income	39
Figure 24:	Total Inbound and Outbound Migration Flows to New London County, 2013	40
Figure 25:	Commuter Inflow/Outflow seCTer Region, 2004-2014	41
Figure 26:	Share of Households without Vehicles	41
Figure 27:	Sample of Walkability Scores	41
Figure 28:	Labor Force Participation Rate	42
Figure 29:	Education Attainment	42
Figure 30:	Occupation Concentration/Location Quotient	42
Figure 31:	Percent of Businesses by Business Size, 2015	43
Figure 32:	Workers by 2-digit NAICS Industry, 2004-2014	43
Figure 33:	Annual Average Unemployment Rates 2009 & 2015	44
Figure 34:	Median Household Income	44
Figure 35:	Unemployment and Poverty Levels	44
Figure 36:	Share of Renter Households in Southeastern Connecticut Paying More than 30% of Income Towards Rent	45
Figure 37:	Job Change Historic and Projected	46
Figure 38:	Share of Employment in Major Industries	47



## SECTION 2 (CONTINUED)

Figure 39:	New Establishments per Capita, 2014	48
Figure 40:	STEM Occupations - Location Quotient, 2015	48
Figure 41:	Innovation Index	49
Figure 42:	Portion of Revenues from Property Tax, 2014	50
Figure 43:	Past, Present, and Projected Industry Jobs	51
Figure 44:	Tourism Employment Trends	54
Figure 45:	Healthcare Employment Trends	56
Figure 46:	Healthcare Services Cluster Detail	57
Figure 47:	Defense Employment Trends	59
Figure 48:	Defense Cluster Detail	60
Figure 49:	Energy and Environment Employment Trends	61
Figure 50:	Bioscience Employment Trends	63
Figure 51:	Agriculture, Fishing and Food Production Employment Trends	66
Figure 52:	Creative Sector Employment Trends	69
Figure 53:	Advanced Manufacturing Employment Trends	71
Figure 54:	Maritime Industry Employment Trends	73

## SECTION 3

Figure 55:	Number of Participants - Public Input Sessions	77
Figure 56:	Focus Groups: Topic and Participation	78

## SECTION 4

Figure 57:	CT Trails	107
Figure 58:	Workers by Age, 2009-2014 seCTer Region	110
Figure 59:	Workers by Ancestry, 2009-2014 seCTer Region	110
Figure 60:	Workers by Gender, 2009-2014 seCTer Region	110
Figure 61:	Seasonally Adjusted Employment: Norwich - New London Westerly, RI LMA	110





## COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY OVERVIEW

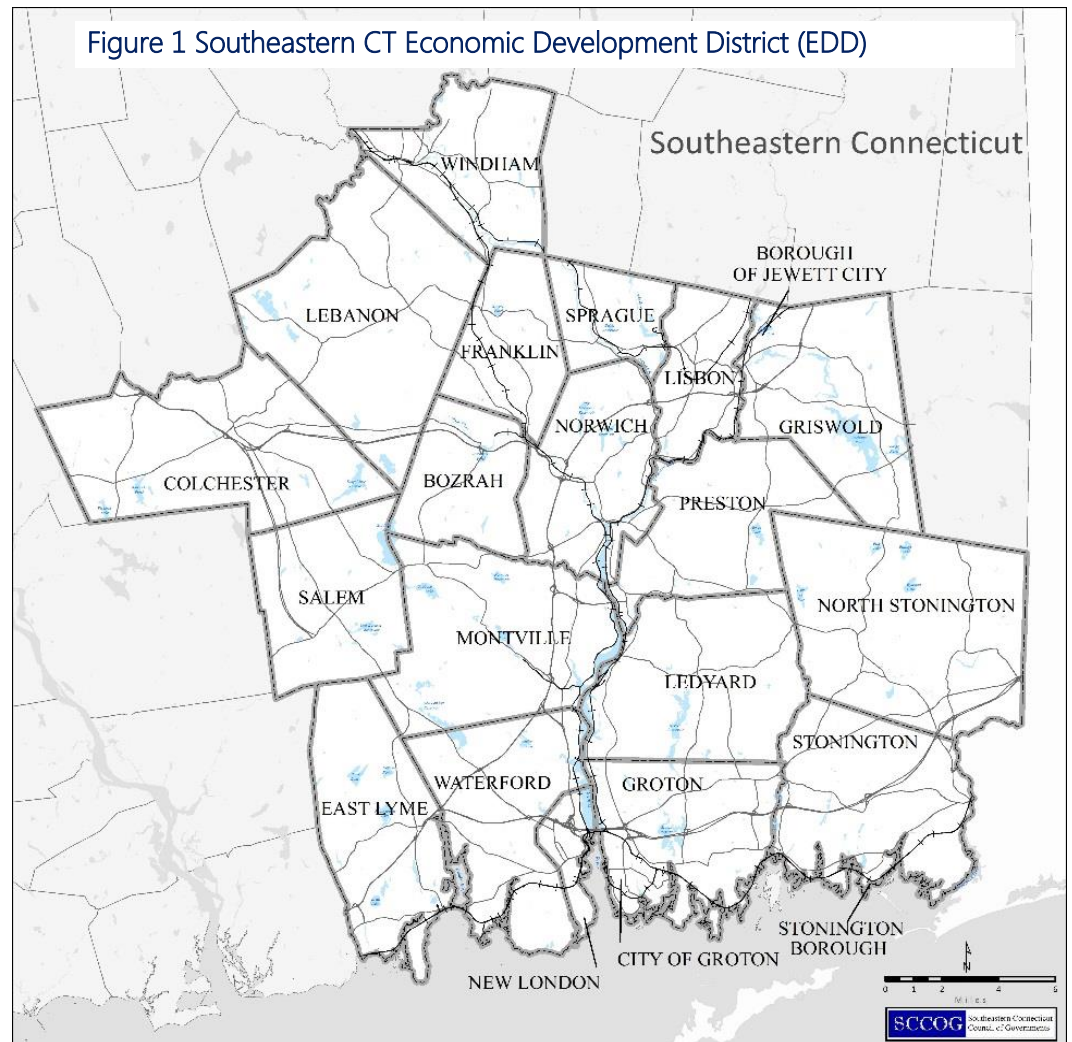
*"A CEDS is the result of a regionally-owned planning process designed to build capacity and guide the economic prosperity of an area or region."*

The Southeastern Connecticut Enterprise Region (seCTer) is a non-profit, public-private regional economic development agency serving the 20 towns, two boroughs and two Native American Tribal Nations of Southeastern Connecticut. Per the US Census 2014 ACS, the population of the seCTer region is 286,786.

seCTer's mission is to promote and preserve the region's attractiveness, to encourage new businesses, and to assist and to nurture existing and expanding local enterprises. seCTer is the agency responsible for developing and implementing the Comprehensive Economic Development Strategy (CEDS) for the Southeastern CT Economic Development District in close partnership/coordination with the Southeastern CT Council of Governments and other regional organizations.

In 2011, the seCTer region was officially designated as an Economic Development District meeting the requirements of C.G.S. Section 32-9p, to have one or more distressed municipalities as determined by "high unemployment and poverty, aging housing stock and low or declining rates of growth in job creation, population, and per capita income." DECD additionally included 1) Level of Per Capita Income, 2) % of population with high school degree and higher and 3) Per Capita Adjusted Equalized Net Grand List (AENGL) to make the determination.

Co-Chaired by Robert Mills (Norwich Community Development Corporation) and Sean Nugent (Preston Riverwalk Agency), seCTer's Economic Development and Marketing Committee has been designated as the CEDS Strategy Committee, with oversight from the full seCTer Board of Directors. The Committee is comprised of representatives from the public and private sector in compliance with EDA guidelines. The CEDS Strategy Committee and Economic Development Sub-committee are staffed by Juliet Hodge, the principal staff charged with drafting the CEDS.



The CT Office of Policy and Management (OPM) recently completed a comprehensive analysis of the boundaries of logical planning regions in Connecticut under Section 16a-4c of the Connecticut General Statutes (2014 Supplement). This analysis resulted in the number of planning regions being reduced from the original fifteen to nine, as a result of four voluntary consolidations and the elimination of two planning regions. Windham and Lebanon were re-designated to the Southeastern Connecticut Planning Region, and are now members of the Southeastern Connecticut Council of Governments, and Lyme and Old Lyme are now members of the Lower CT River Valley Region. The adoption of 2017 CEDS formalizes this new configuration.

The purpose of the CEDS is to provide direction and focus as well as a framework from which to proceed and to which local plans can align to gain validity and strength to help facilitate implementation. The CEDS provides possible strategies to develop the flexibility needed to adapt to both macro- and micro-economic conditions and to fully utilize the region's unique advantages to maximize our economic opportunity for its residents. The CEDS

- is the result of a continuing economic development planning process and strategic thinking developed with broad-based and diverse public and private sector participation;
- serves as a benchmark by which a regional economy can evaluate opportunities with other regions in the national and global economy;
- analyzes the regional economy;
- establishes goals and objectives as part of a regional action plan;
- identifies investment priorities and clearly defined metrics designed to efficiently and easily monitor implementation and success (or failure); and
- provides an economic roadmap to diversify and strengthen regional economies.

The 2017 CEDS meets the requirements set forth in 13 C.F.R. § 303.7 and will replace the 2011 CEDS and all prior updates and project lists. The 2017 CEDS is approved by seCTer, the Southeastern CT Council of Governments (SCCOG), the State of Connecticut Department of Economic and Community Development (DECD), CT Office of Policy Management (OPM), and ultimately by the U.S. Department of Commerce, Economic Development Administration (EDA).



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<sup>i</sup> EDA Guidelines 03/09/2016

# SECTION 1

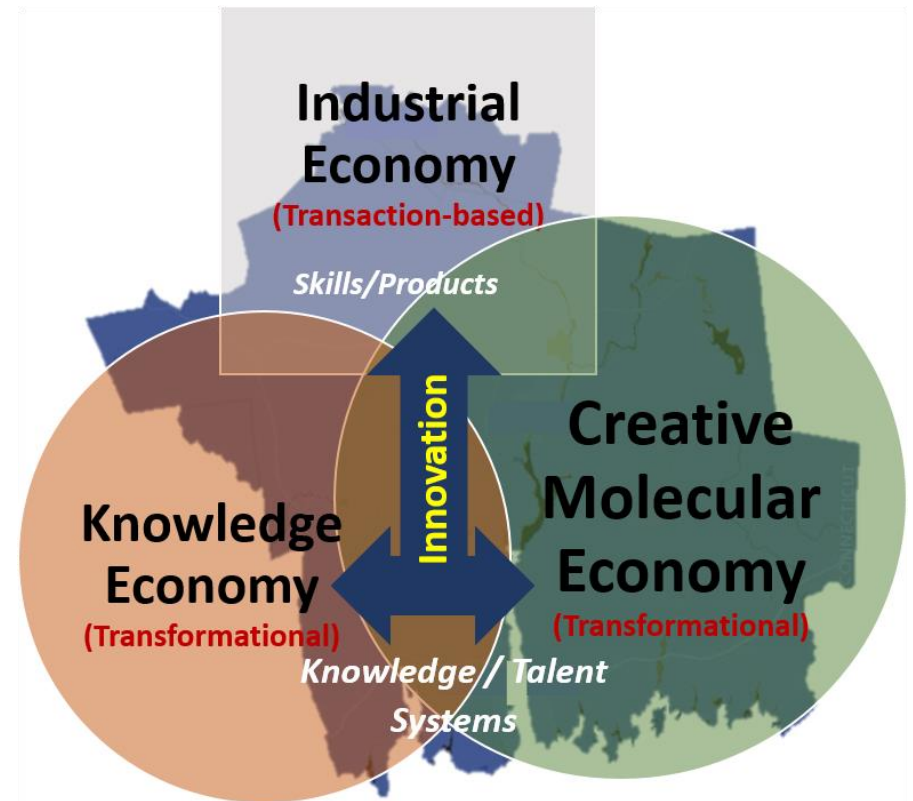
## INTRODUCTION AND OVERVIEW OF THE ECONOMY

### 1.1 THE "NEW NORMAL"

In the period following the adoption of the region's first CEDS in 2004, Southeastern Connecticut (SECT) witnessed deep structural changes in the global economy that have and will continue to impact and transform the local economy at speeds that are unfamiliar and uncomfortable to many. We are challenged by the reality that the next "big deal" will no longer revive a struggling economy. **The transaction-based economy has evolved into a transformational, knowledge-based economy that recognizes continual innovation supported by open networks and complex systems as its foundational elements.** The skills, mindset, and structures needed to support the waning, transaction-based economy lose their relevancy as we transition to the "New Creative Molecular Economy,"<sup>1</sup> and can even be detrimental as we attempt to adapt and evolve. The goal of restoring pre-recession conditions is impossible because there is a dynamic, new structure and a new set of assumptions in place that at times change without clear motive. Simply modifying or improving the decades-old, trusted methods will not guarantee success in the emerging economy. We need a transformational change that *reenergizes* and *repurposes* static, institutional systems (regulatory, social, educational, corporate, etc.) in order to move beyond the status quo.

Generating the political will to achieve this will be one of our biggest challenges.

SECT, similar to other regions in New England, must navigate the storm caused by the historic convergence of three separate and distinct economic development paradigms: the Industrial, Knowledge, and New Economy, where the newest is itself characterized as "disruptive and constantly evolving." We are challenged by our inability to predict outcomes in this New Economy, and the need instead to develop (and continually redevelop) systems that allow us to *adapt* to the outcomes. **The reality of this new, disruptive, global economy must illuminate an *undisputed* path away from isolated towns competing for recognition and resources toward regionalism, where the critical mass *vital* to compete in the global marketplace, is provided and strengthened by one regional perspective.**





The following chart outlines the key differences between the Traditional and Innovation-based economy and describes the new focus for economic development. These changes have significant impact on **the role of the Economic Developer, demanding a reevaluation of the traditional hyper-focus on business recruitment and the need to consider a convener, network building and support role.**

ECONOMIC DEVELOPMENT TRADITIONAL VS. INNOVATION-BASED	
How does Economic Development Work?	
<ul style="list-style-type: none"> <li>Public sector incentives</li> <li>Big new private investments in factories</li> <li>The “low cost” community will win the deal in the end</li> </ul>	<ul style="list-style-type: none"> <li>Investment in research capacity, entrepreneurs, and capital</li> <li>Private-public-education partnerships</li> <li>The most innovative culture will grow the fastest</li> </ul>
How do you “move the needle”?	
<ul style="list-style-type: none"> <li>Marketing and land development</li> <li>Headline grabbing deals</li> <li>Pick the “winners” in your targeted industry clusters and focus on them</li> </ul>	<ul style="list-style-type: none"> <li>Cultivating and networking local public and private leaders</li> <li>Highly connected, self-reinforcing networks of people, money and ideas</li> <li>Focus on clusters of strength, but let the “winners” pick themselves through the creative process</li> </ul>
Focus Points	
<ul style="list-style-type: none"> <li>Big companies</li> <li>Business attraction</li> <li>Best incentives</li> <li>Real estate</li> <li>Trade shows</li> <li>Branding for external marketing</li> <li>Executive amenities</li> <li>Places companies want to be</li> <li>Greenfield industrial and office parks</li> </ul>	<ul style="list-style-type: none"> <li>Talented leaders, skilled workers</li> <li>STEM skills, innovation ecosystems</li> <li>Entrepreneur networks</li> <li>Business creation, expansion, reinvention</li> <li>Bringing research to market</li> <li>Connecting academic institutions to local businesses and communities</li> <li>Branding for internal marketing</li> <li>Live/work/play places</li> <li>Places talented workers and entrepreneurs want to be</li> <li>Public investments in community</li> </ul>
Business Environment	
<ul style="list-style-type: none"> <li>Efficiency is dominant source of private sector strength</li> <li>Relatively stable industries with long-cycle investments</li> </ul>	<ul style="list-style-type: none"> <li>Strength through constant adaptive changes</li> <li>Innovation is the dominant source of strength</li> <li>Engaging a diverse network of individuals</li> </ul>
Who provides ED leadership?	
<ul style="list-style-type: none"> <li>Top-down, power of the purse</li> <li>Elected Officials/EDO Executive Director</li> </ul>	<ul style="list-style-type: none"> <li>Bottom up, soft power and thought leadership</li> <li>EDO Exec Dir identifies and supports startup community leaders who take joint leadership</li> </ul>



**Figure 2: Traditional vs Innovation-Based Economy, Camoin Associates**



In its effort to latch onto the emerging economies, SECT grapples with gridlock. The residents, business owners, elected officials, public servants, and other stakeholders have repeatedly articulated the need for a more coordinated and collaborative approach to achieve common goals and the efficiencies necessary for all towns, businesses, organizations, etc. to thrive. However, they are routinely defeated by a relentless addiction to the familiar “way it has always been done.” It is essential that we intentionally and thoughtfully create a new framework that focuses on our unique assets and increases the fundamental capacity of our economy -the continual expansion of the “economic frontier” - rather than limits the focus to improving the efficiency of existing structures simply to stay afloat. The strategies we develop must recognize our current system as merely one possible system rather than the *only* system, and that growth may require uncomfortable change on the part of the entrenched to break through the stagnation and create new pathways and conditions for equitable economic opportunity and security. **Just as the innovations of the industrial age radically transformed the economy, physical landscape, and social and political systems that had been in place for centuries, so too will the innovations of the new economy bring similar transformational change to our current systems, structures and physical landscape.**

## 1.2 EMERGING FROM THE RECESSION

Nationally, the country has seen a slow but steady growth since the National Bureau of Economic Research declared the end of the Great Recession in 2009, as indicated (in part) by the following indicators:

- Real Gross Domestic Product (GDRP) has averaged 2.1% growth annually between 2009 and 2016. Growth trends in both GDP and GDRP are expected to continue in 2017.
- An average of 158,000 jobs a month have been created since the recovery began through September 2016. Trend expected to continue through 2017.
- In 2016, the U.S. unemployment rate reached an all-time low in nine years (4.6%) and disposable personal income an all-time high.
- Economists point to strengthening qualitative growth factors, such as more advanced technology, improved labor force skills, and greater productivity.

Connecticut’s growth has been modest:

- State Gross Domestic Product (SGDP) saw 0.6% growth in 2015 and 0.9% in Q1 2016.
- CT Personal Income grew 1.1% in Q2 2016 relative to the preceding four quarters, earning CT a ranking of 20<sup>th</sup> among the states for Personal Income growth. <sup>2</sup>
- The CT DOL forecasts a 3.6% increase in Disposable Personal Income in Q1-2017 from Q1- 2016<sup>3</sup>
- As of the end of November 2016, 82,200 (69%) jobs were regained of the 119,000 (seasonally adjusted non-farm) jobs lost during the recession, equating to 1,028 jobs per month since February 2010.
- The private sector has regained 94,200 (84.3%, 1,178 per month) of the 111,700 private jobs that were lost during the same period. <sup>4</sup>

- October 2016 CT unemployment rate dropped to 5.1% from its peak of 9.2% in October 2010 - an eight-year low.<sup>6</sup>
- Housing market began to recover in 2012, slowed in 2014, and showed improvement again in 2015 and 2016. The positive trend is expected to continue.<sup>5</sup>
- More than 1,600 companies benefitted from the State's campaign to strengthen the Small Business Express Program (SBEP) which provides loans and grants to Connecticut's small businesses to spur job creation and growth. As of mid-November 2016, the State had provided more than \$260 million in loans and grants with an associated expected 6,616 in job creation and 18,202 retained.
- "First Five Plus" program is expected to leverage nearly \$1.3 billion in private investment, create 5,530 jobs and retain 14,204 (15 participating companies).
- \$60M invested in the Connecticut Manufacturing Innovation Fund (MIF) to support the growth, innovation and progress of Connecticut's advanced manufacturing sector. To date, approximately \$25 million has been allocated and matched by \$26 million of private investment.

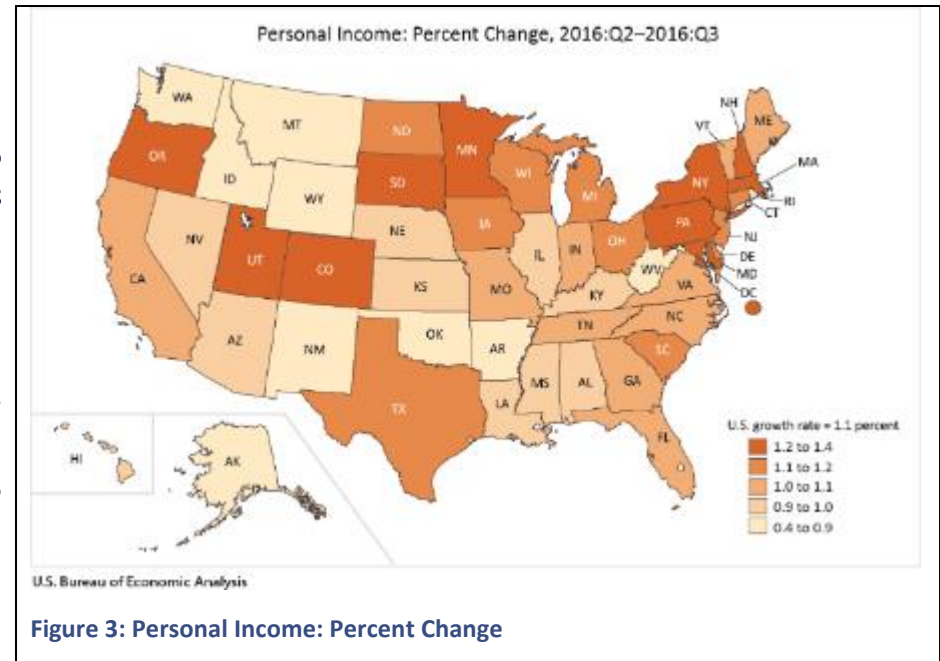


Figure 4: Comparative Prosperity Performance by County, 1998-2013

Region	1998	2013	Change	Real Growth in Prosperity
Hartford County, CT	\$66,164	\$75,717	\$9,553	0.90%
Fairfield County, CT	\$54,359	\$59,089	\$4,730	0.56%
New Haven County, CT	\$43,817	\$47,758	\$3,941	0.58%
Middlesex County, CT	\$42,227	\$41,784	(\$443)	-0.07%
Litchfield County, CT	\$32,021	\$32,406	\$385	0.08%
Windham County, CT	\$29,841	\$30,901	\$1,059	0.23%
Tolland County, CT	\$23,545	\$26,058	\$2,512	0.68%
New London County, CT	\$42,838	\$48,618	\$5,780	0.85%

Despite the positive indicators and campaigns to assist Connecticut businesses, the State's fiscal health is still a concern to many. The deficit is expected to be \$1.45 billion for Fiscal Year 2017-2018. Notable cuts in the budget impacting SECT include suspending all funding for the Eastern Regional Tourism District for Fiscal Year 2017 - effectively suspending tourism marketing, public relations and promotional material development for SECT; proposed reduced funding to Southeast Area Transit (SEAT) and Windham Regional Transit District bus service; and direct aid to municipalities.

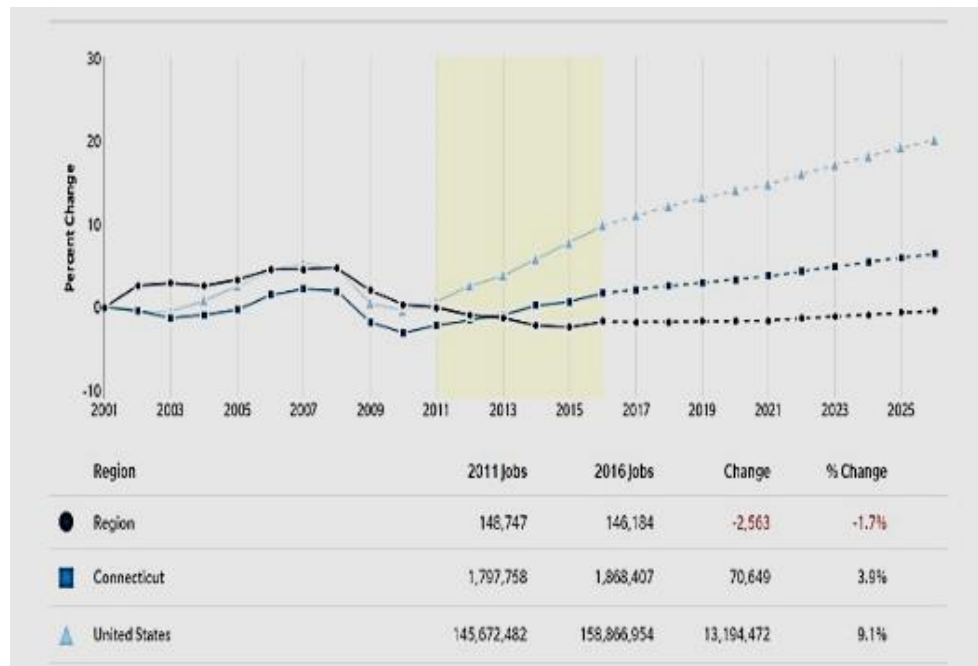
Source: U.S. Cluster Mapping Project (<http://clustermapping.us/>), Institute for Strategy and Competitiveness, Harvard Business School.

### 1.3 REGIONAL CONTEXT

**As Southeastern Connecticut renews its focus on strategies to create broad-based prosperity, it is important to understand and acknowledge the local context in which this CEDS is written, as well as the broader global context addressed above.**

Since the adoption of the 2011 CEDS, there have been significant changes with respect to our demographic and socio-economic profile, our industry and workforce profile, and fiscal profile. Because the two Casinos and the Tourism, Bio-Science and Defense sectors of the regional economy remained relatively strong in the 2008-09 period, the impacts of the “Great Recession” were not immediately felt in SECT. It was not until 2015 that the seven year period of job loss bottomed out at 9.3% (for the Norwich-New London LMA)<sup>7</sup>. The Region’s overall job decline was driven by the Government sector, which shed over 5,700 jobs. Of those jobs, over 4,500 fall under Local Government (excluding Education and Hospitals), a category that also includes employment related to the Region’s two casinos.

**Figure 5: Percent Change in Jobs, seCTer Region,**



Contributing factors have been a downturn in the gaming market; reorganization and downsizing within Pfizer; the transfer of two submarines and support staff from SUBASE New London due to reassessment of Navy force requirements; and less leisure travel/disposable income due to the recession. SECT has also seen an increase in the number of service sector jobs - which are lower paying than the manufacturing and other jobs they replaced.

Significant closures over the last five years include Fusion Paperboard in Sprague, with an associated loss of 145 jobs; AES Thames and West Rock in Montville; Safelite in Pawcatuck; and Monsanto in Stonington. These employees are residents of towns throughout the region, attesting to the regional nature of so many businesses in the SECT Economic Development District (EDD). Changes at Pfizer include a loss of 1,500 employees and an additional 800-1,000 contractors. The departure of Pfizer from the New London facility had an impact on daytime businesses, as Pfizer employees had different and more flexible hours and higher salaries than the 3,500 Electric Boat workers who now occupy the facility. Pfizer’s one million square foot Building 118 was torn down having a sizeable negative tax impact on Groton’s tax base. The company did recently hire 400 new employees at their global research and development center in Groton.

In addition to job loss, municipal general operating and school budgets have been greatly impacted by significant reductions in federal, state and local philanthropic giving. This loss of revenue impacts residents, non-profits and businesses in the region with respect to the cost and ability to deliver necessary services especially to vulnerable populations. These impacts are felt through increased taxes and permit fees; reduced education and other programming; and less capital in general for necessary investments (staff, equipment, infrastructure etc.).



The Pfizer research complex in New London, Connecticut, as seen from a public outlook in February 2005. Electric Boat now occupies the facility.

Though the [National Bureau of Economic Research](#) determined that the second quarter of 2009 marked the end of the Great Recession, there has been a distinct lag in economic activity in the SECT region over the past five years. In addition to the impact of the sluggish economy, SECT was dealt another heavy financial blow with Superstorm Sandy which hit New England in October 2012. The storm was estimated to have caused \$394.3 million in damage to the six New England states (CT, MA, RI, NH, VT and ME) and five deaths. CT alone accounted for four of the five deaths and \$360 million of the damage! Local municipalities, already experiencing revenue loss, were faced with unbudgeted overtime, clean-up costs and costly infrastructure repair. The storm did serve as a wake-up call, and many utility companies have since undertaken decisive measures to reduce the risk of damage to utility infrastructure and lessen the occurrence and duration of power outages.

Another concern, particularly in SECT, is low population growth, lack of ethnic diversity, and notable aging of the population. This impacts economic growth in a multitude of ways ranging from the lack of human capacity needed to fuel innovation and fill jobs, to our general competitiveness and attractiveness to new businesses and investment. The new types of high-tech/knowledge-based businesses want to locate in dynamic, vibrant areas that are diverse and well connected, modern, and ripe with talent. Attractive places for business location and relocation offer abundant resources for start-ups; flexible regulatory processes and investment opportunities; as well as social, cultural and educational “amenities” aimed at attracting a younger generation (and talent). Regions with ageing populations and no steady influx of young adults (foreign-born or domestic), tend to evolve into places geared toward the demands of the existing population – particularly with respect to housing, transportation, and entertainment. **Without tangible demand, the only impetus to change may come from forward-thinking community leaders urging towns and developers to anticipate the emerging trends and permit/build accordingly.** The cost of services in a mostly suburban, aging region are likely to be higher, as the same efficiencies cannot be met as they can in their urban counterparts.

Despite the economic downturn and slow recovery, the economy of SECT is gaining some momentum.

Two indicators that the economy in SECT is on the mend are housing and unemployment. Housing is an important sign and leading indicator of the economic outlook of any region. In SECT single-family home sales increased 15% through June 2015, while median single-family home prices increased 2%. Housing construction is also on the rise. In 2014, the net gain was up 421 units from the 141 unit low in 2008, but still well below the



peak of 1,268 in 2004. The Connecticut Department of Labor, American Community Survey reports an annual average unemployment rate of 6% in 2015 for the seCTer region (new configuration), down from its peak of 9.6% in November 2011 (US Bureau of Economic Analysis, New London County).

Additional discussion on the Economic Health of the region will be discussed in Section 2 as part of the Economic Profile provided by Camoin Associates in their Data Analysis included as Appendix A.

## 1.4 REGIONAL ASSETS AND ACTIVITY

The following sections highlight significant assets and regional activity that have impacted our core industries, workforce, transportation infrastructure, and other key components of the local economy central to its ability to recover from major disruptions such as the Great Recession. As noted in the 2011 CEDS, and still applicable today, for the past 300 years, the region's business community and population have shown a noteworthy resilience to considerable disruptions in the local and global economies, and have been able to leverage the area's numerous assets and exhibited a willingness

to cooperate in attracting businesses to regional locations.

**The challenges that face the region remain finding ways to effectively build on our strengths and existing economic drivers; to enhance the skills of the workforce to accommodate industry demand; and to make use of existing but outdated buildings and contaminated sites, in order to build a new economic future for the region.**

SECT has an abundance of investment opportunities in downtown areas that are near transportation infrastructure already in place. This is infrastructure that many other

regions in the nation have to build from scratch. SECT is also small enough so residents and stakeholders can have direct impact in the continued development of their local and regional economy. **Investment opportunity, existing infrastructure, and ability to have an impact are all very enviable qualities that SECT can and should capitalize on.**



One of the most articulated assets is SECT's location along the New England corridor and its proximity to 30% of the U.S. population and 60% of the Canadian population. SECT is essentially within a day's drive of over 30% of the nation's effective consumer income, retail sales, and manufacturing firms.<sup>8</sup> The Region marks the midpoint between New York and Boston and is within an hour of New Haven and Hartford, CT, Springfield MA, and Providence, RI - all significant urban centers providing additional economic and cultural opportunities for business owners and residents of SECT.

New London County is bisected by the Thames and Shetucket Rivers, bounded by the Pawcatuck River on its southeastern side and the Connecticut River on the west. Long Island Sound forms its southern border from the Connecticut River to the Pawcatuck River and provides easy access to the shipping lanes of the Atlantic Ocean. These marine resources have influenced the types of economic growth on which the region has depended since the 1600's. The historic maritime trade has included whaling, ship

and yacht building, commercial fin and lobster fishing. Currently maritime related tourism and water-dependent recreation are mainstays of the tourism industry in the region. The deep water Port of New London also enticed business to the region during the 19<sup>th</sup> and 20<sup>th</sup> centuries, most notably the U.S. Navy, the U.S. Coast Guard, Electric Boat, and Pfizer, Inc..



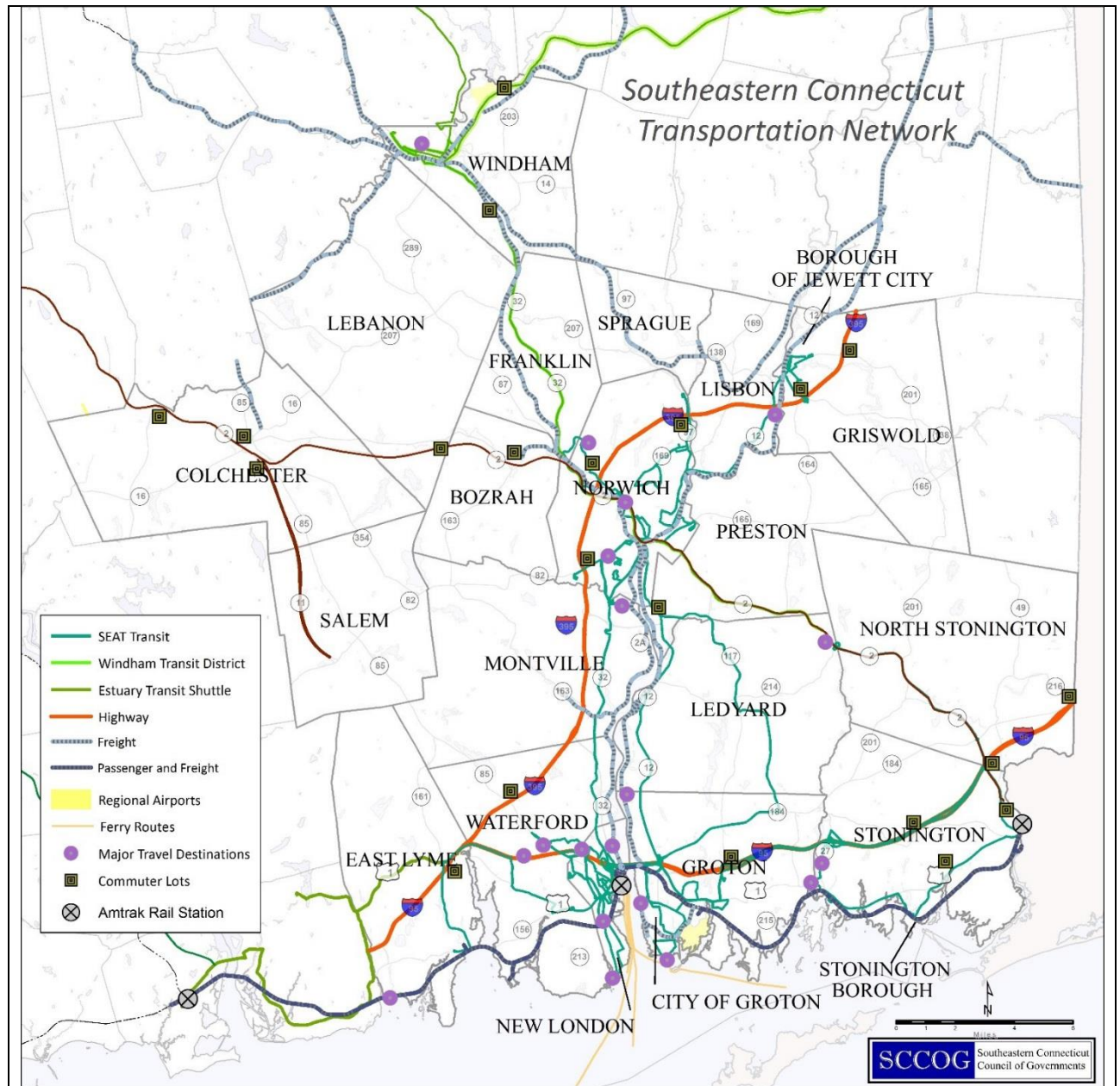


*The location of SECT for businesses, whether existing, relocating or start-ups, coupled with the transportation infrastructure, is desirable, with proximity and access both to major markets, and to a population of educated, youthful workers and potential entrepreneurs from the urban centers of the Northeast (2011 CEDS).*

The network of transportation corridors and services throughout the region consists of highways, rail lines, bus service, airports, passenger ferry service, and shipping services. I-95, serving the east/west corridor in the region, is the most heavily traveled thoroughfare along the Atlantic Coast from Florida to Maine.

I-395 serves a north-south corridor in the region, with highest traffic volumes concentrated in the Montville section due to recent developments and expansion of the Mohegan Sun Casino and Hotel complex. Additional available sites for development exist in abundance along the I-395 Corridor.

AMTRAK provides passenger rail service with stops at New London and Mystic. Freight service is offered by the New England Central Railroad and the Providence and Worcester Railroad.



### Figure 6: Transportation Assets; SCCOG Land Use Data

Significant marine transportation exists in Long Island Sound, comprised of passenger ferries, commercial shipping, and pleasure boating. The Admiral Harold E. Shear State Pier in New London, adjacent to the Central Vermont Railroad Pier, functions as the region's most important commercial marine facility. The piers have on-site freight rail connections to the north, east and west by way of the Providence & Worcester and New England Central (Rail America) Railroads. These two rail lines, on opposite sides of the Thames River, diverge when they reach Norwich and continue north to Worcester and Palmer, MA, respectively. Amtrak's Northeast Corridor provides passenger service through New London and Mystic to Boston, New York, and

Washington D.C.. Shoreline East offers commuter rail service to New Haven. Southeast Area Transit (SEAT) operates the public bus system in several towns and cities in the region. Funding for SEAT is provided by fares and contributions from the State of Connecticut and member municipalities.

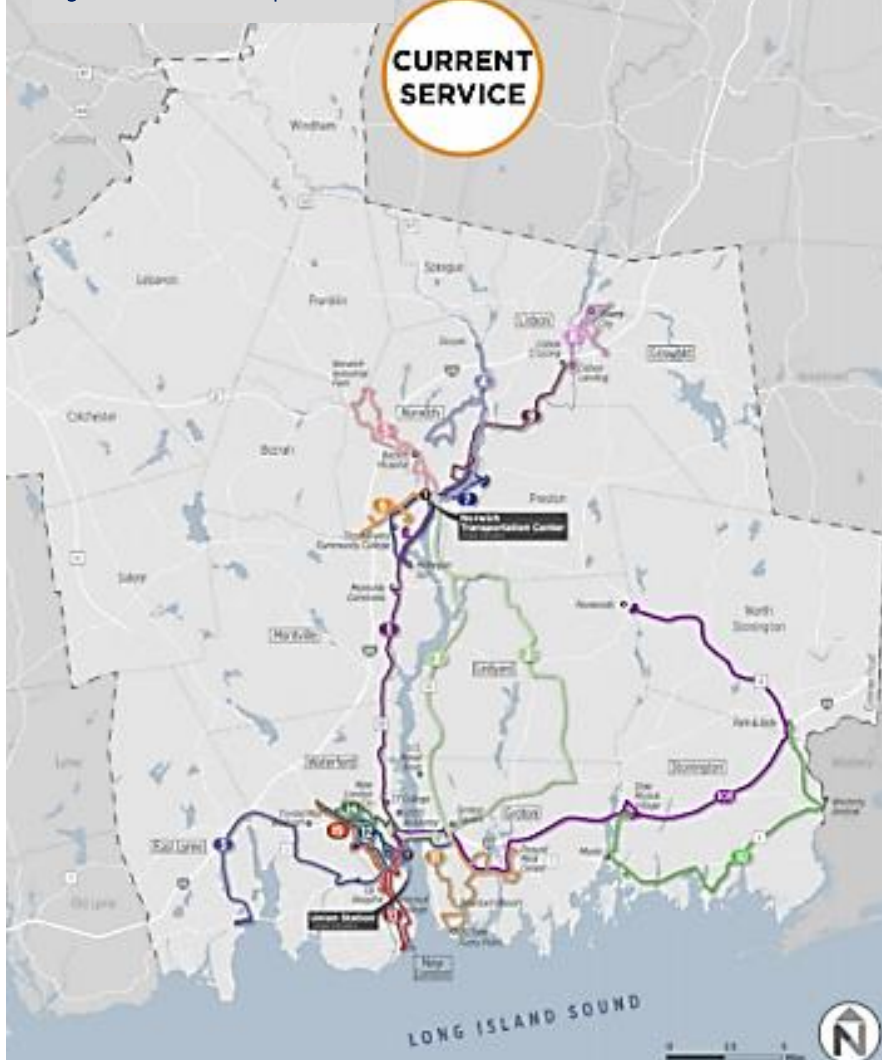
In the northern part of the region and parts of Windham County, bus service is provided by the Windham Regional Transit District. The nine towns served are Ashford, Chaplin, Columbia, Coventry, Lebanon, Mansfield, Scotland, Willington and Windham.

In 2013, the CT DOT transferred ownership and operation of the State's six airports to the Connecticut

Airport Authority (CAA) as part of an overall economic development and growth strategy and for purposes of developing and improving the airports. Two of the six airports are located at the southern and northern borders of the SECT Economic DDD (Groton - New London and Windham Airport), thereby providing general aviation services to the entire region.

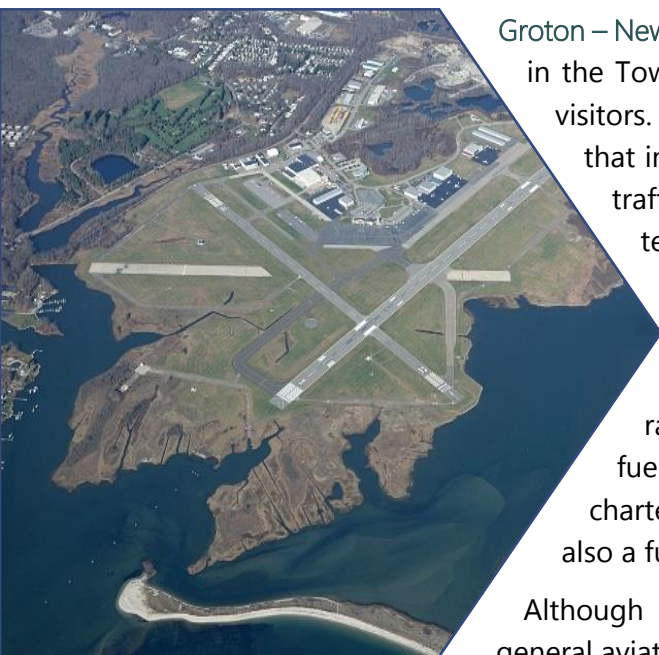
Commercial airline passenger and freight service is available at CAA's Bradley International Airport (BDL) in Windsor Locks, Tweed New Haven Airport (HVN), and TF Green Airport (PVD) in Rhode Island.

Figure 7: SEAT Route Map



Norwich Transportation Center





Groton - New London Airport

Groton – New London Airport (KGON) is a public-use, publicly owned, general aviation airport on 489 acres. It is located in the Town of Groton, seven miles from New London’s city center, in the Mystic Region - an area popular for visitors. The airport consists of two asphalt runways (4,000 feet and 5,000 feet long) and supporting infrastructure that includes a taxiway system, aircraft parking aprons, hangar facilities, an instrument landing system, an air traffic control tower (daily operating hours: 7a-10p), automated weather observation stations, and numerous tenant facilities.

The airport’s primary role is to serve general aviation, business, recreational and tourist-related demand in Southeastern Connecticut. To meet this demand, the airport provides infrastructure and aeronautical support facilities for corporate jets and for multi- and single-engine aircraft operators. A complimentary range of FBO (Fixed Based Operator) services and amenities are offered including aircraft maintenance, fuel, storage, sales, rentals, and personal flight instruction. Additional services available include private charter flights, underwater egress training for pilots and passengers, as well as car and truck rentals. There is also a full service restaurant in the main terminal. Total air traffic control count for 2016 was 38,394 operations.

Although a majority of operations occurring at the airport involve general aviation aircraft, the airport is home to the Army National Guard’s 1109th Theatre Aviation Sustainment Maintenance Group (TASMG). The TASMG assists in deployment and redeployment, provides technical assistance in support of Army aviation, and accounts for a considerable number of military flight operations to and from the Airport.



Windham Airport (KJD) is a public use, publicly owned general aviation airport on 280 acres, located approximately three miles from the City of Willimantic, in the town of Windham. The University of Connecticut’s main campus in Storrs, is a fifteen minute drive from the airport, and Eastern Connecticut State University is also nearby in Willimantic. The

airport’s primary role is to serve small and medium-sized general aviation aircraft in central Connecticut. The airport consists of two asphalt runway that are 4,200 feet and 2,700 feet long. Complimentary facilities include aircraft parking aprons; T-hangars and larger aircraft hangar storage; aircraft maintenance and repair; propeller overhaul, repair and sales; a weather station; and self-service aircraft fueling facilities accommodating single and multi-engine aircraft with a focus on corporate business and recreational flight operations.<sup>9</sup>



Windham Airport



Fire Hawk and US Air Force 2 at Groton - New London Airport; Compass Rose at Windham Airport

### ACTIVITY RELATED TO TRANSPORTATION 2011-2016

- As part of Governor Malloy's 30-year, \$100 Billion Transportation vision known as "Let's Go CT," the CT DOT initiated the I-95 Corridor Study of safety, rail, bus and traffic improvements. It also studied the potential for economic development along the corridor from Greenwich to North Stonington. Investments in SECT will include much needed repairs to the Gold Star Bridge that spans the Thames River between New London and Groton along I-95 corridor – the busiest along the Eastern Seaboard.
- Other State initiatives include LOTCIP – Regional program for roads and other transportation infrastructure improvements; and Ride-share programs like CT-Rides and NU-Ride.
- [Southeast Area Transit \(SEAT\) Bus Study](#) reviewed and updated routes to improve timing, location and accessibility to better serve the "carless" population.
- The [Norwich Intermodal Transportation Center was completed in 2012](#). The transportation center provides parking and serves as the Norwich hub for SEAT bus transfers. Norwich and New London have developed comprehensive circulation and parking strategies and have begun work to implement these strategies.
- [Thames River Heritage Park Water Taxi Service](#) between Groton and New London completed its first season – Summer 2016 – and service is expected to continue next season.
- [New England Central Rail \(NECR\) received an \\$8.2 million Tiger Grant](#) to expand freight rail capacity from New London to Stafford CT.
- [CT Port Authority was established](#) with a primary mission to develop and market the State's ports and promote its maritime economy. The CT State Port Authority will take ownership of State Pier in New London. In February 2017, the State Bond Commission approved \$4.5 million in funding to the



TRHP Water Taxi leaving Fort Trumbull



Connecticut Port Authority for repairs and improvements at the Port of New London, in part to take advantage of anticipated upgrades to the adjacent Central New England rail line.

- Proposed **National Coast Guard Museum** project includes improvements to New London Transportation Center and parking facilities.
- **Cross Sound Ferry** expanded its service allowing for eight additional departures and arrivals between New London and Orient Point, Long Island, New York.



#### Cross Sound Ferry Services

Cross Sound Ferry Services delivers over one million passengers annually, with a fleet of eight vehicle-passenger ferries and one state-of-the-art high speed passenger-only ferry, making it the largest marine transportation service in Connecticut and an economic driver in Southeastern Connecticut. From its main ferry terminal in New London, Cross Sound ferries make over 62 arrivals and departures per day going to and from Orient Point, New York and Block Island, Rhode Island. Owned and operated by the Wronowski family for over 40 years, Cross Sound Ferry Services is one of three other marine-related businesses owned



Adam Wronowski and Stan Mickus of Cross Sound Ferry receive Celebrate CT Award from Deputy Commissioner Bart Kollen and Shelly Saczynski, retired CERC Board Chair;

- **Shoreline East expanded passenger service** – some additional proposals for future expansion – MBTA will extend to Westerly, RI within ten years.
- Town of Groton has been given preliminary approval to create an **Airport Development Zone (ADZ)** to attract development to the Groton – New London Airport, the abutting industrial park, and properties within a two mile radius.
- As part of the **CT DEEP EVConnecticut Public Fleet Electric Vehicle and Charging Station Incentive Program**, the Town of Groton Planning Department was awarded a grant to fund the purchase of a Nissan Leaf and the installation of charging stations at Groton Town Hall, the Town Hall Annex, and Groton Public Library and Senior Center. These charging stations are up-and-running and free to the public.
- The Thames River is navigable from New London to Norwich, with a channel depth of up to 40 feet, and most sections of the river at approximately 20-35 feet. At the southern end of the Thames, the **Admiral Shear State Pier facility in New London, currently operated by Logistec, Inc.**, receives cargos of wood and copper and an occasional passenger cruise ship. Activity tracked at the State Pier indicate a significant increase in number of cargo ships in 2012, then a decline. There has, however, been an increase in total tonnage.

With the exception of issues concerning the need to upgrade freight rail and increase the frequency of Amtrak's Northeast Corridor service in southeastern Connecticut, the transportation challenges identified in the 2011 CEDS were essentially reaffirmed during the current planning process and are discussed in Section 3.2 of this Plan.



Figure 8: Admiral Harold E. Shear State Pier, New London, CT Shipping Report 2004 – 2016

Year	Number of Cargo Ships	Forest Products Tonnage	Copper/Steels Tonnage	Other	Total Tonnage	Number of Passenger Ships	Number of Passengers
2016	19	0	164,060***	-	164,060	0	0
2015	21	5,381	105,565 <sup>s</sup>	116,601 <sup>sa</sup>	227,554	0	0
2014	20	6,479	147,142 <sup>s</sup>	32,300 <sup>sa</sup>	185,921	1	1,847
2013	21	0	102,415 <sup>s</sup>	10,423 <sup>dc</sup>	112,838	0	0
2012	31	0	111,100 <sup>s</sup>		111,100	0	0
2011	16	0	60,672 <sup>s</sup>	10,758 <sup>cc</sup>	71,430	0	0
2010	13	0	46,391 <sup>s</sup>	7,476 <sup>cc</sup> 230 <sup>trans</sup>	54,097	2	6,059
2009	5	30,139	0		30,139	0	0
2008	14	99,216	6,678		105,894	9	11,535
2007	30	81,421	89,353		170,774	7	15,640**
2006	39	121,480	14,217		135,697	1	1,200 est.
2005	41	126,670	78,552	81,000 <sup>hl</sup>	286,222		
2004	49*	136,945	82,932		219,877	3	

cc Calcium Chloride  
 sa Salt  
 dc Domestic Container  
 s Steel only  
 hl Heavy lift  
 trans Transformers

\*\*\* Includes salt tonnage from one ship delivered in August 2016; poles in May

\*\* Estimated passenger numbers for 5/9/07, 9/1/07 and 9/15/07

\*1/2004 – 3 ships with Heavy Lift cargo – tonnage not reported

Prepared by Ned Hammond, Office of Development and Planning, City of New London 2/06/2017

Table data provided by the port operator, Logistec USA, Inc.

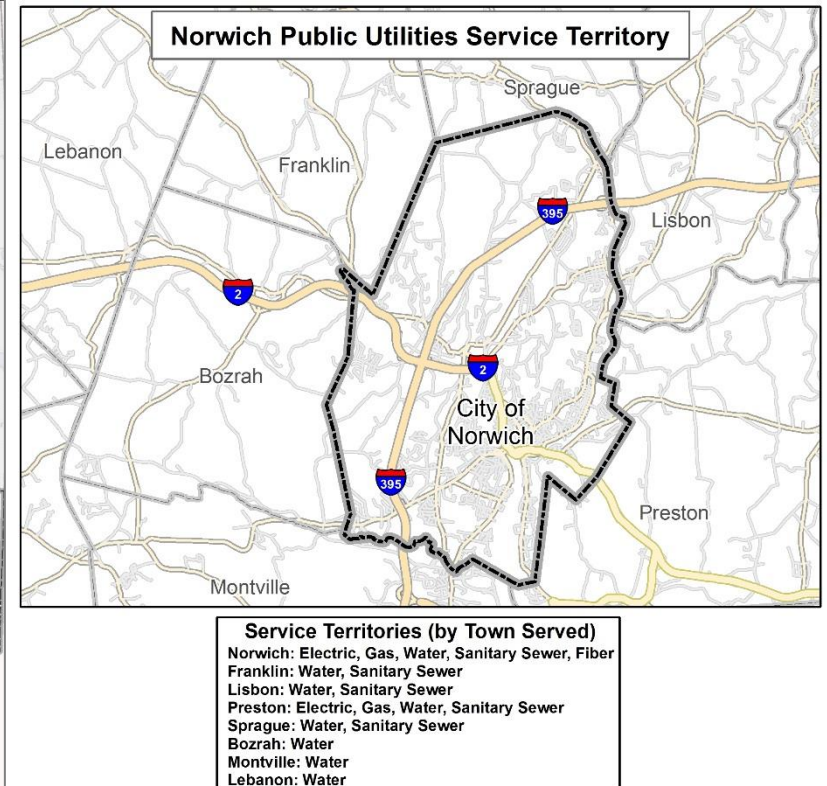
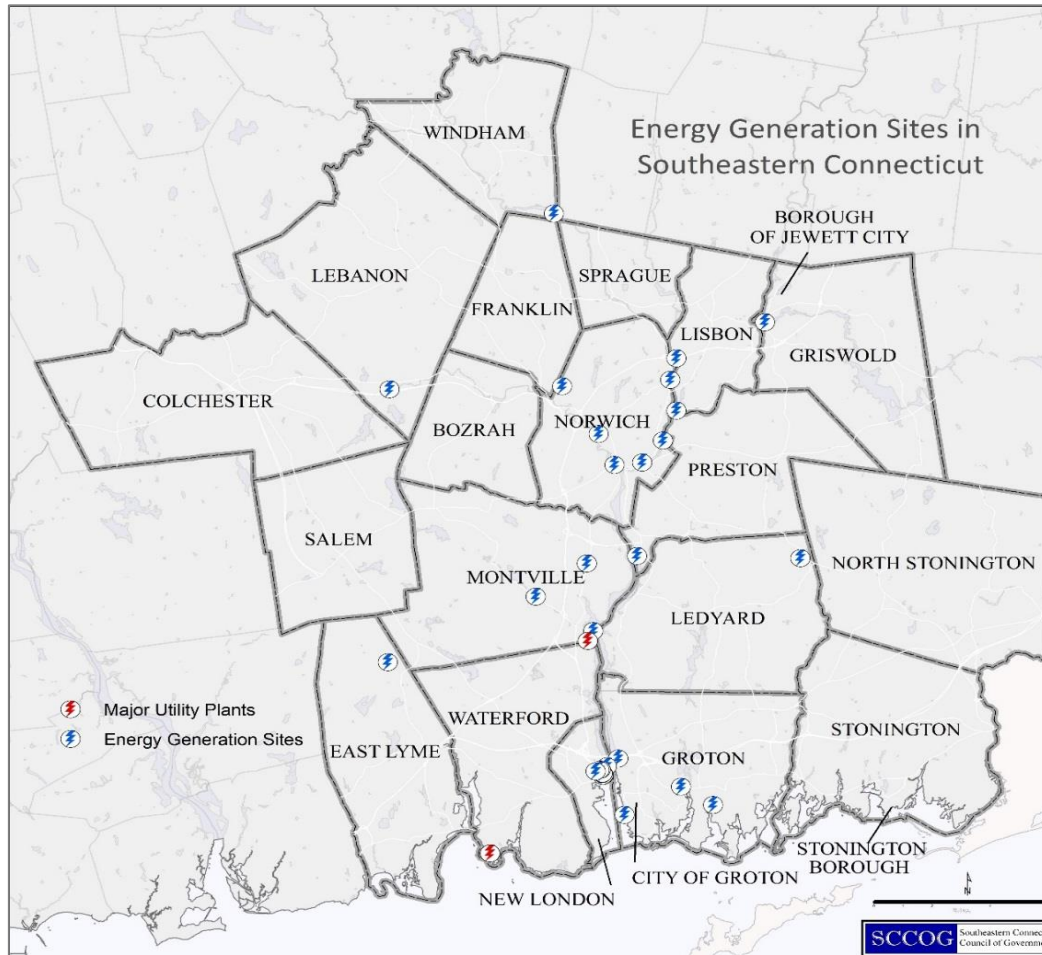
## 1.4.2 UTILITIES

Immediate responsiveness in an emergency is of high value, and to this end SECT is fortunate to be served by several local utility companies throughout the Region with exceptional customer service and highly reliable supply.

**Eversource Energy** (previously Northeast Utilities) is the electric power distributor to most of SECT and also provides natural gas to New London, Groton and portions of other communities. **Groton Public Utilities (GPU)** provides electricity, water and sewer services to the City of Groton and large portions of the Town of Groton, including several of the largest power users in Connecticut.<sup>10</sup> **Bozrah Light and Power**, a division of GPU, provides electricity to Bozrah. Jewett City Department of public utilities provides electricity and sewer services to Jewett City and adjacent portions of the Town of Griswold.

**Norwich Public Utilities (NPU)** services approximately 21,000 electric customers, 9,600 gas customers, 11,000 water customers, and 7,600 wastewater customers in the greater Norwich area (see service map below). NPU continues to expand its natural gas service throughout the City, adding nearly 1,900 new natural gas customers to the network since 2010. In 2016, NPU, with the Connecticut Municipal Electric Energy Cooperative (CMEEC), installed a Community Solar Garden that will provide its customers with more than 2.75 MW of renewable energy. When added to NPU's existing

hydro power capabilities this proposal would bring the renewable portion of the NPU portfolio to nearly 20%. NPU promotes the use of alternative fuels. NPU maintains two CNG fueling stations to serve both area fleets and transient CNG vehicles. One station is located just off the Norwichtown exit off Interstate 395, central to New London County, and provides a key bridge to CNG users traveling the Northeast corridor.



**Figure 9: Energy Generation Sites (Left), NPU Service Territory (Right)**

SECT is home to Millstone Nuclear Power Station, which generates almost half of all electricity produced in Connecticut. Several smaller generating stations are distributed throughout the region, powered by sources including natural gas, diesel fuel (ULSD), hydroelectric, biomass and solar.<sup>11</sup>

Solar continues to be a rapidly growing electricity source with many “solar farms” recently built and currently proposed. Many of these distributed resources are being modified to better support local distribution of power to critical facilities in the event of emergency. Several communities are planning micro grids to take advantage of the small output generation they host so that they may further improve the ability to sustain power supply in critical situations.

Groton Utilities (GU) is applying to the State of Connecticut, Department of Energy and Environmental Protection for a Round III Microgrid Grant. The microgrid is a local energy grid which normally operates while connected to the main grid but can disconnect and operate independently during major electrical outages. During such times, a microgrid uses its own local energy generation from renewable sources, fuel cells, batteries, or fossil fuels located within to supply power to nearby buildings until the main grid is stable enough to reconnect. Should GU be successful in obtaining the grant award, the plan would be to power sections of the east side of Groton by harnessing the already installed 15 megawatts of diesel generation for microgrid purposes to supply electric power to customers considered critically important during major emergencies.

#### Water Supply and Wastewater Systems

There are more than 100 water supply systems serving approximately 75% of the population of SECT, covering a third of the region's land area. The systems are primarily owned by municipalities, however, some are privately owned or operated by the [Southeastern Connecticut Water Authority \(SCWA\)](#). With the exception of Stonington and New London, all the systems exceed the 1.15 ratio of supply to demand recommended by the [Connecticut Public Utilities Regulatory Authority](#). SECT is served by 17 sewage systems and 14 wastewater treatment plants. Areas serviced are primarily urban and some suburban as shown on in Figure 10. The vast majority of properties in SECT are reliant on septic systems to handle their waste, which can be a serious impediment to development – particularly hospitality uses and multi-family housing.

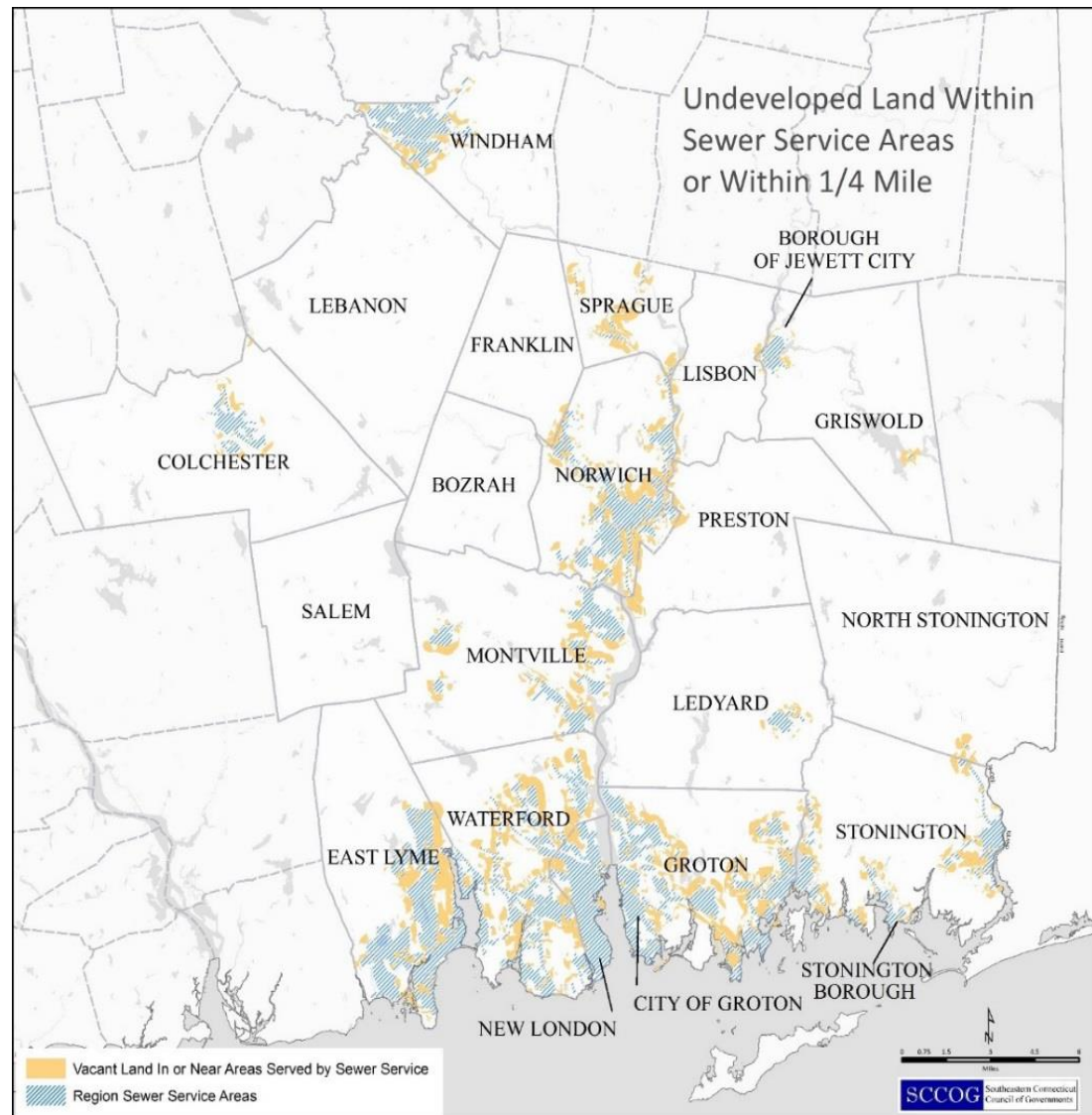


Figure 10: Undeveloped Land within Sewer Service Areas; SCCOG Land Use Data

Per the SCCOG [Regional Plan of Conservation and Development \(RPOCD\)](#), only 14% of households in SECT heat with natural gas, compared to 33% statewide. Eversource Energy, Spectra Energy, and City of Norwich Public Utilities supply natural gas to southeastern Connecticut communities.<sup>12</sup> The 2013 Natural Gas Expansion Plan developed jointly by Connecticut's



natural gas distributors indicated that future expansion of natural gas mains would only occur if a major anchor user could justify the cost of expansion, or if conducted as part of system reliability project.<sup>13</sup> A two-mile expansion project in 2015 brought better access to natural gas to Franklin and Bozrah.<sup>14</sup>

The Connecticut Municipal Electric Energy Cooperative or CMEEC is a public power entity that provides electric services to several municipal utilities and participating wholesale customers, including the Bozrah Light and Power Company and the Mohegan Tribal Utility Authority located in CT. The municipal utilities, in turn, provide electricity to roughly 70,000 residential, commercial/industrial and small business customers located across the state. CMEEC is headquartered in Norwich. CMEEC is owned by municipal utilities in the cities of Groton and Norwich, the Borough of Jewett City, and the Second (South Norwalk) and Third (East Norwalk) Taxing Districts of the City of Norwalk, Connecticut. Sources of electric power range from nuclear plants to hydroelectric stations in Connecticut, to massive power dams in Canada and New York.

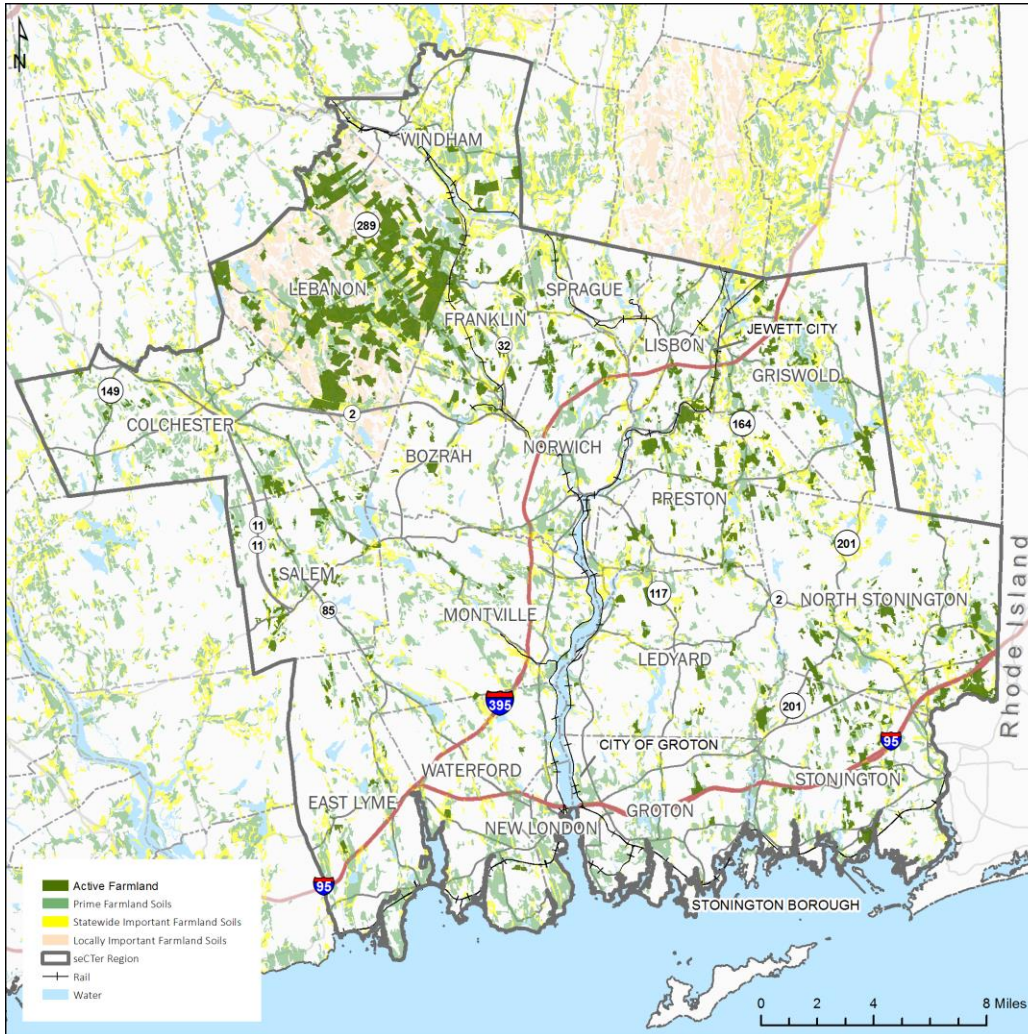
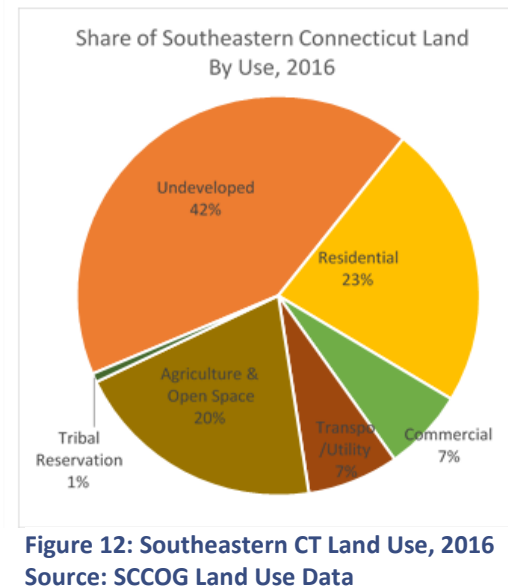


Figure 11: Active Farmland and Prime Farmland Soils; Map by Town of Groton, SCCOG Data

Sources of electric power range from nuclear plants to hydroelectric stations in Connecticut, to massive power dams in Canada and New York.



#### 1.4.3 LAND USE AND AGRICULTURE

A significant percentage of land in SECT remains undeveloped (42%). Only 7% of the total land area in SECT is developed commercially, interestingly the same percentage dedicated to transportation and

utility infrastructure and right-of-ways. Though the region offers significant opportunities for commercial development in these undeveloped areas, infill and redevelopment in or near existing areas serviced by utilities and public transportation remains a priority.



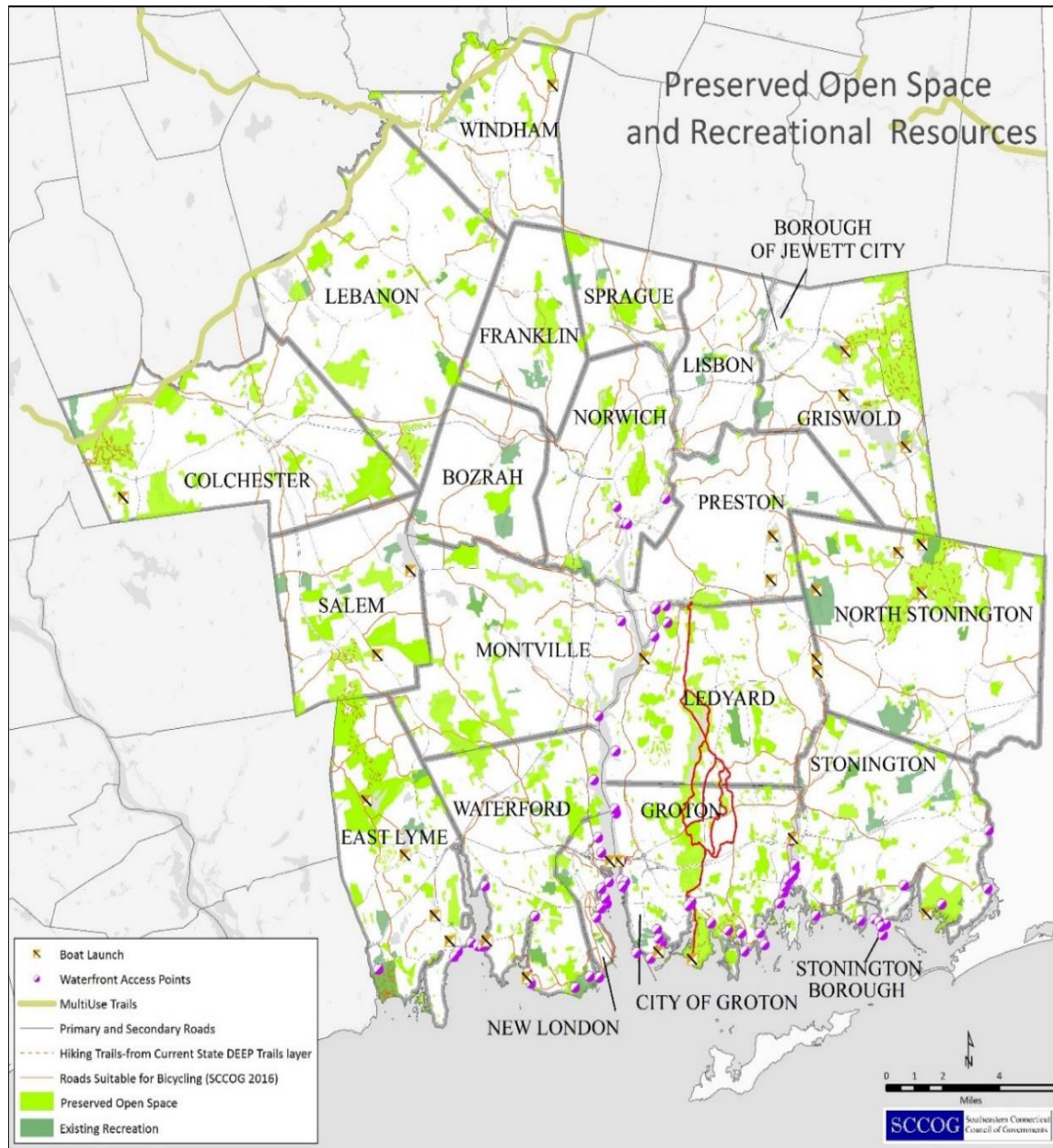


Figure 13: Preserved Open Space and Recreational Resources; SCCOG Land Use Data

Twenty percent of land is being used for agriculture, including land permanently set aside for this use. New London County is second only to Litchfield County in the greatest amount of farmland in CT. This includes approximately 12,500 acres of permanently preserved farmland in the seCTer region, representing close to 30% of all preserved farmland in the State. The SECT Region is home to New England's largest egg farm (Hillandale Farm) and substantial dairy operations (several in North Stonington and The Farmers Cow headquarters is located in Lebanon), as well as the largest commercial greenhouse operation (Pride's Corner Farm, Lebanon). The Franklin-Lebanon-Bozrah area alone is an agricultural hub with 8,500 acres of permanently preserved farmland, or 20% of all preserved farmland in CT. The Agriculture Industry cluster will be discussed in greater detail in Section 2.5.6.

The region's high quality of life is often attributed in part to vast natural, recreational, and historic/cultural resources. The following map highlights the active and passive recreational space, protected open space, lakes and rivers, and the existing major hiking trails.

Major parks and forests include Patchaug State Forest, North Stonington, Griswold and Voluntown; Bluff Point Coastal Reserve, and Haley Farm State Park, Groton; Salmon River State Forest, Colchester; Nehantic State Forest and Rocky Neck State Park, East Lyme; Harkness Memorial Park, Waterford; Hopeville Pond State Park, Griswold; and numerous Wildlife Preserves throughout the region.

The Airline Trail is a major hiking/biking/pedestrian trail that stretches from Eastern Connecticut highlands to the Connecticut River in Portland. The trail exists in two sections: South, from East Hampton to Windham, and North, from Windham to Pomfret with the Thompson addition out beyond. A major portion of the trail runs through northern Colchester including a spur that connects to the Town Center.

*Other assets associated with quality of life include the coastline and other marine resources of the region, both for business and recreation; the health care system; quality educational institutions and opportunities for continuing education; the generally low crime rate; the climate; and the beauty of the region in its open spaces, hills, and beaches. Other assets include the depth and breadth of human and social service agencies that exist to serve populations in need, which because of the on-going weakness in the economy are becoming ever larger (2011 CEDS).*

#### 1.4.4 TOURISM AND THE CREATIVE ECONOMY

In addition to the natural and recreational resources, the region is rich with a diverse collection of arts, culture, and historic assets (regional history and heritage organizations), when considered collectively, rival that of some of the surrounding urban centers. The 2011 CEDS recommended the establishment of a regional arts council. This goal was realized with the formation of the Southeastern CT Cultural Coalition (SCCC). Their mission is to foster region-wide economic growth in New London County, by optimizing existing and new arts and cultural activities, to assure that the cultural sector and creative business assets are central to the vitality of the region. SCCC is an independent, non-profit organization that currently serves over 490 partners by providing core services to connect, strengthen, and advocate for the cultural community - being the "voice" of the cultural sector and the liaison between the cultural sector and leadership entities invested in regional revitalization (municipal, community, business, education, tribal, military, and tourism sectors).

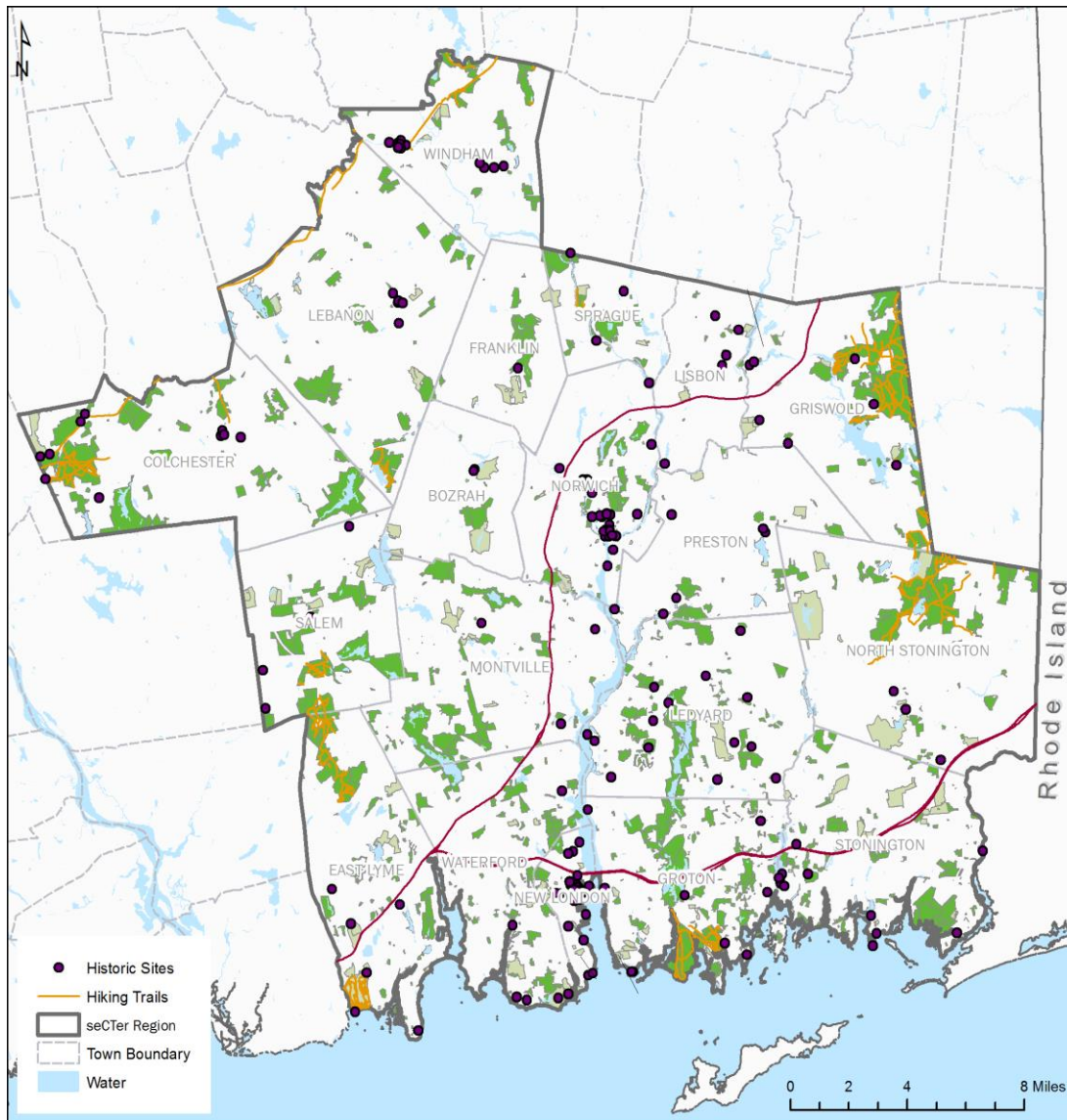


Figure 14: Historic Sites and Recreation. SCCOG Land Use Data, Map by Town of Groton



- The SCCC is currently working on a 20 organization project called 'Performing Arts InterSECT' for a cooperative marketing guide, online site, and launch event (March 2017).



Harkness Park, Waterford

The 2011 CEDS also identified the need for better coordination among cultural agencies in their programs and services offered to the public and to educators. In 2015, a collaborative effort between several organizations in the region resulted in the creation of a single joint



Calendar of Regional Events or C.O.R.E. allowing this coordination to occur, while providing residents and visitors with a convenient way to find all local happenings from family-friendly festivals to educational workshops and civic meetings.

SECT is home to a robust and diverse performing arts sector dedicated to the creation, production and presentation of dance, music, theatre, spoken word, puppetry, opera and more. Helping to drive the regional economy, these organizations collectively serve more than 100,000 people and provide hundreds of public programs annually. From small, local musical groups enriching our communities to large organizations with national and international audiences, our region's acclaimed performing arts providers are dedicated to innovation, creativity, entertainment, training, and education.

#### Arts Centers and Artists

- SECT is home and host to artists from all over the world. From local artist clusters, including the Velvet Mill in Stonington with over 40 artist studios and creative businesses to Lyme with its museums, college, arts center and more.

#### National Recognition and International Connections

- Eugene O'Neill Theater Center's program, the National Theater Institute, operates the longest cultural collaboration between the USA and Russia, with its partner the Moscow Art Theater. NTI also operates renowned undergraduate training programs in CT.
- New London's Griffis Arts Center, which has hosted artists from 38 countries since 1990, and has a facility in the Republic of Bulgaria.
- Expressiones artist-in-residence program hosting Latin American artists to work with and in local schools.
- National Medal of Arts awarded to Eugene O'Neill Theater Center in 2016; National Medal for Museum and Library Services awarded to Otis Library in 2016; and National Medal for Museum and Library Services awarded to Mystic Aquarium in 2014.
- SECT host to Major Arts and Culture Conferences
  - New England Museum Association, November 2016, 1,000 museum professionals for 3-days in Mystic
  - New England Foundation for the Arts Creative Communities Exchange, June 2017, 300 arts and economic development professionals for 2-days
  - International Fields of Conflict Conference in 2018 at Mashantucket Pequot Museum

## Museums

- Largest Native-American museum in the world, The Mashantucket Pequot Museum.
- Oldest continuously operated Native-American museum in the world, the Tantaquidgeon Museum.
- Mystic Seaport Museum with its new and innovative Thompson Exhibition Building, and home to the Charles W. Morgan, the last wooden whaling ship in the world.
- Submarine Force Museum, home of the USS Nautilus, the world's first nuclear powered submarine
- Future home of National Coast Guard Museum and home of the nation's Coast Guard Band.
- Historic House Museums of SECT- How We Lived Then : A regional initiative of 16 historic house museums in the SECT to create a cooperative printed and digital marketing brochure, resulting in increased overall attendance at sites.
- Florence Griswold Museum, the home of American Impressionism and *Yankee Magazine's* pick as "one of the five best small museums in New England."

## Cultural Facilities Improvements

- O'Neill Campus Expansion- designed by Centerbrook Architects opened in 2015. The \$8 million dollar expansion of the campus included the creation of a village-like setting comprised of Victorian-style cottages for artist and student housing, as well as a rehearsal hall.
- Mystic Museum of Art (formerly Mystic Arts Center) \$700,000 purchase, preservation and renovation of 15 Water Street, "Emporium" building now a gallery and artist-in-residence and market rate apartments.
- Florence Griswold Museum Campus Expansion - acquisition in 2016 of the last private parcel of Florence Griswold's historic estate. The new parcel doubles public access to the Museum's riverfront campus, creating a park-like environment for visitors and residents.
- Mystic Seaport has completed a \$15.3 million, 40,000 square foot, year-round exhibit at the north end of the property. The contemporary designed Thompson Exhibition Building opened September 2016.
- The Mystic Seaport Museum and Mystic Aquarium are two of the region's top attraction for families and continue to attract approximately one million visitors a year.

The Thames River Heritage Park with Water Taxi service has finally come to fruition. It is not a conventional park with fixed borders. Instead, it's a framework that draws together heritage and contemporary sites, neighborhoods, commercial districts and institutions on both sides of the river. It does this by coordinating signs, graphics, information, kiosks, website and mobile apps, programming, and ultimately, by having the heritage sites all open at the same time. The Thames River Heritage Park is a thoroughly modern concept for a park. There is none other like it in Connecticut. It will be the first!



Mystic Aquarium, Mystic



O'Neill Campus – New Cottages

Nearly \$1 million has been invested in Norwich to enhance Heritage Tourism.

- Uncas Leap: \$140,000 for Mill demolition; \$270,000 related to brownfield remediation and master plan; \$500,000 for Site Plan development.
- Norwich Heritage and Regional Visitor Center: \$120,000.
- "Walk Norwich" Initiative received approximately \$50,000.

#### Garde Arts Center:

The Garde Arts Center, the regional non-profit center for the performing arts serving Southeastern Connecticut, is embarking on its tenth decade, and celebrated its 90<sup>th</sup> anniversary in 2016. The Garde owns an arts block of four buildings: the four-story Garde Office building/lobbies; the 1,450-seat historic Garde movie palace; the 100-seat Oasis Room; the three-story Mercer office building and gallery; and the multi-storefront Meridian Building. After a four-year initiative developing plans and raising \$31 million funds for a prospective public arts high school capital expansion project, the Garde was unable to meet the regulatory burdens imposed by the State to implement the project on its own property, although the funds remained for use by the City of New London on municipal property. This turn of events will allow the Garde to refocus on core programs and services while developing new partnerships and enterprises utilizing the Garde's extensive real estate. New ventures being explored include a restaurant, shared work spaces, stage rehearsal space and dance studios, and film and music production. Long-delayed backstage expansion into Gov. Winthrop Boulevard and a new second stage will continue to be critical capital needs as the Garde increases programming to serve and complement increased tourism anticipated by the new National Coast Guard Museum.

#### State Website:

Working with the Connecticut Office of Tourism, the Eastern Regional Tourism District and the privately funded Greater Mystic Visitors' Bureau, developed and populated content for a new destination website for the State of CT. The *CTVisit* website launched in April 2016, allows users to see attractions and other content by region. Our region's section, "Mystic Country" has increased website inquiries by over 400%.

Tourism destinations in SECT have developed a cooperative relationship with the Eastern Regional Tourism District to be represented at national tourism trade shows. This is the first time in nearly two decades that "Mystic Country" has had a presence at travel trade events. Funding to the Eastern Regional Tourism District, however, was cut in Fiscal Year 2017, and CT closed Welcome Centers on Interstate Highways including two key SECT tourism Welcome Centers (North Stonington I-95, Westbrook I-95). Both of these cuts will have an impact on current local marketing initiatives.



Uncas Leap, Norwich



New Thompson Exhibition Building, Mystic Seaport



## Resort Casinos

The two casinos lost approximately 1,000 jobs over the last five years<sup>15</sup> – with potential further job loss with the possible construction of a third casino near the Massachusetts border. That said, Mashantucket Pequot Tribal Nation and the Mohegan Tribal Nation

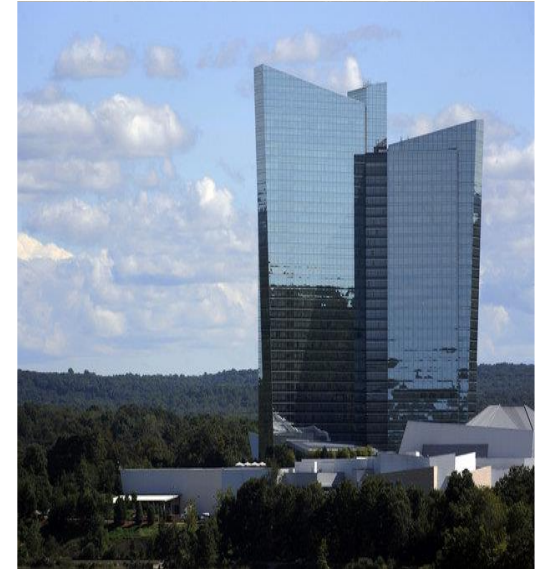
are planning a joint casino in Windsor to compete with the proposed Massachusetts Casino. Both casinos have also been actively working on diversification strategies that have resulted in job creation and significant capital investment.

Tanger Outlets completed a \$120 million project in conjunction with the Mashantucket Pequot Tribal Nation as part of a diversification strategy. The development comprises 300,000 square feet, including 82 outlet stores, employs approximately 900 full time positions, and generated approximately 400 construction jobs.

Mohegan Tribal Nation hired 400 employees in their non-gaming business ventures and has entered into an agreement with the Town of Preston to develop the Preston Riverwalk property as detailed below.



Tanger Outlet Mall Foxwoods Resort Photo  
<http://wnpr.org/post/tanger-outlet-mall-opens-foxwoods>



Mohegan Sun Casino (AP Photo/Jessica Hill)



Preston Riverwalk Property taken from the Mohegan Sun -2014  
Photo by J. Hodge

*Thirteen years after the State of CT closed the former Norwich State Hospital, the Town of Preston assumed ownership and responsibility for cleaning up and revitalizing the 393 acre portion of the property located within the Town. The Preston Redevelopment Agency (PRA) was formed and given the responsibility for site clean-up and revitalization. Between 2011 and 2015, the Agency received roughly \$15 million in grants, loans, and Town matching funds and an additional \$1.5 million in scrap value enabling the PRA to abate and demolish 49 of the 59 original structures, which represents over 80% of the original footprint.*

*In May 2016, the Mohegan Tribal Gaming Authority (MTGA) and the PRA (Town) agreed to a Memorandum of Understanding (MOU) creating an exclusivity period to allow the parties to reach terms for the sale and development of the property. The MOU describes the project as being a high quality, integrated mixed-use, taxable development suitable for the unique nature of the site. It is contemplated that this development will consist of entertainment, recreation, hotel, retail (including, without limitation, lifestyle center, restaurants, convenience), business, time-share, senior housing, and similar and related uses. On January 14 2017, MTGA*

*released its conceptual master plan for the development of Preston Riverwalk, which is consistent with the uses described in the MOU.*

*If and when the town approves the Property Description and Development Agreement, the State of Connecticut has committed to provide an additional \$10 million to complete the remediation and abatement at the site. Initial ground breaking is anticipated by mid-2018, with full build-out of up to a \$600 million*

*development within five years. This project, coupled with recent announcements related to the growth of work by Electric Boat, will serve as a tremendous economic springboard for SECT, as both will create hundreds of construction and full-time jobs and enhance the region's tax base.*

#### 1.4.5 MANUFACTURING AND DEFENSE

Anchored by The US Naval Submarine Base and General Dynamics/Electric Boat, the manufacturing and defense industries have contributed significantly to SECT's economic recovery from the Great Recession. In 2015 alone, SECT enjoyed a 2.2% growth rate- more than triple the state average of 0.6% - adding more than 2,800 jobs. Much of this job growth was driven by the manufacturing sector (1,100 jobs from January 2015 through January 2016), mainly due to the large hiring initiated at Electric Boat, manufacturer of nuclear submarines for the U.S. Navy, along with its supply chain in the region.

- General Dynamics/Electric Boat (EB) Electric Boat announced the award of a \$17.6 billion submarine contract for two Virginia Class submarines a year, to be ordered over the period between 2014 through 2018. Currently 362 of the program suppliers are Connecticut companies. EB's Facility Master Plan (FMP) consists of 18 major projects which will require \$1.5 billion of investment through the next decade; its five year spend to CT suppliers is \$485 million (approx. \$100 million per year); and EB's annual payroll (2015) in CT is \$855 million. The U.S. Navy is expected to contract with Electric Boat for another 9 or 10 Virginia Class Submarines in fiscal year 2019.
- In fiscal year 2016, Congress approved \$1.6 billion for the Columbia Class Program, for continued engineering and design for a new class of ballistic missile submarines replacing the existing Ohio-class of such submarines (this program is a top priority for the Navy), and \$168 million for continued development of the Virginia Payload Module, which will significantly increase the capacity of Virginia-class submarines to carry and launch cruise missiles.

Here are some highlights of Electric Boat's pending expansion:

- 12 new Columbia-class ballistic missile submarines and two (possibly three) Virginia-class attack subs
- 2,000 new workers this year, with 1,350 located in Connecticut
- 18,000 workers in CT and RI by 2030 – increase from current workforce of 14,500

Spent in 2016:

- \$485 million in 2016 on 454 suppliers across the state
- \$29.1 million in 2016 on 33 suppliers in the 4th Congressional District
- \$5 billion allocated by Congress for two more Virginia-class subs
- \$1.9 billion allocated to develop the Columbia-class sub, estimated to cost \$5.5 billion each

- Congress rejected a DOD request to conduct another defense base realignment and closure (BRAC) round. The last one was held in 2005. The estimated \$150 million in Capital improvements since 2012 have enhanced the base's military value, created modern new capacity, thus decreasing the likelihood of a BRAC.



2016 Renderings of the proposed USCG Museum.  
Photo from [www.coastguardmuseum.org](http://www.coastguardmuseum.org)

- US Coast Guard will strengthen its presence in and commitment to the region with the construction of a National Coast Guard Museum (NCGM) in downtown New London. The National Coast Guard Museum Association (NCGMA), a non-profit organization chartered to build the museum, proposed a 54,000 square foot state-of-the-art building at the head of New London City Pier, adjacent to New London's multi-modal transportation hub. Construction is expected to begin by 2020.
  - The summer of 2015 was declared Connecticut's Coast Guard Summer to commemorate the 225th Birthday of the USCG and the 100<sup>th</sup> anniversary of the USCG Academy at its current location.
  - The period of October 2015 to October 2016 was declared Connecticut's Submarine Century. SECT communities, destinations, organizations and educational institutions developed and hosted a highly successful, yearlong "Submarine Century" series of events celebrating the 100th anniversary of the nation's first submarine base and the establishment of the Submarine School.
  - In 2016, SCCOG received a Department of Defense Office of Economic Adjustment grant to prepare a Joint Land Use Study (JLUS) of the SUBASE in Groton. Working on behalf of the six surrounding municipalities, SCCOG has retained a consultant to conduct a cooperative planning effort between the U.S. Navy and local municipalities, examining ways to ensure lasting compatibility between the SUBASE and neighboring towns.
- The State of Connecticut has been designated as an [Investing in Manufacturing Communities Partnership \(IMCP\)](#) Community. Connecticut is one of 12 applicants to earn the designation under the Obama Administration. This positions the state to access more than \$1 billion of federal funding dedicated to the resurgence of manufacturing in the United States.
- A goal of the 2011 CEDS was to establish a Manufacturer's Council. The Eastern Advanced Manufacturing Alliance or EAMA was formed and currently has 57 members. EAMA is working with Three Rivers and Quinebaug Valley Community Colleges and area technical high schools to ensure curriculums reflect current industry demand.



### 1.4.6 EDUCATION AND WORKFORCE DEVELOPMENT

With scores of baby-boomers retiring, SECT is expected to experience a shortage of labor. With only a one percent projected population growth, the population of working-age adults is expected to further decline as a greater share of the region's adult population is of retirement age. If patterns of workforce participation by age continue, then we could expect a labor shortage in SECT of as many as 20,000 workers by 2025, if projected employment growth occurs.<sup>16</sup>

As innovation and technology continue to gain importance in the local and global economy, SECT has responded on the education front by increasing STEM curriculum in schools, moving toward more magnet schools, and investing in post-secondary certificate programs that are more closely aligned with current industry needs.

The following are significant programs and initiatives in the SECT area.

Connecticut Advanced Manufacturing Initiative (CAMI) received a \$1.28 million grant for Three Rivers Community College (TRCC) and Quinebaug Valley Community College (QVCC) to enhance metal fabrication programs.



With assistance from the CAMI grant, TRCC was able to develop a 30-credit, Precision Sheet Metal Manufacturing certificate program. The certificate program is the only post-secondary program of its kind in the nation, and it was developed with industry input from member companies of the Eastern Advanced Manufacturing Alliance (EAMA). The program's goal is to prepare unemployed/underemployed workers for employment at Electric Boat (EB) or EAMA companies.

The implementation of this multi-faceted project also included the oversight of a large lab renovation in the B-wing of TRCC, as well as the procurement of over \$240,000 worth of new equipment. A full-time Business & Industry instructor was hired to oversee the daily management of the program. In addition, two part-time, grant-funded, Educational Assistants were hired to work on the project. To date, nine adjunct instructors have been hired to teach in the program. "The Eastern Connecticut Manufacturing Pipeline" pre-employment program is also taught at Grasso Technical High school's newly renovated, state-of-the-art, Welding and Automotive Labs.

The first cohort of CAMI students at Three Rivers began their credit studies in Fall 2015. Since April 2016, TRCC implemented three *Outside Machinist Modules*, customized specifically for EB, two *Welding Modules*, and one *Introduction to Manufacturing Module*, serving a total of 72 students, with an average employment rate of 93%.



Quinebaug Valley Community College received a \$1.47 million CAMI grant to enhance the *Advanced Manufacturing Certificate Program*. Trained for entry-level position as machinists and *Computer Numerical Control (CNC)* lathe and milling operators, 119 graduates have received



Top to Bottom:  
New London Science and Technology Magnet High School; Winthrop STEM Elementary School, New London; (<http://www.calabreseengineers.com/k12.htm>) Kelli-Marie Vallieres cuts the ribbon on a new precision sheet metal fabrication lab at Three Rivers Community

*Advanced Manufacturing*

certificates, as well as 231 NIMS (National Institute for Metalworking Skills) credentials. Ninety-five percent of the graduates have obtained gainful employment in the manufacturing industry.

### The Eastern CT Manufacturing Pipeline Initiative (MPI)

Through a hugely successful launch, the MPI attracted more than 1700 applicants in the first eight months. The Pipeline Initiative coordinates community stakeholders (employers, academia, and state/regional agencies) to deliver customized training programs through our CT Community College and Voc-Tech school system.

The initiative aligns the skills of the region's workforce to the hiring needs as articulated by regional manufacturing employers participating in curriculum development. Due to its innovation, the Initiative attracted a \$6 million investment from the U.S. Department of Labor to implement customized training programs to support the manufacturing industry. Only six communities nationwide were awarded a Workforce Innovation Fund (WIF) Grant! The grant is targeted to the unemployed and underemployed, and they hope to enroll approximately 450 jobseekers over the next three years. To date, there have been 1,100 interested applicants.

The Initiative has achieved a 92% participant placement rate in its initial five classes under this grant. The Initiative has been so successful that it has spawned a Pipeline Initiative in the healthcare sector, which was then funded by a \$7.5 million grant from the U.S. Department of Health & Human Services to train participants for careers in that sector over the next five years. Workforce development programs are more established and gaining traction.



Female welder at Collins & Jewell, Bozrah

seCTer is a partner with the Eastern Connecticut Workforce Investment Board (EWIB), General Dynamics/Electric Boat and the regional Community Colleges and Technical High Schools in the Eastern Connecticut Manufacturing Pipeline Customized Training Program designed to insure a ready supply of trained workers to meet EB's future needs.

In a further effort to ensure the availability of a skilled workforce to meet the projected demand at Electric Boat, the Westerly Higher Education and Job Skills Center is expected to open in early 2017. This facility will offer certificate programs in Pipefitting, Electrical, Carpentry and Sheet metal work.

### **Eastern Connecticut's Competency-Based Skills Super Highway**



### CT-Early College Opportunity Program (CT-ECO)

Local school districts, Three Rivers Community College, and Quinebaug Valley Community College have aligned with Electric Boat and the 37 Industries that make up the Eastern Manufacturing Alliance with the creation of the CT-ECO program. In the fall of 2015, the Science and Technology Magnet High School of Southeastern Connecticut in New London and the Windham Technical High School both launched CT-ECO programs, offering the 110 students who have enrolled to date an affordable career path to Advanced Manufacturing.

Motivated in part by the increasing number of baby-boomers retiring from Electric Boat and the projected hiring needs over the next decade and beyond, the CT-ECO program is designed not only to help address this anticipated shortage, but to provide students with an affordable higher education opportunity and a clear path to employment with the many regional employers that are in need of a younger skilled workforce.

Modeled after the IBM Pathways in Technology Early College High School program in Brooklyn, NY, the CT program integrates both high school curriculum and college courses, and students graduate with both a high school diploma and an associate's degree in advanced manufacturing. Students are matched with a mentor and placed in an internship within an industry, which places them in a better position to be hired when a position become available.

Other Workforce Development Initiatives include the following.

- **CT Ready to Work Initiative** received a \$5.5 million grant to assist long term unemployed workers.
- **Windham Technical School STEM Pathway Program** received a \$900,000 investment from the state in 2015. Windham High School and the district is also home to the Charles H. Barrows STEM Academy for kindergarten through eighth grade.

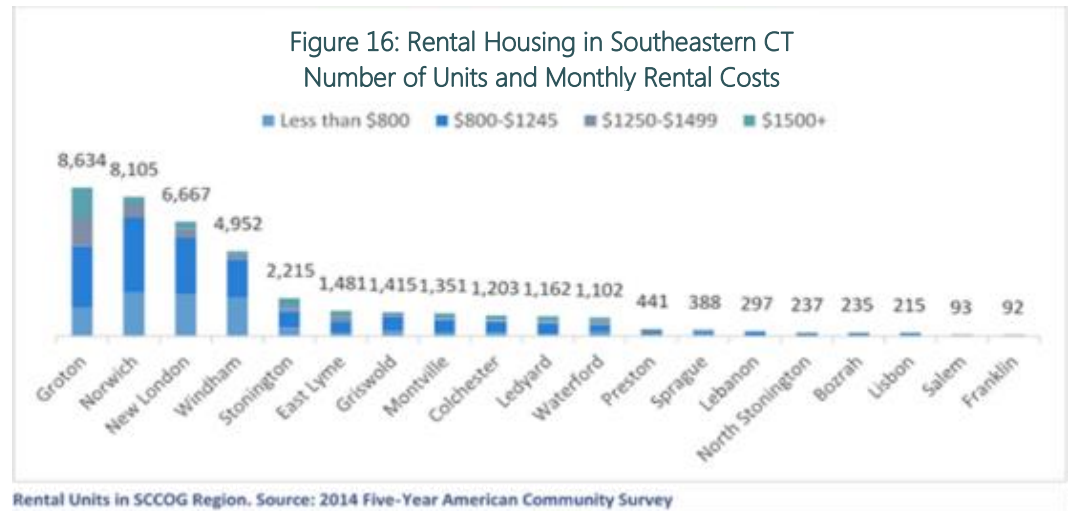
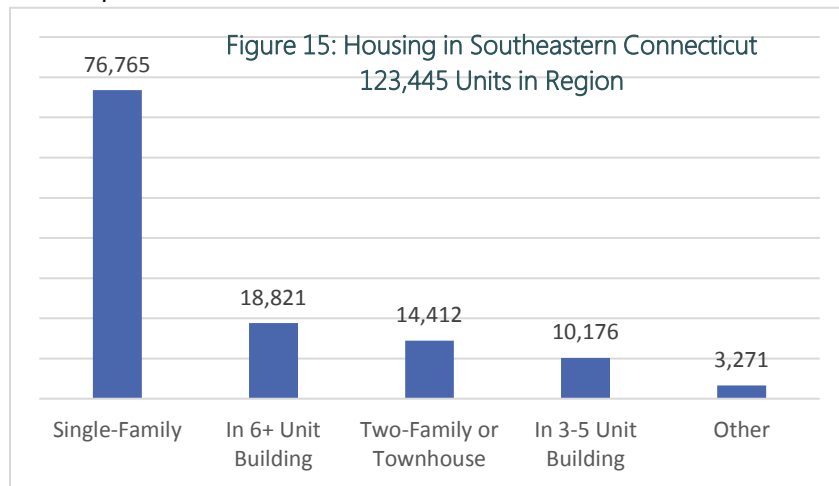
- **Dominion Nuclear Connecticut, Inc. (DNC)**, owner/operator of Millstone Power Station in Waterford, provides 16 full academic scholarships each year to qualified applicants entering the two-year **Nuclear Engineering Technology Associate Degree Program** at TRCC. The scholarship/internship program was initiated in 1983 by Northeast Utilities (NU), but continued since 2001 by DNC. These scholarships include a 12-week paid summer internship at Millstone for the summer between the first and second year of academic study. Though 26-28 freshman start the program, only 16-18 students graduate at the end of the rigorous two-years. This program has provided an excellent pathway for graduates to obtain a quality education with practical experience to create a pipeline of qualified technicians to support commercial nuclear power. To date, DNC has hired more than 287 nuclear program graduates.





## Workforce Housing and Transportation

In addition to workforce development programs, the provision of appealing, affordable housing is crucial to the success of attracting the millennials, sought to fill the anticipated job openings (particularly at Electric Boat) over the next decade. Housing needs for the increasing senior population are very similar to those of millennials: both desire smaller, rental units within walking distance of basic services including healthcare, employment and entertainment. SECT's housing stock is primarily single family, detached units, with the vast majority of multi-family, rental units located in the urban centers, and slightly outdated. Recent and planned residential housing in New London is a positive step in the right direction. The new modern units proposed will be within walking distance of the EB facility in the former Pfizer complex near Fort Trumbull and many of the desired amenities will be provided on site.



Shaw's Landing, New London

Strategies to increase mobility and access to job centers and training opportunities are central to this CEDS. The suburban geography, and lack of sufficient density in all towns to justify (or support) increased investment in public transportation, will continue to challenge SECT and hamper our ability to attract the talent needed to fill positions and grow the workforce.

Towns such as Colchester, Norwich, and Willimantic can play a big role in the region with respect to housing the future workforce and providing the impetus needed for investment in the existing transportation systems to better connect to the southern portion of the region, as well as to employment opportunities in Hartford and Middletown. All have distinct, historic downtowns/village centers, offering diverse social and cultural opportunities and numerous investment opportunities for entrepreneurs of all ages. Colchester in particular should seek to capitalize on its strategic location. A [map in their Comprehensive Plan](#) clearly shows Colchester in the middle of a "trade area" where a facility in Colchester would be closer for many people than a similar facility in Norwich, Waterford/New London, Old Saybrook, Middletown, Hartford/Glastonbury, Manchester, or Willimantic.

### 1.4.7 HEALTHCARE

The healthcare sector is emerging in the SECT region and is expected to grow. The region is serviced by four hospitals: Lawrence and Memorial, William W. Backus, Windham Hospital, and Westerly Hospital – just over the border in Rhode Island. Over the past five years, this sector has witnessed major mergers and acquisitions and the opening of many new satellite healthcare facilities as discussed below.

#### Lawrence + Memorial Hospital – New London

L+M Healthcare acquired Westerly Hospital in 2013 and formalized its affiliation with Yale New Haven Health in 2016. L+M provides regular outreach programs such as community disaster preparedness, cancer screening for low-income persons, as well as services for the homeless and pregnant women. It is the only hospital in the region with an inpatient rehab unit and Neonatal Intensive Care Unit.

Other activity:

- L+M Wound + Hyperbaric Center opened (2011);
- L+M Cancer Center opened in Waterford (2013);
- L+M Medical Group opened newly renovated Medical Office Building on Howard Street in New London (2014);
- L+M Medical Group opened offices in Mystic and Waterford (2016).

#### William W. Backus Hospital, Norwich

Backus Corporation and Hartford HealthCare formal affiliation was approved. Hartford HealthCare will establish a newly defined East Region, comprised of system members in New London and Windham Counties, including Backus and Windham Hospital, which is already a Hartford HealthCare member (2013).

- Hartford HealthCare Medical Group Primary Care/Women's Health providers in Old Lyme and Oncology practice in Waterford. HHC Applied to the state Office of Health Care Access to purchase the Constitution Surgery Center in Waterford.
- Family Health Centers in Norwichtown and Waterford opened expanded access to primary, urgent and specialty care in the community (2014).



L+M Cancer Center, Waterford



William W. Backus Hospital Family Health Center, Norwichtown



- Along with the other members of the Hartford HealthCare Cancer Institute, being certified as a member of the Memorial Sloan Kettering Cancer Alliance giving Backus patients' access to MSKs celebrated standard of care and its vast array of clinical trials.
- Backus Hospital received several Industry Top Awards including
  - Only hospital in Connecticut to receive four out of five stars for quality in the latest "Overall Hospital Quality Star Rating" from the federal Centers for Medicare & Medicaid Service (2016).
  - "Most Wired" award past six years for being one the most technologically advanced hospitals in the nation.
  - 2014 Consumer Choice Award from the National Research Corporation.



#### Windham Hospital, Willimantic

- 2013 – Formal alliance with Memorial Sloan-Kettering Cancer Center.
- 2013 -The 30,000sf Windham Hospital Family Health Center opened in Willimantic. Connecticut Hand Surgery Center and the Windham Hospital Rehabilitation Network moved into the second floor of the facility.
- 2013 -Windham Hospital's Emergency Department was ranked in the 99th percentile of patient satisfaction.
- 2013 - \$5.2 million in federal funding restored for Windham Hospital under the Medicare Dependent Hospital program.
- 2014 - Oncology Associates and the Lester E. and Phyllis M. Foster Oncology and Infusion Center opened.
- 2014 - Third school-based health center opened at Charles Barrows STEM Academy in Windham. The other two health centers are located at Windham High School and Windham Middle School.
- 2016 - The Hartford HealthCare Center for Healthy Aging opened at Windham Hospital.



Windham Hospital Family Health Center, Willimantic

#### Workforce Initiatives related to Healthcare:

EWIB has now expanded its focus to include the healthcare industry and recently received a \$7.5M (\$1.5m for 5 years) Health Professions Opportunity Grant (HPOG) from the Department of Health & Human Services. Though the Eastern CT WIB is the administrative lead, the program is also delivered in South Central (New Haven) and Northwestern (Waterbury) CT. The funds will provide temporary assistance for needy families (TANF) with a mission to provide opportunities for these recipients to enter and advance along various healthcare career pathways. Approximately 750 individuals are expected to enroll in the HPOG program over the next five years. Participants will benefit from a work readiness and basic skills boot camp; occupational training resulting in a community college certificate or industry license; case management and other support services; work-based learning opportunities; and job placement into a career pathway within Healthcare.



### 1.4.8 INNOVATION

Teaching and supporting entrepreneurship is equally important to workforce development in the region, as most job growth comes from the creation of new businesses. Economic Development professionals and many new and existing organizations in SECT have worked hard over the past five years to develop a stronger support network. In addition to new incubator, maker and co-working space, the [Southeastern CT Entrepreneur Network](#) was formed and new entrepreneur meet-ups are happening throughout the region – particularly in New London as part of [SPARK Makerspace's](#) work to provide opportunities for civic engagement.

SeCTer sees SPARK Makerspace as a powerful new platform for improving the economy of SECT by sourcing entrepreneurship, innovation, and collaboration as drivers for new job creation. We are excited about the potential it represents to attract increased investment that will result in greater economic resiliency for our region.



Networking Space at CURE Innovations Commons

The [Southeastern CT Entrepreneurs Network](#) was born from the 2011 CEDS, and hosts monthly networking events for area entrepreneurs. SECTen has hosted several formal events designed to educate and inspire entrepreneurs as well as connect them with mentors, investors and vendors. Events are currently hosted by CURE at their facility in Groton. The [Small Business Development Center](#) and [SCORE](#) both continue to provide free assistance/mentoring to new and existing businesses in the Region. Together with seCTer, these and other organizations are facilitating further growth of the region's innovation ecosystem.

CT NEXT Innovation Place Initiative: New state program in which \$4.9 million per year will be allocated over the next five years with a limited number of Innovation Places. This grant money is intended to help a community make investments to attract and retain talent, which in turn will create new businesses and jobs for all skill levels. In the SECT region, the Town of Windham (in collaboration with several other towns in the Northeast CT region) and the communities of Groton (Town and City) and New London have received planning grants to pursue designation as one of the [Innovation Places](#) in the State of Connecticut.

[Spark](#), [Makerspace](#) and [CURE Innovation Commons](#) are co-leading the local effort in New London and Groton. Both entities support business incubation and have pre-existing relationships with [CT Next](#), the administrator of this program. The rest of the team includes the municipalities within Groton and New London as well as many anchor institutions and organizations. The Thames River Innovation Place or TRIP was awarded a \$50,000 planning grant to help develop a master plan for innovation. The group will submit the plan to apply for Innovation Place status in April 2017.

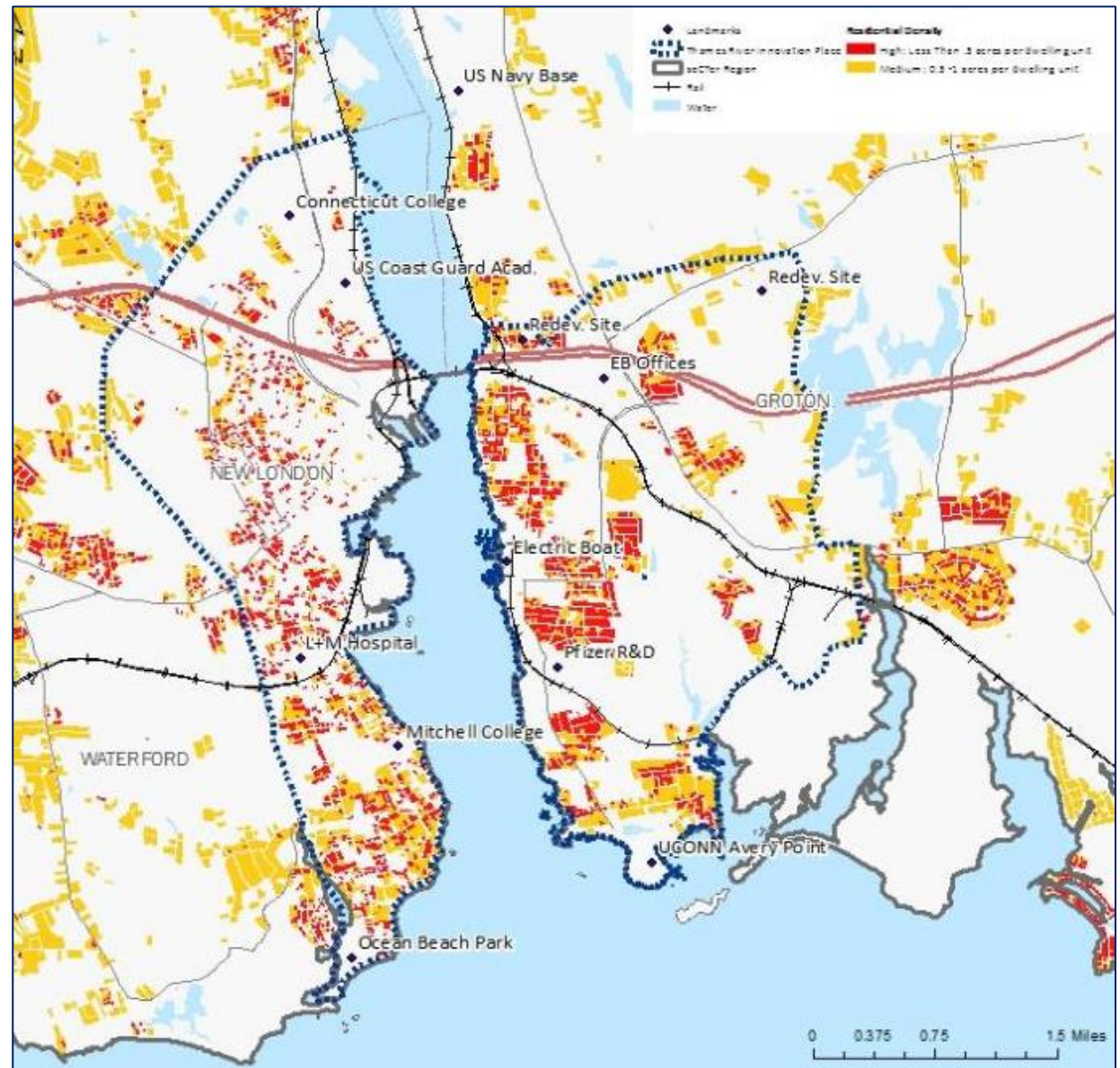


Figure 17: Thames River Innovation Place Boundary Map; Produced by the Town of Groton with SCCOG Data

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<sup>1</sup> Creative Molecular Economy: “An economy based on the integration of emerging technologies, with creative individuals, small groups and companies organized in interlocking networks, connecting and disconnecting constantly in processes of continuous innovation.” **Unleashing Fundamental Change; Networking Transformational Thinking and Action Through Economic Development**; By LaDene Bowen, CECd, FM; Ronnie Bryant, CECd, FM, HLM; Jim Damicis; Scott Gibbs; Rick Smyre; and Mark Waterhouse, CECd, FM, HLM

<sup>2</sup> BEA, “News Release: State Personal Income: Second Quarter 2016.” [http:// www.bea.gov/newsreleases/regional/spi/ sqpi\\_newsrelease.htm](http://www.bea.gov/newsreleases/regional/spi/sqpi_newsrelease.htm). September 28, 2016

<sup>3</sup> The Connecticut Economic Digest, Vol. 21, No. 11, November 2016, p. 6.

<sup>4</sup> The Connecticut Economic Digest, Vol. 22, No. 1, January 2017, p.4.

<sup>5</sup> See Note 4

<sup>6</sup> See Note 4

<sup>7</sup> Eastern CT Workforce Investment Board; Comprehensive Four-Year Plan July 2016 – June 2020

<sup>8</sup> Comptroller’s Report; <http://www.osc.ct.gov/reports/economic/2002cmprt/economic.htm>

<sup>9</sup> Information taken from <http://www.ctairports.org/airports/groton-newlondon/>

<sup>10</sup> State of Connecticut. Utility by Town List, 2014.

<sup>11</sup> Taken directly from the SCCOG RPOCD

<sup>12</sup> State of Connecticut. Utility by Town List, 2014.

<sup>13</sup> Connecticut’s Gas LDCs Joint Natural Gas Expansion Plan, 2013.

<sup>14</sup> Eversource Energy. “Franklin-Bozrah Expansion Project.” Retrieved May 9, 2016.

<sup>15</sup> Source unknown

<sup>16</sup> SCCOG Regional Plan of Conservation and Development



## SECTION 2

### LOCAL, REGIONAL AND GLOBAL IMPACT FACTORS

In order to frame the development of strategies, goals, and objectives that will comprise the CEDS, seCTer commissioned Camoin Associates to prepare an analysis of regional demographic and economic data. The full analysis, which is provided in Appendix A, contains the following series of profiles containing key data for the region overall and, where noted, for its constituent municipalities:

- Demographic and Socioeconomic Profile – Key demographic indicators for the population of the region and its municipalities, including age, race/ancestry, home ownership, income, language, income levels, migration patterns, and commutation patterns
- Workforce Profile – Demographic data on the region's workforce, including gender, age, and race/ethnicity; and data on the region's occupations and educational programs
- Innovation Profile – Data on key innovation metrics for the region as compared to three peer regions
- Fiscal Profile – Grand list, mill rate, and bond rating information
- Economic Profile – Data on the regional economy, including employment, earnings, gross regional product, establishments, shift share analysis, and retail gap analysis
- Targeted Industry Profile – Detailed data on key industry sectors and insights on targeted opportunities

In addition to Camoin Associates, the Southeastern CT Council of Governments provided significant demographic and land-use data for each of the towns in the region. Though the regions have realigned, the common data sources used for the regional profile do not always reflect the addition of Windham to the SECT Economic Development District or the realignment of Voluntown, Lyme and Old Lyme to other surrounding regions. This complicates the provision of regional trends over time and certain indices that are often based on county level data only. The Data Analysis provided by Camoin Associates specifies the geography associated with the data set provided.



## 2.1 DEMOGRAPHIC TRENDS - SOCIOECONOMIC PROFILE

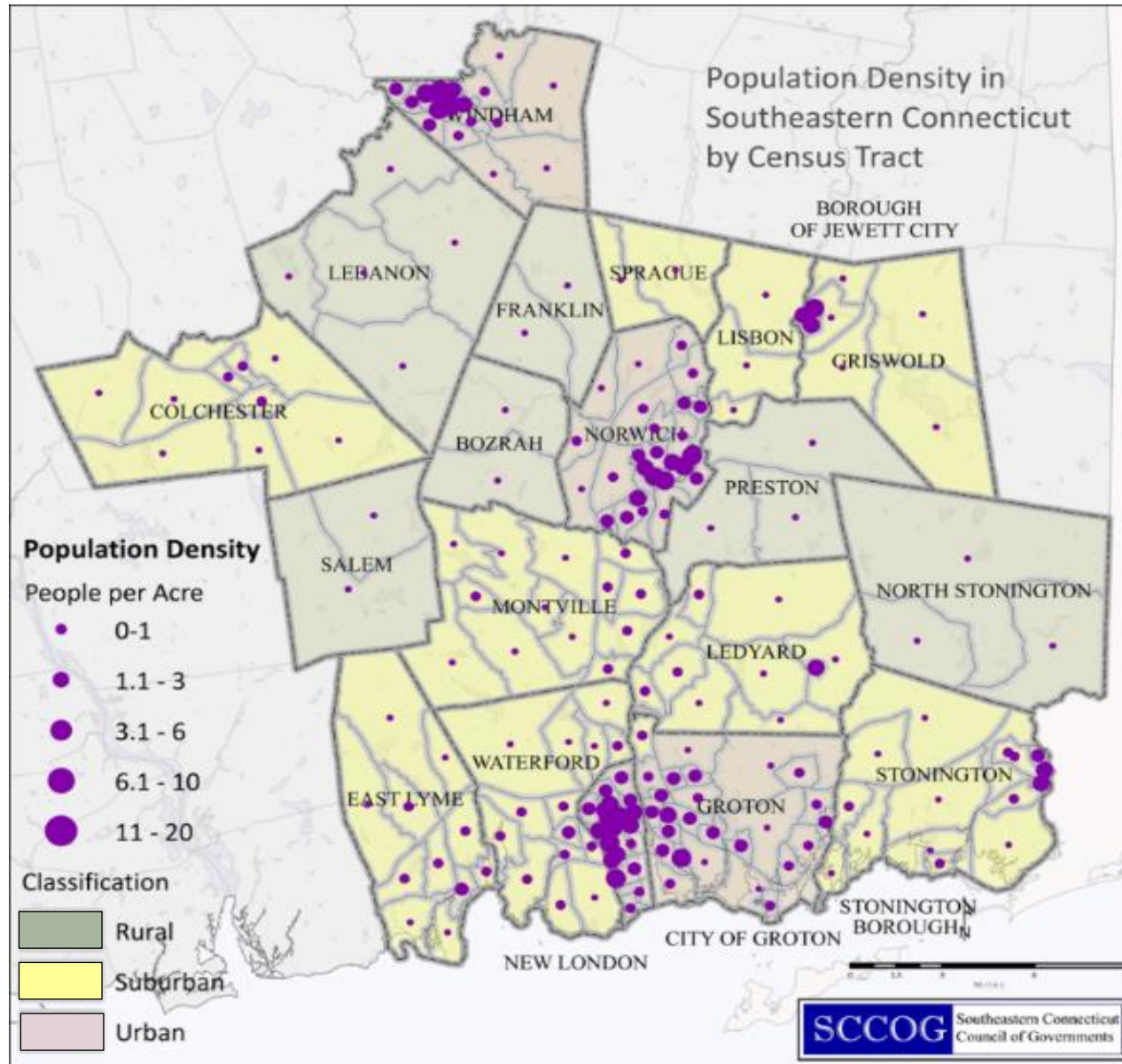


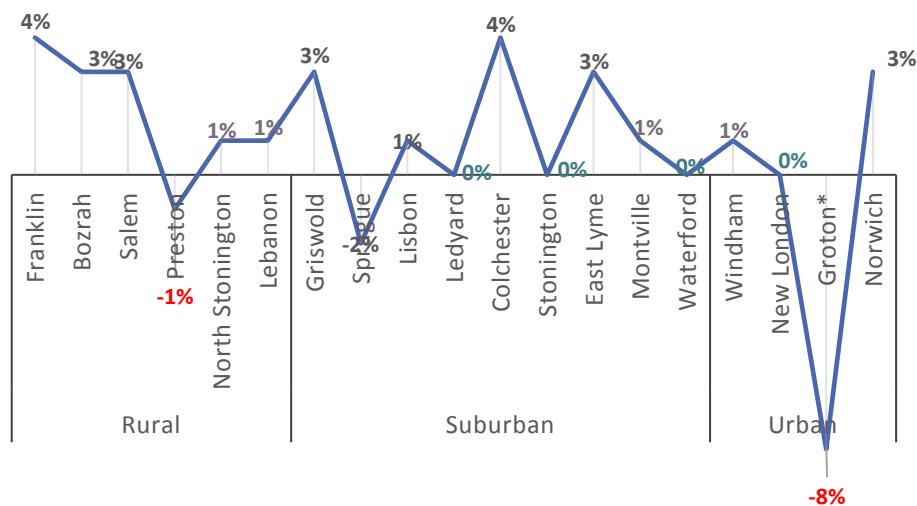
Figure 18: Population Density in SECT by Census Tract

As described in the introduction to this CEDS, the Southeastern CT region includes 20 municipalities - which includes the Boroughs of Stonington and Jewett City as sub-components of their larger parent municipalities (Stonington and Griswold). The City of Groton, a political subdivision of the Town of Groton, is considered to be a separate municipality for the purposes of this CEDS to remain consistent with the Southeastern CT Council of Governments. That said, please note that data specific to the City is not available from certain data sources, and in these cases is included in the data for the Town of Groton.

To further maintain consistency with the Regional Plan of Conservation and Development, urban municipalities are defined as those having population densities equal to or greater than 900 persons per square mile; suburban towns have densities of 200 to 899 persons per square mile; and rural towns have fewer than 200 persons per square mile.

46% of the population live in one of the five urban communities; 44% are residents of the region's nine suburban communities, and the remaining 9% live in one of the six rural communities.

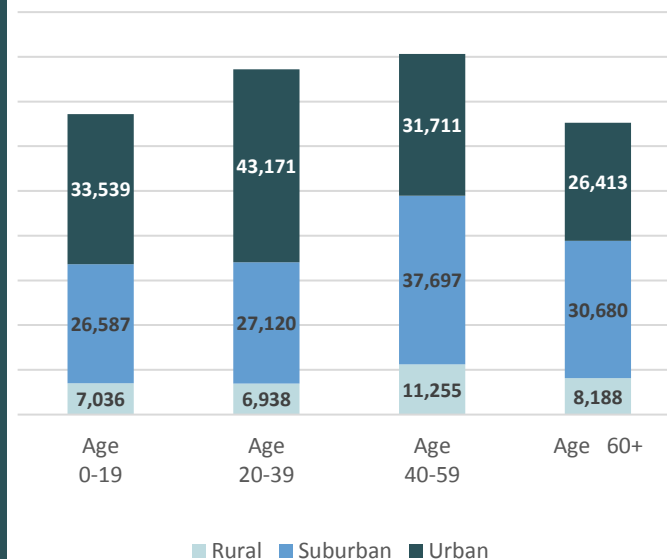
Figure 19: % Change in Population 2005-2015



1%

Population growth will not support or sustain economic development in the region

Figure 20: Age Distribution

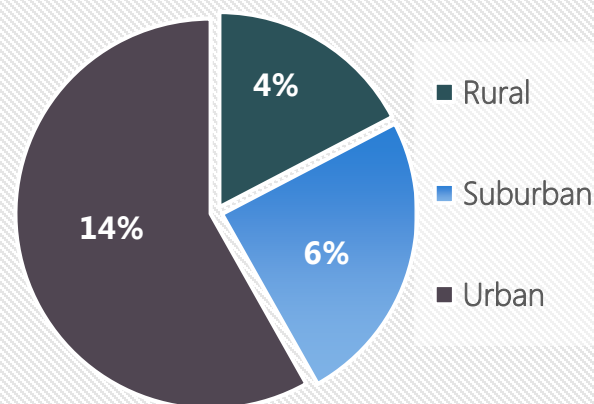


seCter Region		% Young Adults 20-29					
Connecticut	2%	Groton	22%	Windham	20%	Connecticut	13%
U.S.	9%	New London	21%	seCter Region	15%	U.S.	14%

### 2.1.1 POPULATION GROWTH, AGE, AND DIVERSITY

The population growth and diversity speak to the region's competitiveness and resiliency. Increasing the human capacity in SECT is vital to the sustained growth of the economy. All residents must be provided the opportunity to develop their own capabilities in order to contribute to the regional economy. Strategies must focus on attracting and retaining people across all demographics by providing a livable, vibrant and connected environment and proudly marketing our rich assets.

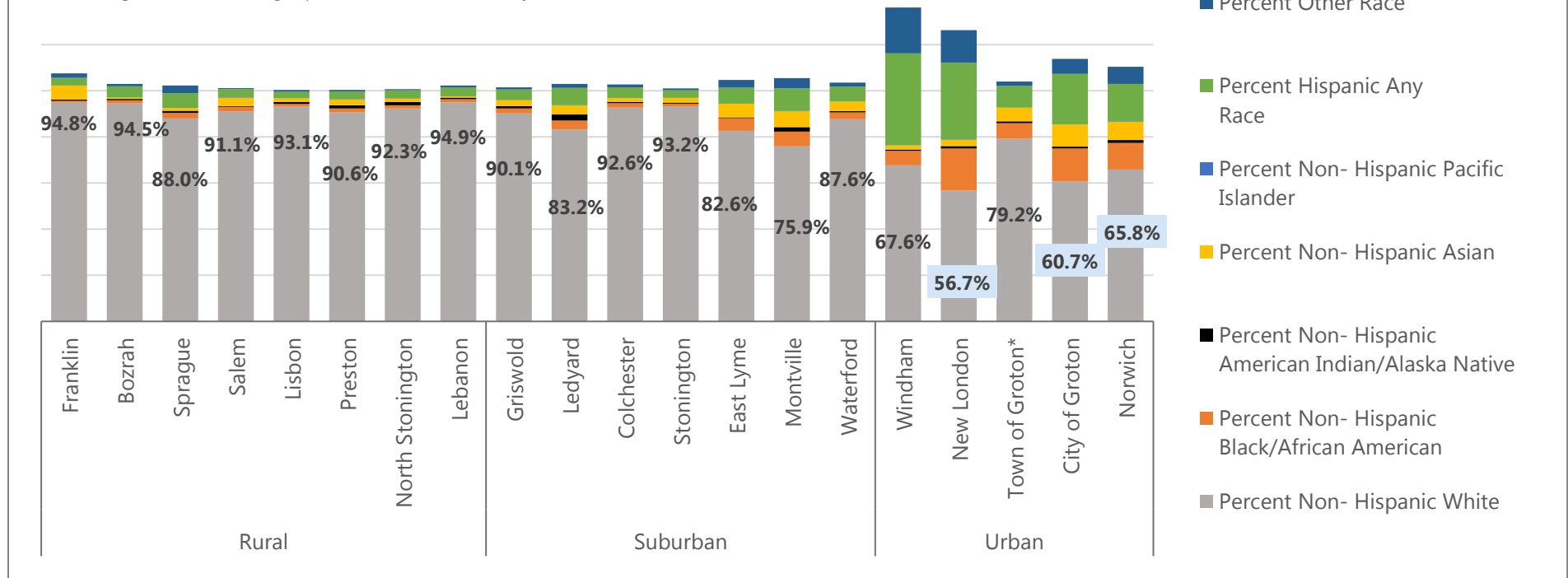
Figure 21: % Foreign Born by Municipality Type



seCter Region	9%
CT	14%
US	13%



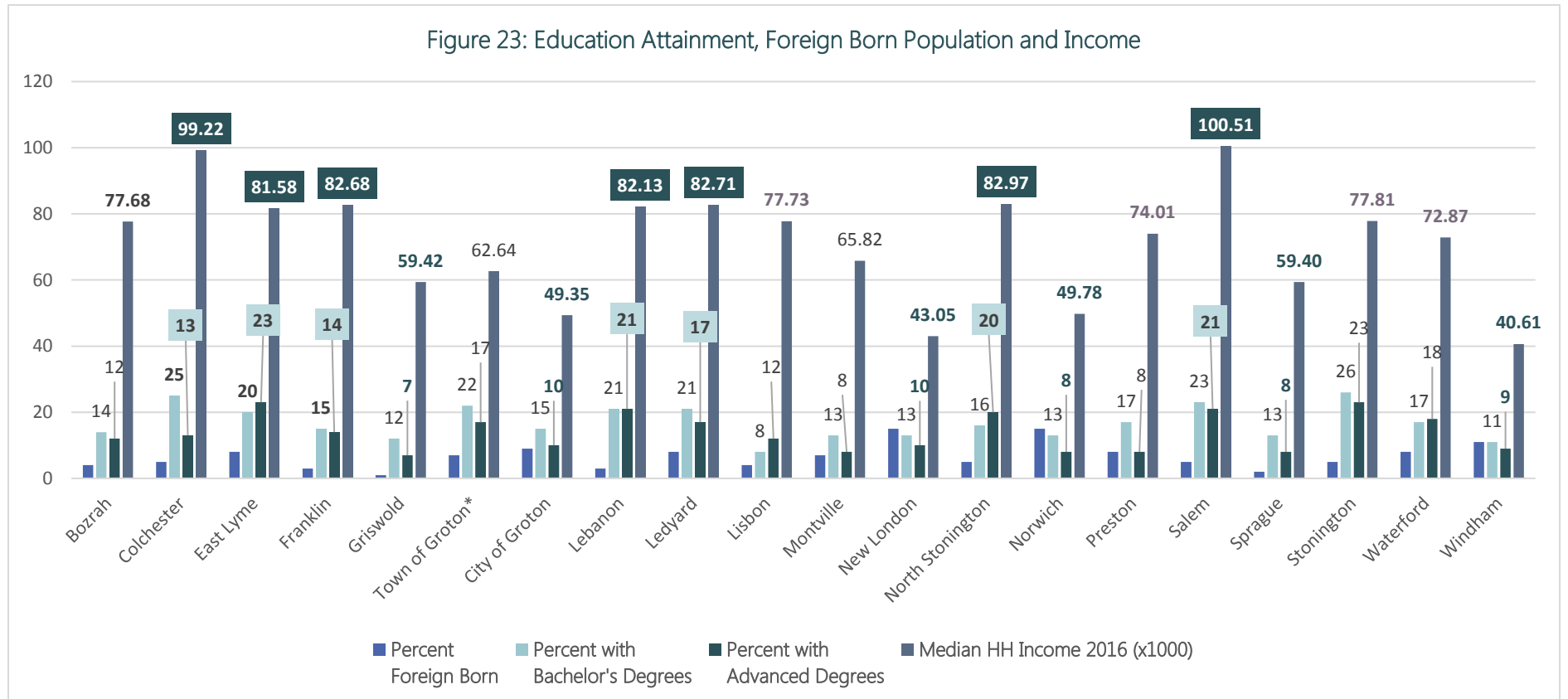
Figure 22: Demographic Profile - Ancestry



Between 2005 and 2015, the total population increased for 13 out of 20 municipalities, but only 1% for the region as a whole – a rate not conducive to economic growth. With respect to diversity, ten of the 20 municipalities report 90% or more of their population as being Non-Hispanic – White. The overall population is also aging, though the portion of young adults, age 20-29, is particularly high for the Town of Groton, Windham, and New London. The City of Groton and Norwich are also home to young adults, with 18% and 15% of young adults respectively, which is slightly higher than percentages for CT and the US. Strategies aimed at growing the regional population, whether native or foreign born, is central to creating and *sustaining* a vibrant economy.

Economists point to a possible resurgence of the small urban centers. The younger generation seeks a high quality of life in an area that is affordable, but still connected to the big cities and all they have to offer. Economists also point to young talent and diversity as necessary components of a vibrant economy. The four urban centers in SECT are all within a short drive or train ride to larger urban centers. They have a more diverse population and a greater percentage of young people. The fact that these urban centers are not thriving may indicate a disconnect between the residents and the resources and opportunities available, plus other unknown barriers to full participation in the economy that must be identified and addressed.

The chart below compares factors thought to impact household income. It reveals a fairly consistent correlation between educational attainment of a bachelors degree or higher and a greater household income, further emphasizing the need for greater inclusivity. It confirms the income and educational disparities that exist throughout the region – particularly between the urban centers and the suburban towns.



Strategies must focus on making these urban centers attractive to new residents and investment and also on making connections within and between the urban centers. Identifying and then reducing the barriers that prevent young, low-income, foreign born and/or minority populations in the four urban areas from starting a business or investing in properties must become a priority. These barriers could be related to lending practices, restrictive and confusing regulatory processes, language barriers, the unavailability of prime properties due to land-banking, and lack of venture capital. Ensuring that all residents have access to the training and education they need to increase their economic and social mobility must also be a priority and will include strategies to increase public transportation and facilitate safe, alternative modes of transportation.

Local, State and Federal investment focused on modernizing transportation and utility infrastructure and brownfield redevelopment is central to the revitalization of the urban centers and will have a larger, positive regional impact.

### 2.1.2 MIGRATION AND COMMUTER PATTERNS

According to data from the American Community Survey 2009-2013 5-year estimates data, there are more people moving to New London County from a different county, state, or country than there are people moving out of New London County to a different county or state. The same is true for Windham County. As the maps indicate, most people coming to the region are from neighboring states/counties as well as from California and Florida. The outbound pattern is very similar. New London County gains a significant number of residents from Fairfield and New Haven Counties and loses population to Tolland and Windham Counties. New London County also loses population to Rhode Island and the Boston metro area. New London County showed more in-migrants than out-migrants in 2013, with a net gain of 2,406 migrants. Windham County also showed a net gain.

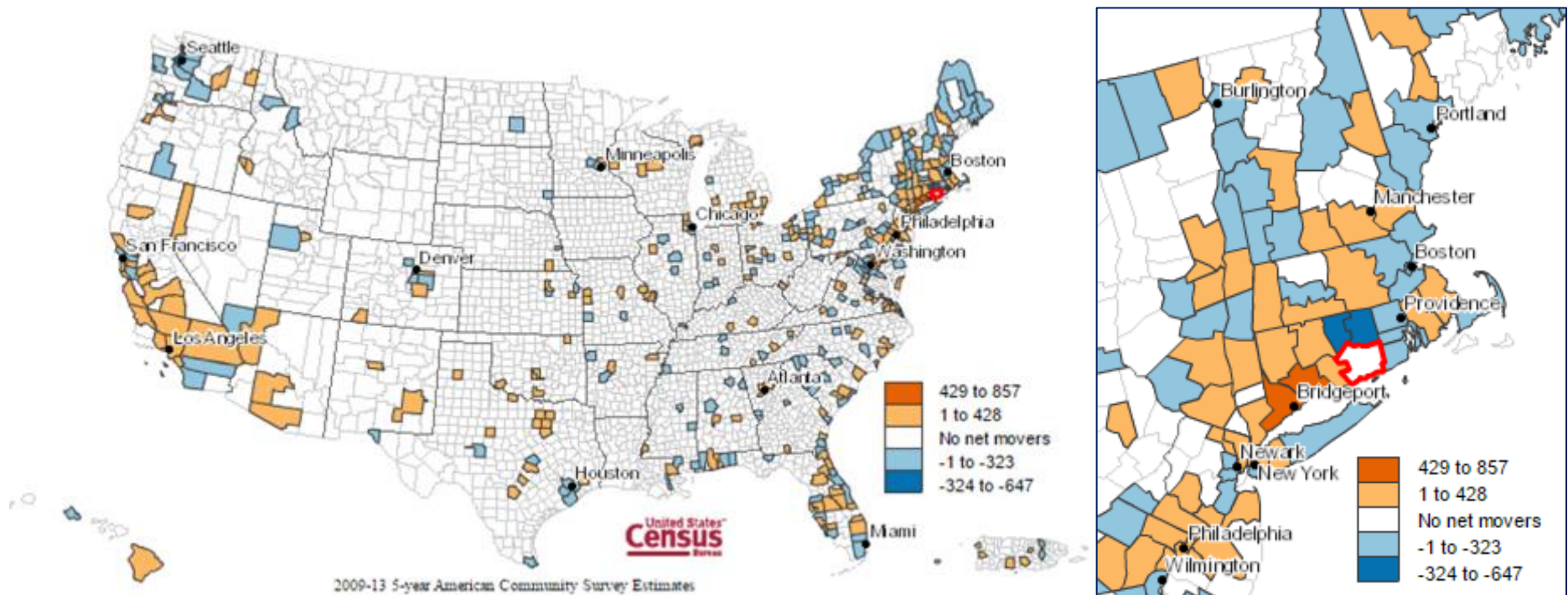


Figure 24: Total Inbound and Outbound Migration Flows to New London County, 2013

Commute time speaks to a region's livability, mobility and quality of life. Driving is the dominant means of transportation for commuting, accounting for over 88% of workers, in line with state and national averages. Public transportation accounts for at least 5% of commuting in just two municipalities: the City of Groton and New London.



Figure 25: Commuter Inflow/Outflow seCTer Region, 2004-2014

	2004 Count	2004 Share	2014 Count	2014 Share
<b>Employed in seCTer Region</b>	<b>111,353</b>	<b>100%</b>	<b>115,943</b>	<b>100%</b>
Employed in seCTer Region but Living Outside	35,861	32%	41,677	36%
Employed and Living in seCTer Region	75,492	68%	74,266	64%
<b>Living in seCTer Region</b>	<b>109,226</b>	<b>100%</b>	<b>117,489</b>	<b>100%</b>
Living in seCTer Region but Employed Outside	33,734	31%	43,223	37%
Living and Employed in seCTer Region	75,492	69%	74,266	63%



Foot Bridge in Willimantic. Photo: Winter Caplenson

The seCTer region has seen an increase in cross-commuting with surrounding regions between 2004 and 2014, with a six percentage point increase of residents out-commuting for work, and a four percentage point increase workers commuting into the region.

Many in the region, however, do not own a car. Without available, convenient public transportation, many residents cannot access the basic services needed to thrive, nor can they take advantage of job or educational opportunities that would permit them to participate in the economy. Strategies to increase mobility across all demographics must be a priority.

Figure 26: Share of Households Without Vehicles  
(Bar shows range of potential households)

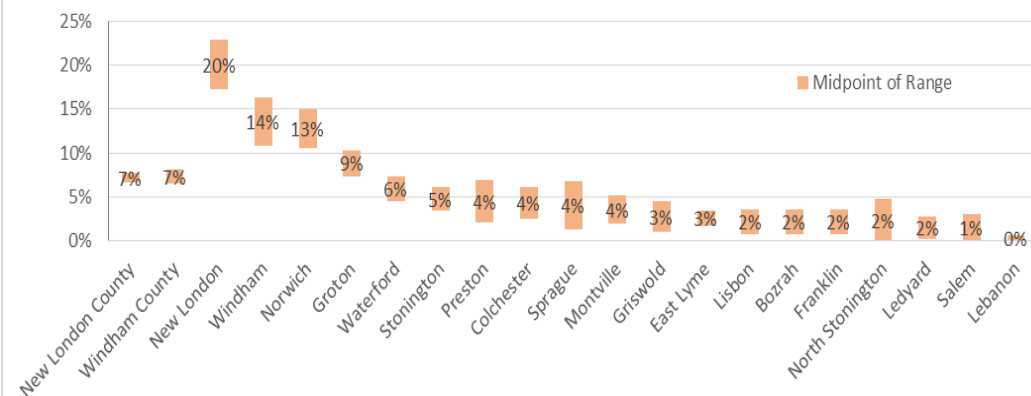


Figure 27: Sample of Walkability Scores (in Downtown Areas)

Pawcatuck	89	Ledyard Center	44
Downtown Mystic	68	Norwich	34
Jewett City	59	North Stonington	18
Stonington, Borough	55	Waterford	14
Willimantic	53	Bozrah	13
New London	52	Colchester	1
Groton	47	Preston	0

<https://www.walkscore.com/>

### 2.1.3 WORKFORCE AND EDUCATION

Also factors to the region's resilience, competitiveness and overall capacity for economic growth are the availability of a young, skilled workforce to fill the new high-tech jobs and replace the aging baby-boomers. The growth in high-tech employment and the number of small establishments are indicative of a more innovative environment.

Educational attainment in the seCTer region is comparable to that in Connecticut and the US. However, disparities across municipalities are considerable. Overall, only 14% of the population in the region have advanced degrees, while 42% have no more than a high school diploma. With the increase in service sector jobs, data show that only four of the region's top 25 occupations require a bachelor's degree or higher.

Younger workers in the region (age 14-24) are disproportionately represented in these lower wage, Accommodation and Food Service jobs, while older workers (ages 55+) account for a disproportionately large share of the Utilities and Manufacturing sectors. Regional goals must therefore not only include strategies to increase educational achievement, but must focus on training the younger generation to replace the retiring workers in the higher skilled, higher wage jobs (or starting their own business).

Given the anticipated workforce needs of Electric Boat, and the projected decline in Computer and Mathematical Occupations as well as Life, Physical, and Social Science Occupations (Camoin Data), there is an even more pressing need to find ways to interest the future generations in the STEM fields of study and careers in advanced manufacturing. Having a skilled workforce in these areas will help the region to remain competitive in the existing Knowledge Economy and increasingly high-tech New Economy.

Figure 28: Labor Force Participation Rates

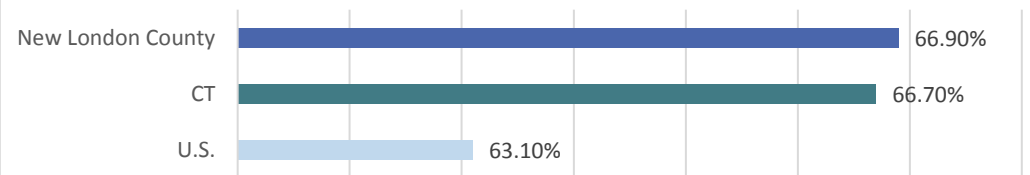


Figure 29: Education Attainment

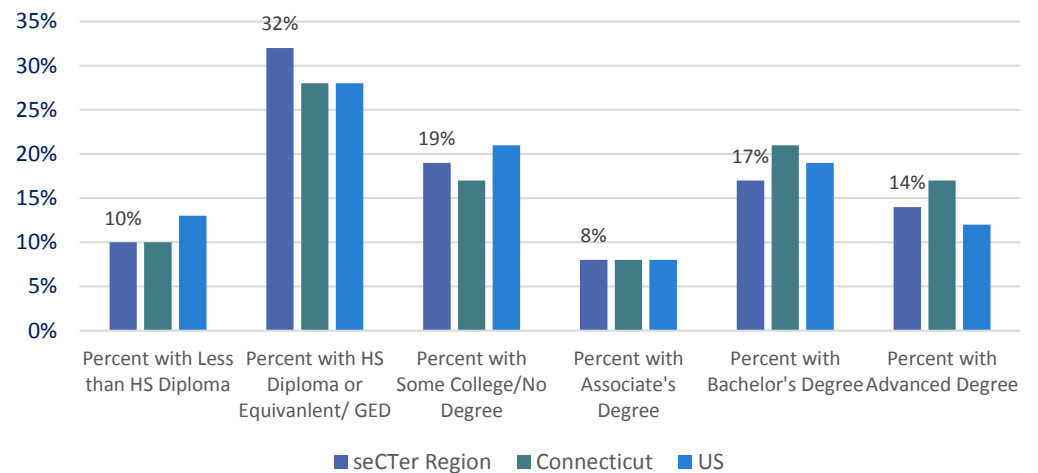


Figure 30 :Occupation Concentration/Location Quotient

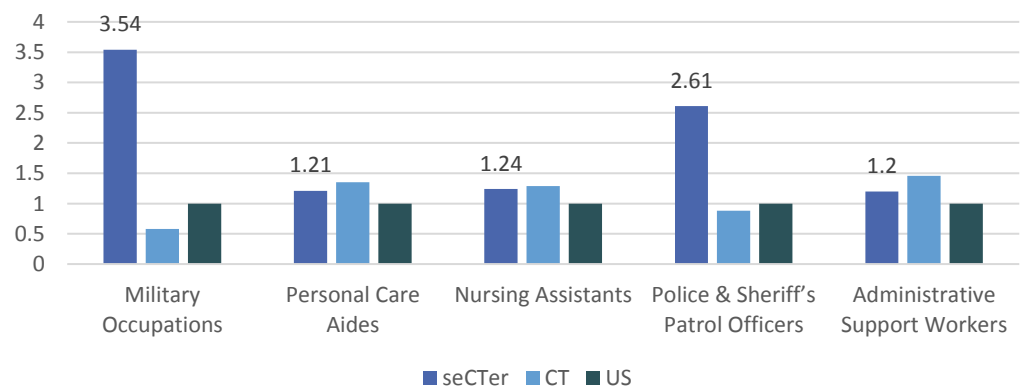
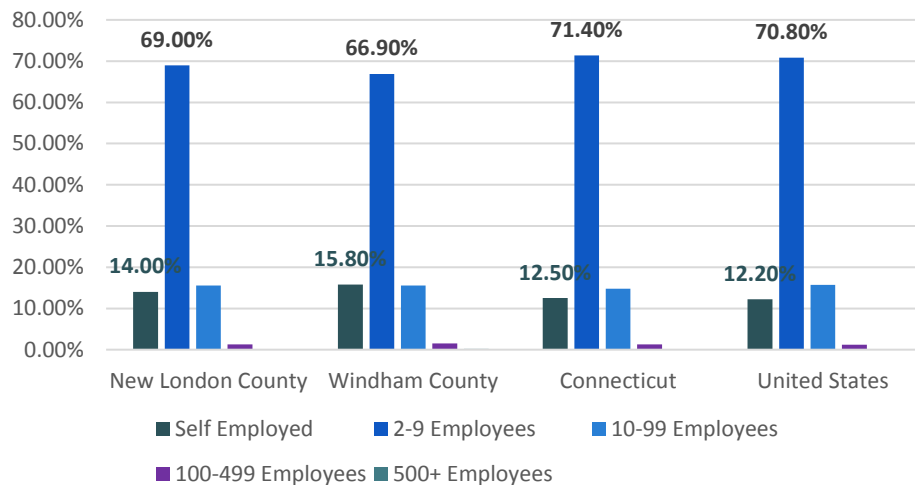


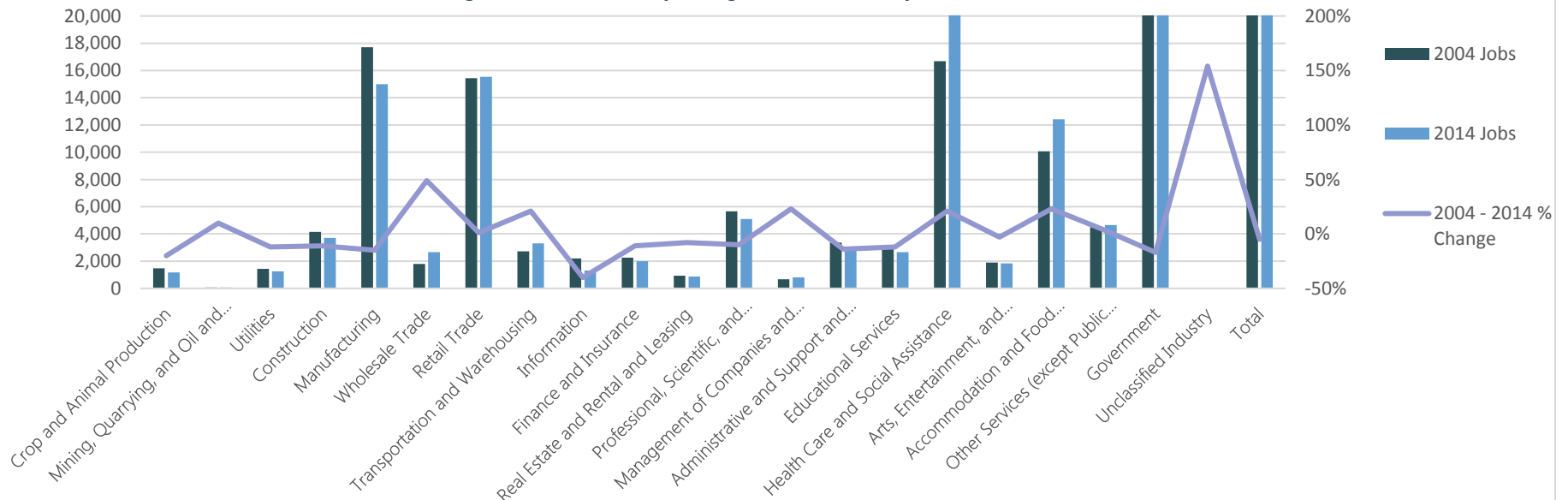
Figure 31: Percent of Businesses by Business Size, 2015



In SECT, 69% of the businesses are very small with only two to nine employees. While this may indicate an environment conducive to starting a business, it points to a need to support the expansion of these existing business as a strategy to grow the regional economy.

Changing the past trend of requiring large-lot, isolated business or industrial parks to one that permits several smaller facilities on one lot will enable new businesses to form and later grow to the next stage. A cluster of small to mid-size manufacturing facilities would likely generate the same, if not more tax revenue, and is far more resilient than one large facility occupying the same footprint. Adding a residential – live/work component to these developments would further allow for greater inclusivity with respect to economic opportunity and thereby increase the regional workforce.

Figure 32: Workers by 2-digit NAICS Industry, 2004-2014



Note: Job Counts include only primary jobs; Source: Census On-The-Map



Instead of the desired occupation growth in advanced manufacturing or bioscience, the largest occupations in 2015 included Office and Administrative Support Occupations with nearly 19,000 jobs, followed by Food Preparation and Serving Related Occupations and Sales and Related Occupations, both with nearly 13,000 jobs. Healthcare Support Occupations and Community and Social Service Occupations are projected to grow by five percent over the next five-year period, which shows the most growth out of all occupations, but is unfortunately associated with lower incomes than the manufacturing jobs that formerly were more abundant in the region.

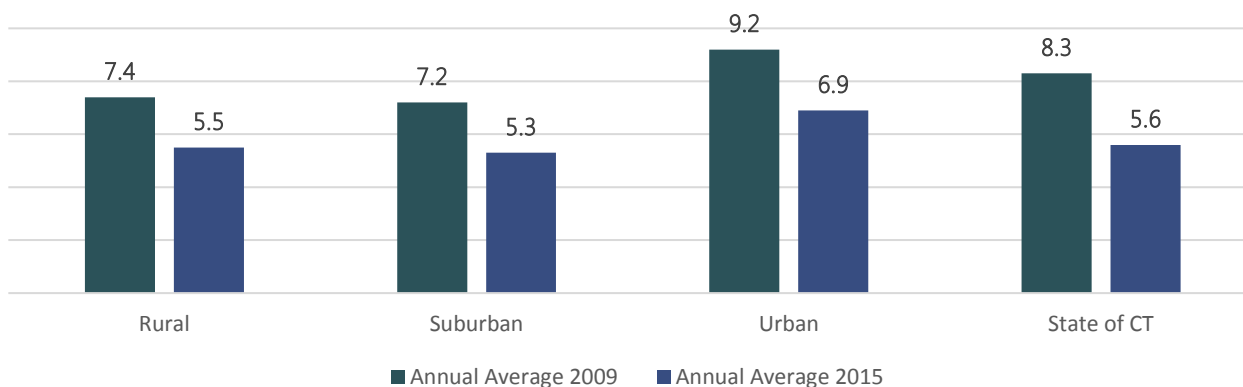
#### 2.1.4 AFFORDABILITY

While the region as a whole is essentially in line with the state, the urban centers rank lower than their rural and suburban counterparts with respect to the basic livability metrics of income, unemployment, poverty status, home ownership, and housing cost.

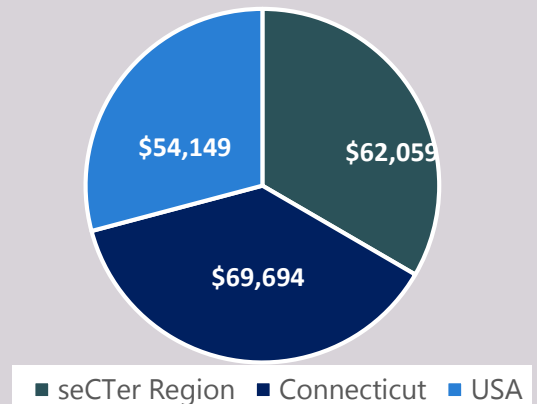
The median household income for the seCTer region is nearly \$8,000 higher than the median household income of the US, but about \$7,600 lower than that of Connecticut. There is great income disparity within the region, ranging from a high of \$100,511 in Salem, and the low of \$40,610 in Windham.

The percentage of households below the poverty level in the seCTer region is in line with CT and lower than the national average. In both New London and Windham, almost one quarter of the population lives below the poverty line.

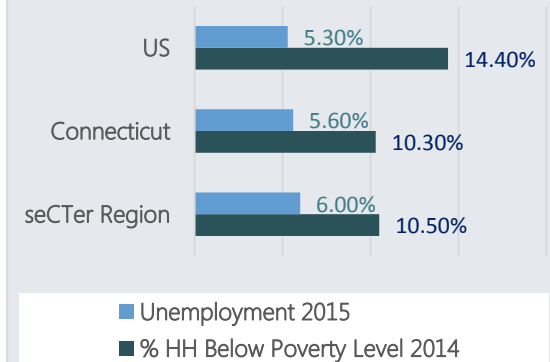
**Figure 35: Annual Average Unemployment Rates 2009 & 2015 seCTer Region**



**Figure 33: Median Household Income**

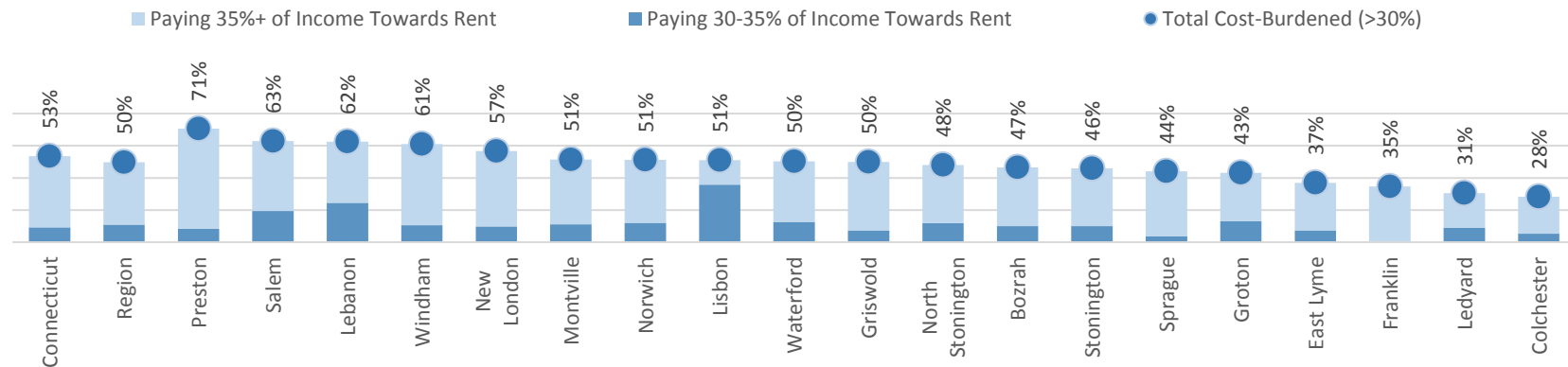


**Figure 34: Unemployment and Poverty Levels**



Homeownership in the urban centers lags behind that of the suburban and rural areas with a range of 34% in New London to the high of only 52% in the Town of Groton. Homeownership in all rural areas is above 80%.

Figure 36: Share of Renter Households in Southeastern Connecticut Paying More than 30% of Income Towards Rent



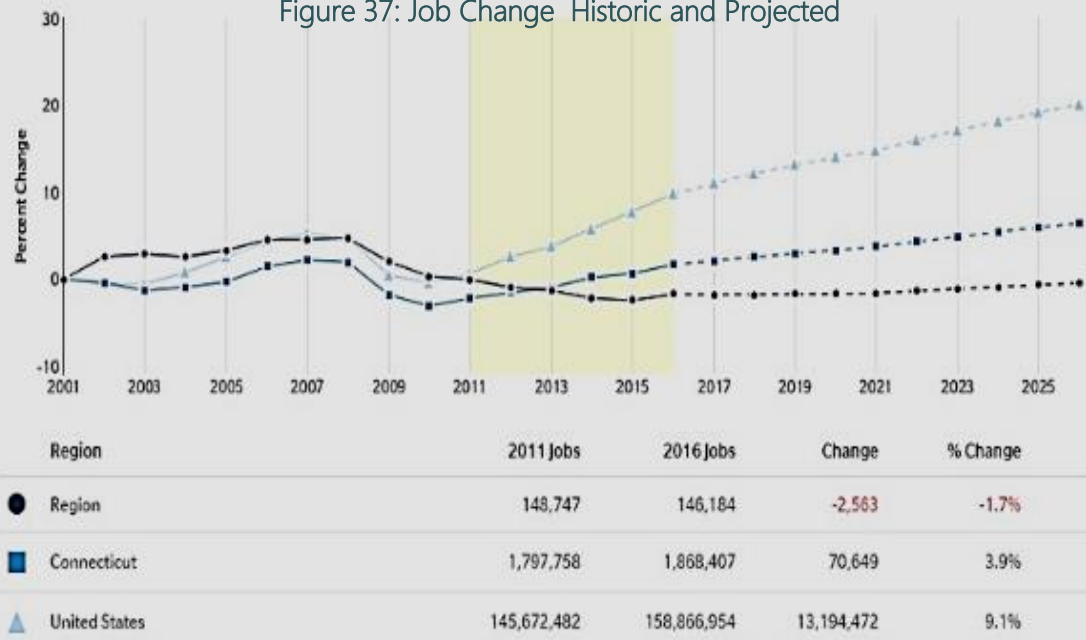
The Economic Development Administration defines Economic Development as “creating the conditions for economic growth and improved quality of life by increasing capacity of individuals, firms and communities to maximize the use of their skills and talents to support innovation.”<sup>1</sup> In SECT, there are many disparities between towns, whether because of income, ancestry, home values, poverty rates etc. All towns in the region must thrive in order for the region as a whole to thrive. The demographic/socio-economic profile highlighted above describes a region with a slow growing, aging population where most people in the workforce are in low to mid-level jobs that support the high-level occupations associated primarily with our large anchor institutions and industries. As the population ages, the potential for more unfilled jobs and talent shortages may impede economic growth and erode the vibrancy often attributed to youth and diversity. Attracting skilled working-age native or immigrant populations will be key to mitigating the effects of attrition and, as Camoin Associates suggest in a recent publication, immigrants, with their language skills and international ties, have the potential to stimulate new global business and trade.<sup>2</sup>

Weaknesses identified related to affordability and livability must be prioritized as they strongly relate to one of our most recognized assets: Quality of Life. One such weakness is that 50% of the households that rent pay more than 30% of their income toward housing leaving little left-over to pay for transportation, healthcare, training and/or other necessities that would help increase their social and economic mobility.

These socio-economic conditions and our changing demographics will impact the goals and strategies of this and future CEDS. An underlying intention of all strategies must be to address the barriers that prevent essential connections between people and resources and goods/services to the market, but in a way that increases each individual’s fundamental capacity and that of the region as a whole to ensure our competitiveness and resilience in the challenging economy.

## 2.2 ECONOMIC PROFILE

Figure 37: Job Change Historic and Projected



As part of their economic profile, Camoin examined employment, establishments, earnings and output according to the standard industry classifications and groupings known as NAICS, the North American Industrial Classification System. Per their findings, 14 of the 21 major industry sectors (2-digit NAICS) economy-wide, showed growth. In terms of number of jobs, the Manufacturing and Accommodation/Food Services sectors showed the highest growth, adding about 1,700 and 1,100 jobs, respectively since 2011.

Average earnings in the seCTer Region increased 34% between 2005 and 2015, and the total Gross Regional Product (GRP) for the region in 2015 was \$14.5 billion. The Government sector (including casinos and military) contributed the largest amount to GRP at

\$3.2 billion, followed by Manufacturing contributing \$2.6 billion, and Health Care and Social Assistance contributing \$1.2 billion.

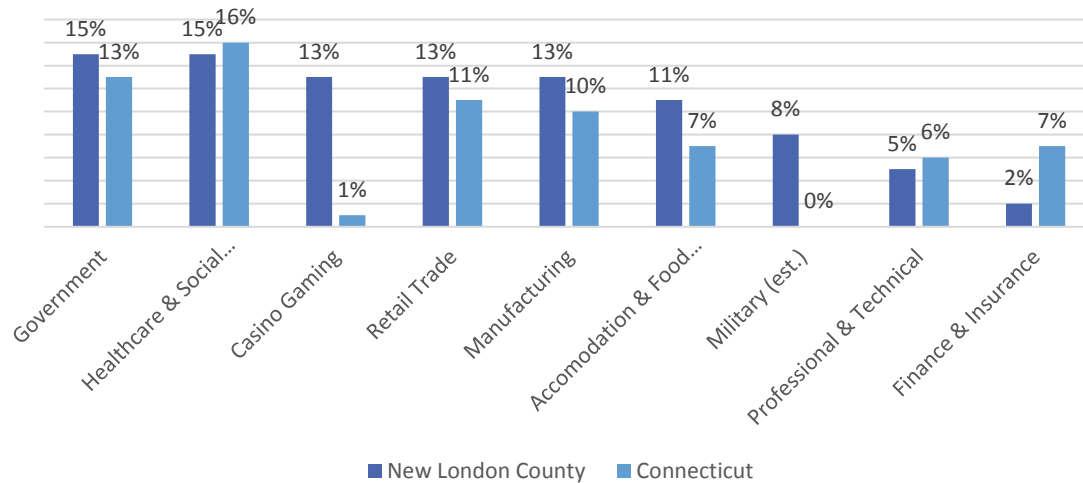
Competitive sectors, as evidenced by a national location quotient above 1.20, include the Utilities sector (2.26); Government (including casinos and military) (1.73); and Health Care and Social Assistance (1.13). Utilities, with average earnings of \$180,000<sup>3</sup>, Manufacturing (\$114,000) and Professional, Scientific, and Technical Services (\$95,000) were identified as the major industry sectors with the highest average earnings per worker. Accommodation and Food Services, Other Services, and Arts, Entertainment and Recreation had the lowest at \$23,000, \$26,000 and \$30,000 respectively. Sectors with the highest dollar wage gains between 2005 and 2015 were Utilities and Whole Trade.

The seCTer region has lost close to 2,600 jobs over the past five years, a decline of nearly 2%. This compares to job growth of nearly 4% in Connecticut overall and over 9% nationally. The number of jobs is projected to remain almost flat, with only an increase of about 200 jobs (a 0.0% increase)<sup>4</sup> compared to projected increases of 2% in Connecticut and 5% in the US. However, these projections do not include expected major increases at Electric Boat due to recent and projected future military contracts. So, employment projections based on econometric models must be viewed as representing a "worst-case" scenario. Currently, the largest 2-digit NAICS industries within the seCTer region are Government (including casinos and



military) with close to 39,000 jobs, followed by Health Care and Social Assistance with nearly 21,000. Government jobs are projected to continue their decline in the next five years albeit at a slower rate (again, based on the EMSI model and excluding projected increases at Electric Boat), while Health Care and Social Assistance is projected to increase by seven percent (over 1,500 jobs). Retail Trade and Manufacturing are the two next largest industries, both with over 16,000 jobs in 2016. Retail Trade is projected to grow by one percent in the next five - year period and Manufacturing is projected to decrease by two percent. (Camoin)

Figure 38: Share of Employment in Major Industries



Source: Quarterly Census of Employment and Wages. Military employment not reported in QCEW, here estimated by SCCOG at ~8,500 jobs; Chart SCCOG

With 1,034 total associated establishments equating to 14% of all establishments in the county, Retail trade was identified as having the highest number of establishments in New London County. This is closely followed by 909 establishments for Other Services (except Public Administration).

#### Shift Share and Retail Leakage Findings<sup>1</sup>

The Shift Share Analysis distinguishes an industry's employment growth in a specific area that is attributable to local competitive advantages or disadvantages from growth which is attributable to overall national employment trends or national employment trends in that industry. The shift share analysis of the seCTer region showed that region has a competitive advantage in Crop and Animal Production, Construction, Manufacturing, Wholesale Trade, and Management of Companies and Enterprises. Among these, within the region Manufacturing has the most competitive advantage based on the shift share analysis.

High levels of retail leakage point to an opportunity for customer demand recapture depending on a corresponding finding from the Business Potential Analysis. Industries experiencing the greatest sales leakage include Electronics and Appliance Stores; Health and Personal Care Stores; and Clothing and Clothing Accessories Stores. The Business Potential analysis provided by Camoin compares the retail spending gap in the seCTer region, within the retail categories that have sales leakage, to the average sales of similar businesses in Connecticut. The results of this analysis confirm possible opportunity for additional Clothing Stores and Health & Personal Care Stores, but not as much opportunity for additional Electronics and Appliance Stores.

### 2.3 INNOVATION PROFILE

The seCTer Region was compared to the following peer regions on a number of innovation-related indicators: 1) Hartford (CT) MSA, comprised of Hartford, Tolland and Middlesex counties, 2) Springfield (MA) MSA, comprised of Hampshire and Hampden counties, and 3) Worcester (MA-CT) MSA, comprised of Worcester County, MA, and Windham County, CT.

When compared with the Hartford MSA, the seCTer region ranks behind the Hartford MSA, but ahead of the Worcester and Springfield MSAs, in terms of share of the population with advanced degrees and STEM jobs as a percent of all jobs. Engineers are among the most well-represented STEM occupations in the region, in terms of both number of jobs and national location quotient. The region is also strong in life and physical science occupations.

The number of new business establishments each year in New London County remained fairly consistent between 2010 and 2014, with the county adding between 400 and 450 new establishments annually. New London County was second only to the Hartford MSA in 2014, in terms of new establishments per capita.

Ten SBIR/STTR grants were awarded to the companies in the seCTer region in 2015, totaling almost \$8 million. On a dollar amount awarded per capita basis, seCTer exceeded all peer regions and Connecticut overall by more than double. There were two venture capital investment deals totaling \$4.3 million in New London County in 2015. On a per capita basis, this is below Hartford MSA, Worcester MSA, and Connecticut as a whole, though the data source provided may not include amounts from angel investors.

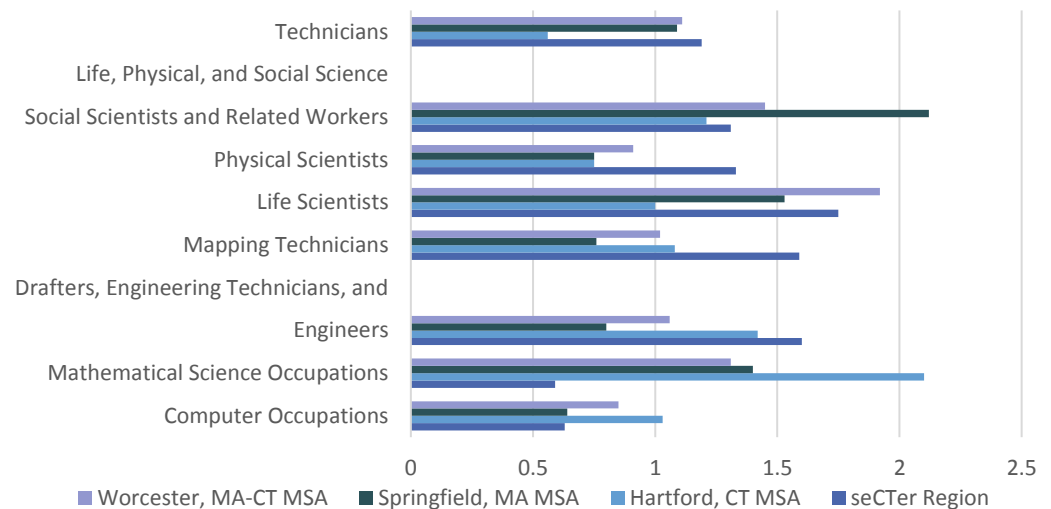
**FIGURE 39: NEW ESTABLISHMENTS PER CAPITA, 2014**

REGION	ESTABLISHMENTS	POPULATION	ESTABLISHMENTS PER 1,000 POPULATION
NEW LONDON COUNTY	443	274,071	1.62
HARTFORD, CT MSA	2,124	1,213,202	1.75
SPRINGFIELD, MA MSA	1,008	630,709	1.60
WORCESTER, MA-CT MSA	1,357	931,816	1.46

Source: US Census, Longitudinal Business Database 1977-2014

	seCTer Region	Hartford, CT MSA	Springfield, MA MSA	Worcester, MA-CT MSA
<b>TOTAL STEM JOBS</b>	7,766	37,723	12,403	21,119
<b>STEM JOBS AS PERCENT OF TOTAL JOBS</b>	5.30%	5.60%	4.10%	5.10%
<b>STEM OCCUPATIONS - AVERAGE EARNINGS</b>	\$38.66	\$39.15	\$36.74	\$37.70

**Figure 40: STEM Occupations - Location Quotient, 2015**



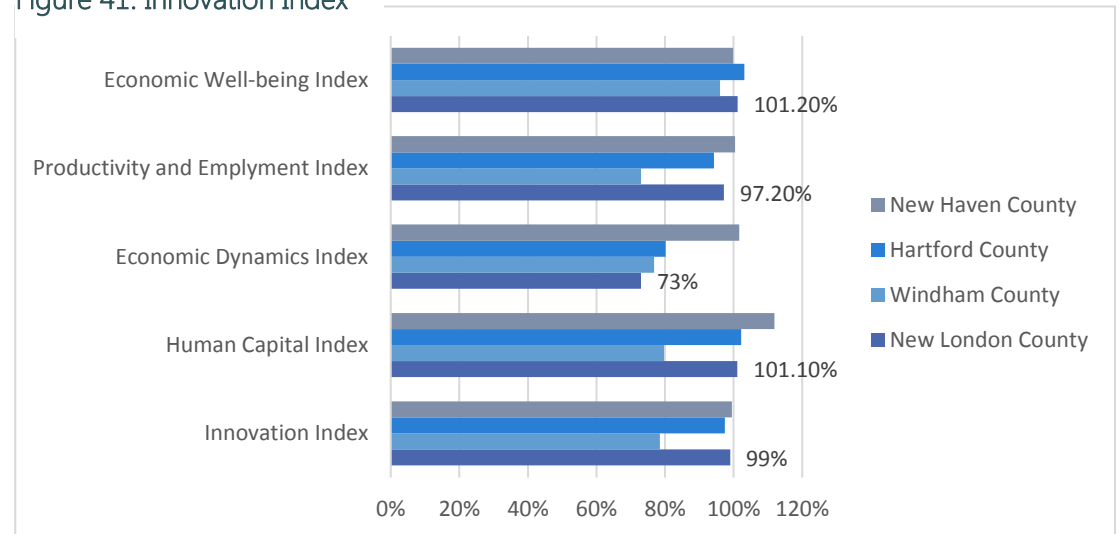
Source: EMSI

Stats America calculates an Innovation Index for counties in the U.S. The Index consists of five components.

1. Human Capital: 30%
2. Economic Dynamics: 30%
3. Productivity and Employment: 30%
4. Economic Well-Being: 10%
5. State Context (for reference only)

The chart to the right shows New London County's score with respect to the state and surrounding counties, and points to a need to target strategies to diversify the economy and improve the networks necessary to attract talent and support innovation.

Figure 41: Innovation Index



Thames River Innovation Place Core Team at work



Dedicated Desk at Foundry 66 Co-working Facility in Norwich

Increased Entrepreneurial Behavior >>> Increased Competitiveness >>> Increased Value-added >>> Increased Resilience >>> Increased Diversity >>>  
Increased Community Prosperity



## 2.4 FISCAL PROFILE

The municipalities in the seCTer region rely on local property taxes as the primary source of revenue to support municipal services. This puts a heavy burden on the residents and businesses and is the leading cause of inter-municipal competition for new development – specifically commercial or industrial development that would increase the grand list without requiring as many services. The overall equalized grand list value of the entire seCTer region was approximately \$32.2 billion in 2014. The municipalities with the highest grand list are the Town of Groton and the Town of Waterford, both at over \$3 billion, followed by East Lyme and Norwich, both over \$2 billion. The municipalities with the lowest equalized assessed values are Sprague, Franklin, and Bozrah, all under \$300 million.

Stonington (\$197,218) and Waterford (\$235,926) have the greatest taxable property per capita, well above the regional average of \$115,794<sup>5</sup> The two municipalities differ, however, in the composition of taxable property. In Stonington, 76% of taxable property is Residential and 12% Commercial/Industrial, whereas only 46% of Waterford's taxable property is Residential and 25% comes from Commercial/Industrial properties.

With respect to Education Spending per pupil, Colchester, Stonington, Franklin and Salem have seen sharp increases from 2011 estimates. Salem and Preston each have a per pupil expenditure of over \$17,000 and have over 20% of their current population considered school-aged.<sup>6</sup>

The mill rate is a function of the amount of money the city or town needs to collect divided by the values of properties within the community on the date of the towns last re-evaluation. A look at mill rates in the region reveals that Windham and New London have the highest rates at 28.30 and 23.58 respectively. This is not surprising as both municipalities are home to educational institutions and hospitals which are both non-taxable. The home values in each municipality are also lower forcing an increase in the mill rate to generate the needed revenue to provide basic services. Stonington (13.89) and Lisbon (12.66) have the lowest mill rates well below the regional average of 19.04. High mill rates can be a deterrent to developers and potential new residents.<sup>7</sup>

Another indicator of fiscal health is a town's bond rating. All the municipalities within the region have a bond rating of at least Upper Medium, the third highest rating per Moody's. When averaging the ratings from Moody's, Standards and Poor's, and Fitch, Preston, Stonington and Salem are ranked highest.<sup>8</sup>

As funding from State and Federal sources continues to diminish, local fiscal solvency will become even more challenging. The notion of regional shared services such as education, building and zoning, animal control, or emergency services has not been well received in the region. If towns continue to rely on property taxes to pay for services and choose not to regionalize certain services, the per capita cost will only increase and further reduce our local and regional competitiveness.

Figure 42: Portion of Revenues from Property Tax, 2014		Debt per Capita, 2014
Waterford	87%	\$4,884
Stonington	84%	\$2,367
Franklin	71%	\$910
Bozrah	69%	\$1,390
East Lyme	69%	\$2,759
Salem	68%	\$1,410
Lebanon	64%	\$431
North Stonington	63%	\$171
Colchester	63%	\$1,005
Groton	62%	\$1,476
Montville	59%	\$2,070
Ledyard	58%	\$1,030
Preston	56%	\$1,342
Norwich	54%	\$1,044
Lisbon	53%	\$886
Griswold	52%	\$1,490
Sprague	51%	\$2,770
New London	50%	\$1,836
Windham	45%	\$886
<b>Regional Average</b>	<b>56%</b>	

Source: State of Connecticut Municipal Fiscal Indicators, January 2016.

## 2.5 INDUSTRY CLUSTER PROFILES

To help understand industry niches and targeted opportunities in the region, Camoin examined, as part of the data analysis, employment, occupations and earnings according to customized industry groupings or “clusters.” This examination was based on a complete review of data down to the most detailed industry classification level (6- digit NAICS) to identify trends, strengths, and weakness. It was also based on Camoin’s review of targeted Industries seCTer identified in the 2011 CEDS, the industry focus groups conducted for this analysis, and Camoin’s experience with targeted industry trends throughout the US and Northeast. Based on this process, Camoin analyzed nine industry groupings to potentially target as clusters including

- Tourism
- Healthcare Services
- Defense
- Energy and Environment
- Bioscience
- Agriculture, Fishing, and Food Production
- Creative
- Advanced Manufacturing
- Maritime



Figure 43: Past, Present, and Projected Industry Jobs

Cluster	2011 Jobs	2016 Jobs	2021 Jobs	2011 - 2016 Change	2011 - 2016 % Change	2016 - 2021 Change	2016 - 2021 % Change	GRP
Tourism	25,609	27,430	28,003	1,821	7%	573	2%	\$1,032,095,450
Healthcare Services	20,256	20,846	22,397	590	3%	1,551	7%	\$1,217,181,099
Defense	17,524	19,319	19,877	1,795	10%	558	3%	\$2,232,344,853
Energy and Environment	6,059	5,513	5,090	(546)	(9%)	(423)	(8%)	\$1,323,743,124
Bioscience	4,014	2,994	2,033	(1,020)	(25%)	(961)	(32%)	\$1,244,529,655
Agriculture, Fishing, and Food Production	1,963	2,144	2,204	181	9%	60	3%	\$174,925,626
Creative	2,103	1,928	1,727	(175)	(8%)	(201)	(10%)	\$112,972,887
Advanced Manufacturing	2,052	1,917	1,883	(135)	(7%)	(34)	(2%)	\$239,246,665
Maritime	371	422	366	51	14%	(56)	(13%)	\$48,172,442
seCTer Region	148,747	146,184	146,417	(2,563)	(2%)	233	0%	\$14,504,598,891
Connecticut	1,797,758	1,868,407	1,906,851	70,649	4%	38,444	2%	\$243,910,568,213
U.S.	145,672,482	158,866,954	166,098,861	13,194,472	9%	7,231,907	5%	\$16,751,927,728,210
Source: EMSI								

## KEY FINDINGS

The analysis of targeted industry clusters points to three primary industry clusters in the region that are large and historically have played significant roles in the regional economy and will continue to do so.

- Manufacturing (specifically, advanced manufacturing and defense)
- Healthcare
- Tourism

The region should continue to focus on these clusters for maintaining and growing the economic base. Two of these clusters - Manufacturing and Healthcare - are also the same sectors being successfully targeted by the Eastern Connecticut Workforce Investment Board working with industry, education, and workforce partners. The region should also expand workforce development efforts to include initiatives to support growth in the Tourism cluster.

The analysis also points to smaller but historically important industry clusters

- Bioscience
- Agriculture, Fishing, and Food Production
- Maritime (excluding defense ship building)

These should also be a focus for strategies to support and grow the regional economy.

- Bioscience on its own and related to healthcare industries; as part of entrepreneur ecosystem; and in efforts to sustain and build high-wage, high-talent businesses, employment, and entrepreneurs
- Maritime as it relates to tourism plus its connection to food (aquaculture) and manufacturing (boat building and related marine manufacturing)
- Agriculture, Fishing, and Food Production as it relates to quality of place (land, open space, cultural heritage), tourism (local food), a healthy region (healthcare initiatives), and efforts to develop and support small businesses and entrepreneurs





Finally, the analysis of targeted industry clusters points to two industry groupings which are growing in importance nationally but are not strong within the seCTer region and would need much more support and nurturing to develop capacity and grow within the region as a niche.

- Creative
- Energy and Environment

We recommend that seCTer not focus on these as primary clusters at this time. However, they should be given attention within their relationships and connection to the primary clusters and overall economic development assets, needs, and strategies including

- Skilled and talented workforce
- Entrepreneurs
- Quality of place

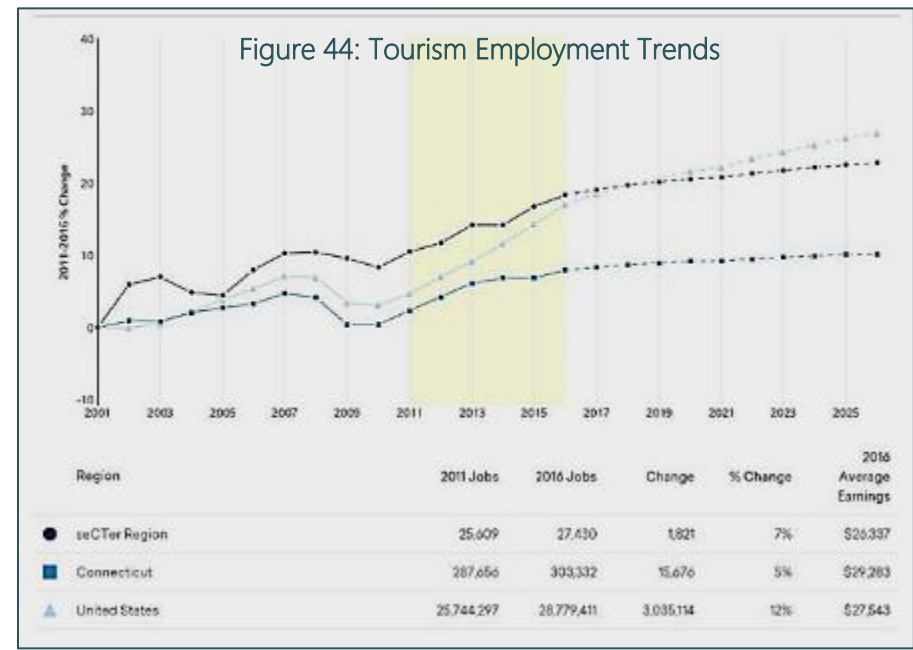
The following sections will examine each Industry Sector identified above in greater detail. Please refer to the Data Analysis in Appendix A for the full Industry Cluster Analysis provided by Camoin Associates.



750 Main St. and mural in Willimantic. Photos by: Winter Caplenson

### 2.5.1 TOURISM INDUSTRY

Of the nine clusters examined, the Tourism Cluster has the largest percentage of jobs in the seCTer region, accounting for 7% of the seCTer region GRP. The region has tremendous potential associated with this industry including its strategic coastal location, a known history and reputation for tourism, considerable recreation amenities including three locations boasting millions of annual visitors: Mystic Aquarium, Mystic Seaport, Olde Mystic Village. SECT is home to two world renowned resort casinos both with retail outlets, historic sites and a new unique Heritage Park, numerous accommodations and diverse food service businesses, outdoor and indoor recreational opportunities, and stakeholders to support and advocate for its growth, including seCTer, the Southeastern CT Cultural Coalition and the Chambers of Commerce. Until its recent loss of funding, much of the regional marketing for tourism was handled by the Eastern Regional Tourism District and the privately funded Greater Mystic Visitor's Bureau.



Future success will require strategies to continue investment to maintain and expand assets and infrastructure; provide increased transportation and pedestrian options; increase wages and overall quality of service while remaining competitive; and solidify and **coordinate existing messages into unifying themes to market the region as a whole**. Coordination with agriculture and fishing industries offers opportunities for growth around local food initiatives. Rejuvenation of downtowns and village centers as quality, mixed-use places offer further opportunities, as does building on recent growth in marine related tourism (tours, ferries, etc.).

#### Additional Key Findings

- The Tourism cluster currently makes up 19% of the seCTer region economy with 27,430 jobs in 2016 (28% if estimated 13,232 jobs related to the gaming industry are included). The Tourism cluster has shown growth over the past five years adding 1,821 jobs, a 7% increase to the cluster, and is projected to continue growing in the upcoming five-year period. Similarly, Tourism grew in Connecticut over the past 5 years by about 15,676 jobs, a 5% increase. This cluster also grew by 12% across the United States.
- The largest 6-digit NAICS industry within the cluster is Full-Service Restaurants, with over 6,000 jobs, or about 22% of jobs in 2016. This industry contributes \$156,728,165 to seCTer GRP.
- Within this cluster, average earnings for 2016 in the seCTer region were \$26,337, lower than that of Connecticut and the United States, being \$29,283 and \$27,543 respectively. Overall, average earnings in the cluster are lower than that for all industries combined.

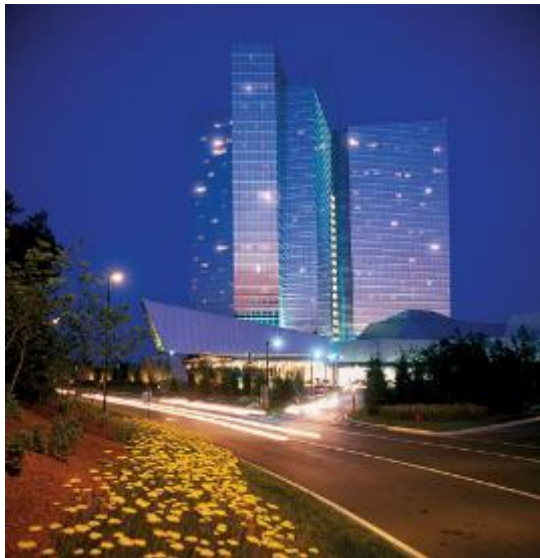
- Forty-three percent (43%) of employees, or 11,760 people, within this cluster work as Retail Salespersons, Cashiers, Waiters and Waitresses, and Combined Food Preparation and Serving Workers (including Fast Food) with median hourly earnings of about \$10.

#### The Gaming Industry and Tourism in the Region

The gaming industry is significant within the seCTer region. It experienced significant growth in the region in the decade before the past recession, but significant losses in its wake. According to the CT Department of Labor there were an estimated 13,232 jobs in the Amusement, Gambling, and Recreation industry in 2015 in New London County that were classified as “local government,”<sup>9</sup> the employment category in which casino jobs are listed.

The Eastern CT Workforce Investment Board (EWIB) as part of its Comprehensive Four-Year Plan: 2016-2020 also indicates the following:

*Connecticut employment reached a post-recession low in 2010 (less than two years after the recession), while Norwich-New London did not reach its low until 2015, after seven consecutive years of job losses. The gaming industry represented the major source of losses in the region due to the reduction of thousands of jobs resulting from difficult conditions in the regional economy coupled with competition in the gaming market. Other regional industry sectors followed with the job loss and recovery trends more consistent with other regions across Connecticut and the U.S.*



Mohegan Sun Casino

The gaming industry is a major employer in Eastern Connecticut. In the 1990s, the two regional casinos drove the economic expansion, adding thousands of workers. In the past decade, however, these casinos have been significantly impacted by the economic malaise as well as the proliferation of competition throughout New England and the Northeast. The result has been an estimated loss of 8,000 direct and 4,080 indirect jobs between 2008 and 2015, a significant impact to the region economy and job loss and recovery statistics.



Foxwoods Resort Casino

Regional gaming executives have expressed apprehension about even more potential job

losses due to increased casino competition in neighboring states. Legislative proposals are being considered to address this issue, including permitting a new casino in another part of the state. EWIB will continue to monitor the competitive pressures on the gaming industry.



## 2.5.2 HEALTHCARE SERVICES INDUSTRY

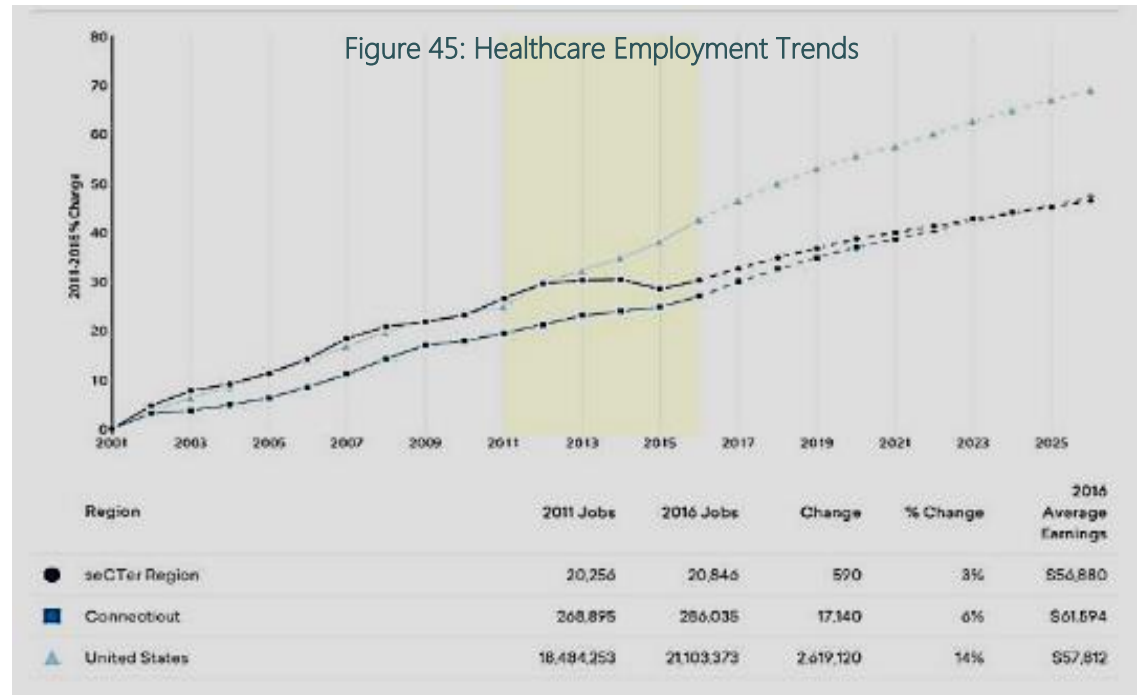
This cluster includes all of the health and social services industries but excludes biosciences which are examined as a separate cluster. Biosciences includes pharmaceutical and medical-related manufacturing and research and development related to life sciences. The two are often related but also have unique characteristics, needs, and opportunities.

This cluster currently makes up a significant 14% of the seCTer region economy with 20,846 jobs in 2016 and contributes about 8.4% or \$1,217,181,099, to the entire seCTer region GRP. SECT is home to three hospital with affiliations to larger healthcare organizations such as Yale New Haven, Hartford Healthcare, Sloan Kettering.

### Key Findings

- The largest 6-digit NAICS industry within the cluster is General Medical and Surgical Hospitals, with 4,565, or 22% of jobs in 2016. This industry specifically contributes \$372 million to seCTer GRP. In terms of employment, nursing care facilities with 2,773 employees and physicians' offices (except mental health specialists) with 2,017 employees add significantly to this cluster.
- The Healthcare Services cluster within the seCTer region has shown slight growth over the past five years adding about 590 jobs, a 3% increase, and is projected to continue to grow by another 1,551 jobs in the upcoming five-year period, a 7% increase. In comparison this cluster has grown in Connecticut by more than 17,000 jobs, a 6% increase over the past 5-year period and by about 14% across the United States. Growth in the cluster was slowed by job losses within General Medical and Surgical Hospitals and nursing care facilities.
- Within this cluster, average earnings for 2016 in the seCTer Region were \$56,880, which were on par with the cluster in the US but lower than that in Connecticut. The seCTer average in earnings in the cluster is also slightly lower than the average earnings overall, for all industries combined in the region.
- About 27% of employees, or 5,577 people, within this cluster work as Registered Nurses, Personal Care Aides, and Nursing Assistants, with median hourly earnings of \$35, \$12, and \$14, respectively.

Figure 45: Healthcare Employment Trends



## Findings from Camoin Interviews

### Challenges

- Consolidation within the industry has forced smaller healthcare providers to scramble to align with regional providers, creating uncertainty around the future of small providers and job security for their employees.
- Workforce attraction and retention is a major issue with many organizations dealing with constant staff turnover and instability. Pay disparities make worker retention a challenge. Small practices lose staff to hospitals due to opportunities for higher pay through longer shifts and third-shift differentials as well as the perception of better pay outside Connecticut.
- Certified Medical Assistants are needed but the certification program is expensive. People opt to go straight to RN.
- Keeping up with state and federal mandates is an ongoing challenge.
- Limited cultural diversity among staff is misaligned with patient base and there is limited availability of qualified foreign language interpreters.
- The region has seen a growing number of young people who are homeless and in need of services.
- Global competition among non-profits for donations challenges local organizations to prove their value.

Figure 46: Healthcare Services Cluster Detail

NAICS (6-digit)	Description	2011 Jobs	2016 Jobs	2011-2016 Change	2011-2016 % Change	2016 Location Quotient	Regional Multiplier	Estimated Employees per Establishment	GRP
622110	General Medical and Surgical Hospitals	4,766	4,565	(201)	(4%)	1.06	1.3656	1,923	\$371,560,656
623110	Nursing Care Facilities (Skilled Nursing Facilities)	2,909	2,773	(136)	(5%)	1.82	1.1898	134	\$141,090,886
621111	Offices of Physicians (except Mental Health Specialists)	1,985	2,107	122	6%	0.88	1.3783	12	\$225,048,414
624310	Vocational Rehabilitation Services	1,362	1,458	96	7%	4.52	1.0719	17	\$36,700,896
624120	Services for the Elderly and Persons with Disabilities	764	1,239	475	62%	0.78	1.0625	38	\$27,906,783
624190	Other Individual and Family Services	920	1,151	231	25%	2.69	1.1126	20	\$43,679,080
624410	Child Day Care Services	1,180	1,055	(125)	(11%)	0.90	1.0683	41	\$24,167,277
623210	Developmental Disability Facilities	1,035	1,027	(8)	(1%)	2.79	1.1412	9	\$40,594,768
621210	Offices of Dentists	985	959	(26)	(3%)	1.06	1.2439	13	\$64,223,339
621610	Home Health Care Services	743	719	(24)	(3%)	0.53	1.1457	57	\$39,934,236

### Opportunities

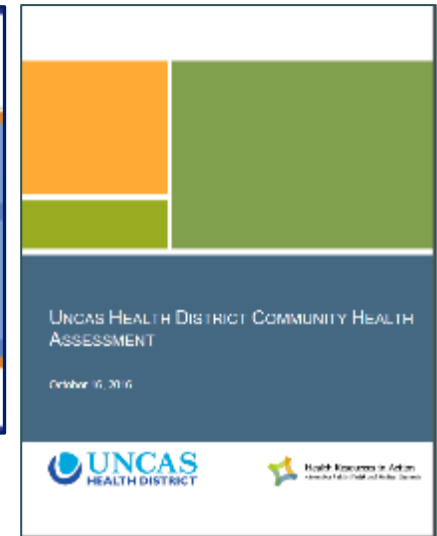
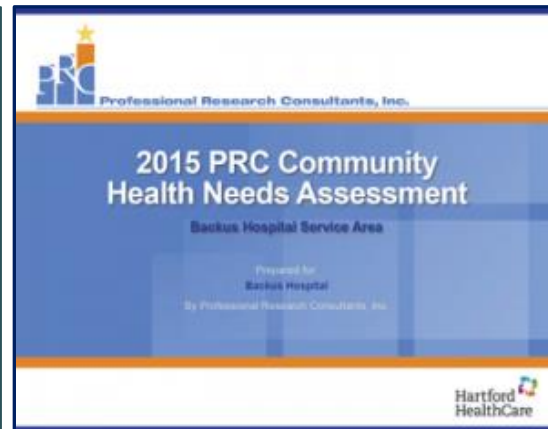
- Community paramedicine is an opportunity to provide better services to community residents
- Telemedicine is an opportunity for provider cost savings and allows better access to healthcare for rural residents
- United Community and Family Services (UCFS) is a community-based organization offering a variety of healthcare and outreach services that has experienced strong growth in recent years



## What This Means for Regional Economic Growth Strategies

The size of the cluster in the region and projections for national and regional growth make this an important cluster as a primary target for seCTer. As consolidations and re-alignments among system providers stabilize, new opportunities to grow the cluster will emerge and take hold. Strategies should focus on workforce training, recruitment, and retention. Opportunities to leverage a region-wide, holistic initiative around health, workforce, economy, community, and food/agriculture through a “Healthy Region initiative” should be examined as it will serve residents, workers, providers, businesses and communities, and provide a positive brand around quality of place.

Recent Health Assessments performed in the Region<sup>10</sup>





### 2.5.3 DEFENSE INDUSTRY

This cluster includes ship building (driven by military ship and submarine manufacturing at Electric Boat) and federal government military-related employment driven by the Federal Military Base. Because of its size, historic importance to the region, and unique needs relative to government and military operations, we examine it as a separate cluster from advanced manufacturing. However, in many respects, particularly in terms of workforce, the clusters are related.

#### Key Findings

- This cluster currently makes up about 13% of the seCTer region economy with 19,319 jobs in 2016 and contributes about 15% or \$2,232,344,853 to the entire seCTer region GRP, the largest of any cluster.
- The largest 6-digit NAICS industry within the cluster is Ship Building and Repairing, with 10,439, or 54% of jobs in 2016. This industry specifically contributes \$1,014,373,966 to seCTer GRP.
- The Defense cluster within the seCTer region has shown growth over the past five years adding 1,795 jobs, about a 10% increase. The cluster is projected to continue growing by about 3% adding 558 jobs in the upcoming five-year period based on historical data, however, recent and expected future contracts point to growth that is much higher.
- This cluster has grown in Connecticut by more than 2,000 jobs, a 7% increase. However, this cluster has declined slightly across the United States, over the past five-year period, which contributes to a 2% decrease.
- Average earnings for 2016 in the seCTer Region were \$91,548, significantly higher than average earnings for all industry sectors.
- 35% of employees, or 6,694 people, within this cluster work in Military Occupations with median hourly earnings of nearly \$19. The remaining occupations include mechanical engineers and many other skilled trades, making this cluster extremely important for supporting high-skilled, high-wage jobs in the region.

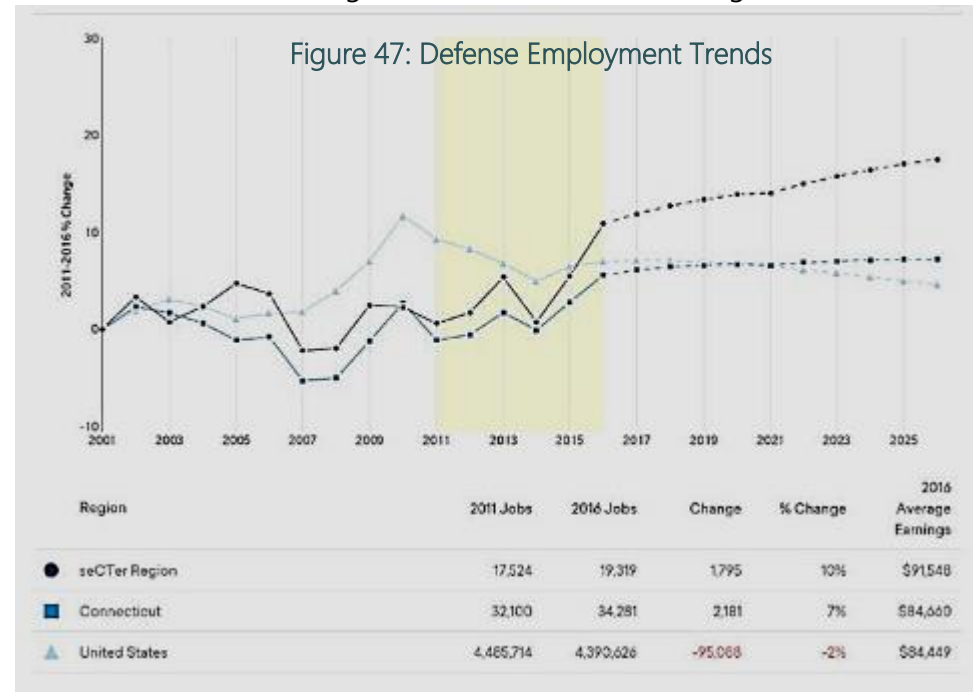


Figure 48: Defense Cluster Detail

NAICS (6-digit)	Description	2011 Jobs	2016 Jobs	2011-2016 Change	2011-2016 % Change	2016 Location Quotient	Regional Multiplier	Estimated Employees per Establishment*	GRP
336611	Ship Building and Repairing	8,058	10,439	2,381	30%	112.10	1.4797	1,894	\$1,014,373,966
901200	Federal Government, Military	7,425	6,694	(731)	(10%)	3.59	1.5299	6,694	\$987,569,082
901199	Federal Government, Civilian, Excluding Postal Service	2,041	2,186	145	7%	1.05	1.4883	63	\$230,401,806
	Total	17,524	19,319	1,795	10%				\$2,232,344,853

\* Employees per establishment estimates reflect 2015 establishment data from New London County

Note: Any industry with <10 jobs in 2016 is not reflected in this table, a full list of all industries included in the cluster can be found in Appendix B

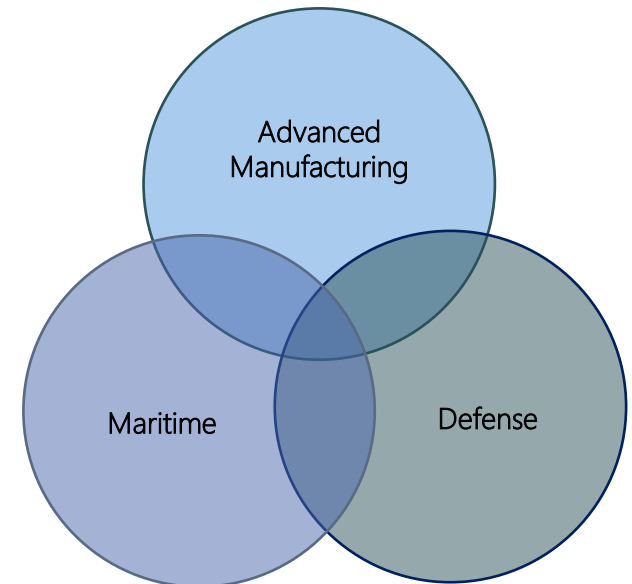
Source: EMSI



### What This Means for Regional Economic Growth Strategies

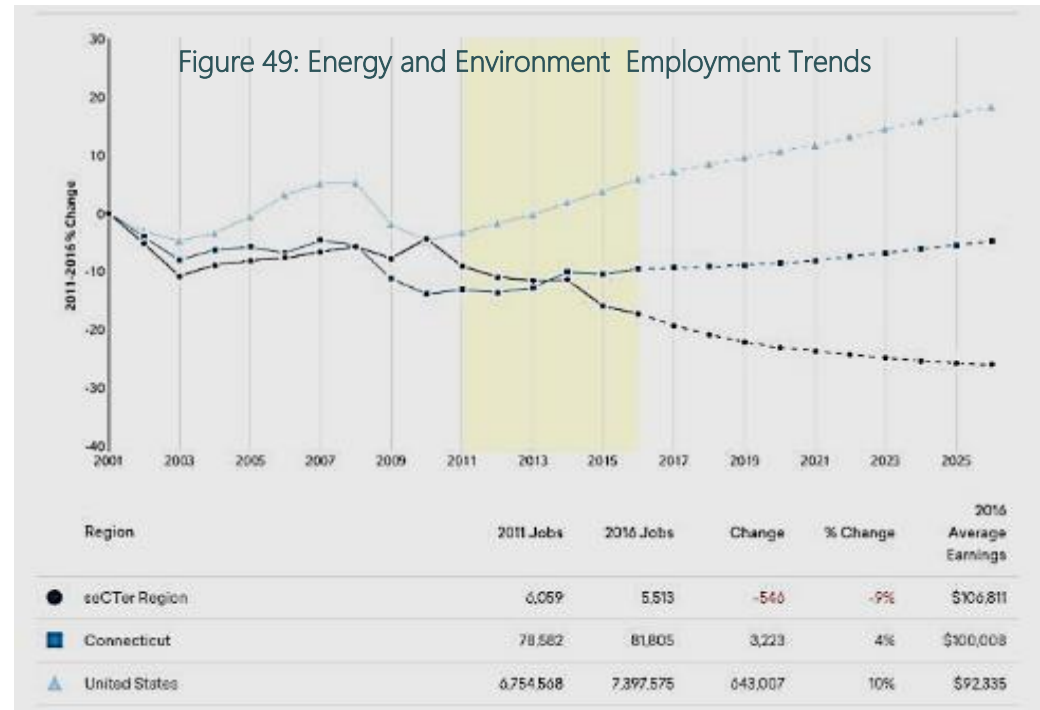


As a large historic base of the regional economy, with strong growth in the past five years and growth expected to continue, plus significantly higher than average earnings among jobs in skilled and STEM related trades, the defense cluster should be a primary cluster to target and leverage for regional economic growth. It also should be considered integral to and within efforts in the region to support and grow advanced manufacturing. To further leverage this cluster, regional economic development efforts should continue to focus on workforce development to support both new growth and replacement of retiring workers and also focus on quality of place factors integrating land use, housing, and transportation needs of employees in this cluster with communities and the region. Because of this cluster's reliance on federal military contracts it is important for the regional and local economic and workforce development community to maintain ongoing communications with employers and federal representatives regarding future employment projections and needs.



## 2.5.4 ENERGY AND ENVIRONMENT INDUSTRY

This cluster was defined broadly for this analysis and includes all utilities related to power generation; waste management; skilled trades typically relied upon including heating, plumbing, and electrical trades-intensive industries; manufacturing related to fuel/energy production including chemicals and fuel production, and equipment, machinery and devices; warehousing and distributions related to energy and environment; and professional services including engineering, testing, R&D, and consulting services. This sector is not specifically designated within the NAICS code system and includes a compilation of industries across many sectors which are typically included in energy and environment. As a result, the jobs and economic data in this section likely overstate the presence of the cluster in the region. For example, all “engineers” are included in this cluster while in fact many engineers work in completely different clusters including defense in the region. This challenge of measuring the energy and environment cluster is not unique to the seCTer region.



### Key Findings

- This cluster makes up between 3% and 4% of the seCTer region economy with 5,513 jobs in 2016 and contributes 9% or \$1,323,743,124 to the entire seCTer region GRP.
- The largest 6-digit NAICS industry within the cluster is Nuclear Electric Power Generation, with over 1,000 jobs, or 18% of jobs in 2016. This industry specifically contributes \$757,449,697 to seCTer GRP.
- The Energy and Environment cluster within the seCTer region has declined over the past five years by 546 jobs, a 9% decrease and is projected to decrease by another 423 jobs in the upcoming five-year period which would contribute to an 8% decrease. Job losses have been driven by losses in the nuclear industry, electrical distribution, and engineering services. Conversely, this cluster has shown growth and is also projected to continuing growing in Connecticut by over 1,000 jobs, a small 2% increase, over the next five-year period. This cluster is also projected to grow 5% across the United States, adding over 400,000 jobs over the next five-year period.
- The most prominent occupations within this cluster are Nuclear Engineers, Electricians, and Plumbers, Pipefitters, and Steamfitters, employing nearly 800 people, cumulatively in 2016.



- Average earnings for 2016, only within the seCTer Region are highest at \$106,811, whereas earnings in Connecticut are \$100,008, and \$92,335 in the United States.

#### What This Means for Regional Economic Growth Strategies

The Energy and Environment cluster in the region is small and driven mostly by nuclear power generation and related industries. It also does not exhibit characteristics of a cluster in the region with related industries interacting within a network of stakeholders including businesses, entrepreneurs, educators, researchers, and service providers all supporting its growth. While this is an industry the region may want to continue to monitor - as it is important nationally and globally - outside of its connections to other industry sectors such as manufacturing and skilled trades, we do not recommend that this be a primary industry area for the region to focus on. Much more work in building regional assets to support its growth would need to occur relative to other focus areas.



Mountain Ash Solar Farm on Stott Avenue in Norwich (Sean D. Elliot/The Day)



Groton Utilities, Buddington Rd. Sub-station

### 2.5.5 BIOSCIENCE INDUSTRY

This cluster includes the industries of pharmaceutical manufacturing, medical device manufacturing, research and development related to life sciences. It excludes healthcare and social services which are included within a separate healthcare cluster.

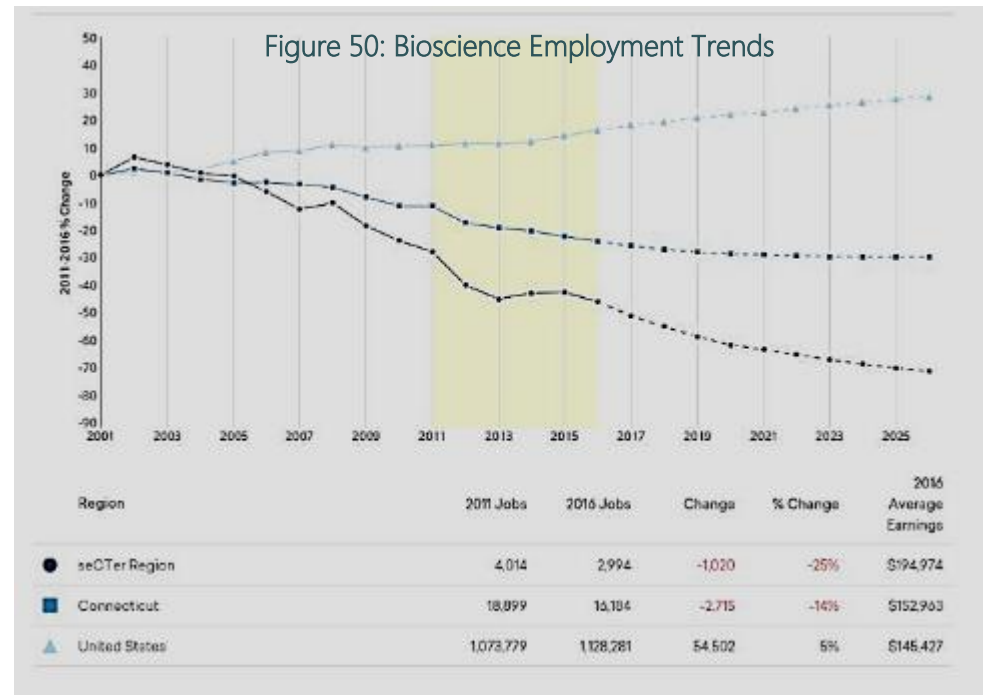
#### Key Findings

- This cluster currently makes up about 2% of the seCTer region economy with 2,994 jobs in 2016 and contributes about 8.5% or \$1,244,529,655 to the entire seCTer region GRP.
- The largest 6-digit NAICS industry within the cluster is Medicinal and Botanical Manufacturing, with 1,367, or 46% of jobs in 2016 followed by 533 jobs within biotechnology R&D.
- The Bioscience cluster within the seCTer region has shown significant decline over the past five years by over 1,000 jobs, a 25% decrease. Much of this job loss can be attributed to the recent and noteworthy loss in jobs at Pfizer, which includes both manufacturing and R&D related employment. The industry is projected to continue to decline by another 961 jobs in the upcoming five-year period which would contribute to another 32% decrease. This cluster has also shown decline in Connecticut between 2011 and 2016 by about 14% or the loss of 2,715 jobs. It is also expected to decline in Connecticut by more than 1,000 jobs over the next five years. Therefore, decline within the seCTer region is more substantial than decline within the entire state. However, nationally this cluster has grown over the past five years and is expected to grow another 5% across the United States, adding about 61,300 new jobs over the next five-year period.
- 334 persons in this cluster were employed as Medical Scientists (Except Epidemiologists) or Chemists, the largest two occupation groups.
- Average earnings for 2016 in the seCTer Region in this cluster were just about \$195,000, far exceeding average earnings for most other industries. Average earnings in the seCTer Region for this cluster exceeded both Connecticut and the United States.

#### Findings from Camoin Interviews

#### Challenges

- Many biotech companies are moving to or expanding in Cambridge, MA, due to the existing and growing cluster in the Boston area and existence of universities. Pfizer, also recently moved a substantial number of jobs from the seCTer Region to the Cambridge location.



- Almost all individuals and companies within the region's bioscience cluster are located in Southeastern Connecticut because of Pfizer.
- Lab space is not readily available in the region for entrepreneurs and small to medium companies.
- Access to the Electronic Research Library is critical to entrepreneurs and small companies yet difficult to afford/access.
- Starting a biotech company in the region is high risk.
- A lack of research institutions in the regions limits talent available. There is a lack of research anchors like those present in New Haven, Boston, and Providence.
- Bioscience relies heavily on government funding. Funding opportunities in Connecticut are lower than in other states like Massachusetts.
- Current talent pool is aging, and there is no significant quality of place draw for new/younger talent.

### Opportunities

- The CURE Innovation Commons is an important new asset for recruiting and supporting startups.
- UConn–Avery Point has incubator lab space but is currently occupied by only one company, which may present an opportunity for attracting more companies. Access to the Electronic Research Library is a key advantage to locating there.
- Sophisticated research can become more decentralized due to telecommuting and advances in instrumentation, meaning that location becomes less important. Businesses can start in the region even if the workforce isn't available.
- Southeastern Connecticut has a cost advantage over nearby bioscience hubs such as New Haven and Cambridge.
- Mentoring opportunities to help start and grow small businesses are needed.
- Support and strengthen the network of existing entrepreneurs in the region – there is a good small mix of talented bioscience related entrepreneurs committed to remaining in and growing the sector.

### What This Means for Regional Economic Growth Strategies

Though small in terms of employment numbers, this is a niche cluster in which the region has had a historical strength, primarily due to the presence of Pfizer. It is characterized by high levels of skills and talent, high wages, and is driven by innovation. Though there have been recent declines due to reductions in the region by Pfizer, there are several strong small firms in the region along with talented workers and entrepreneurs. Avery Point

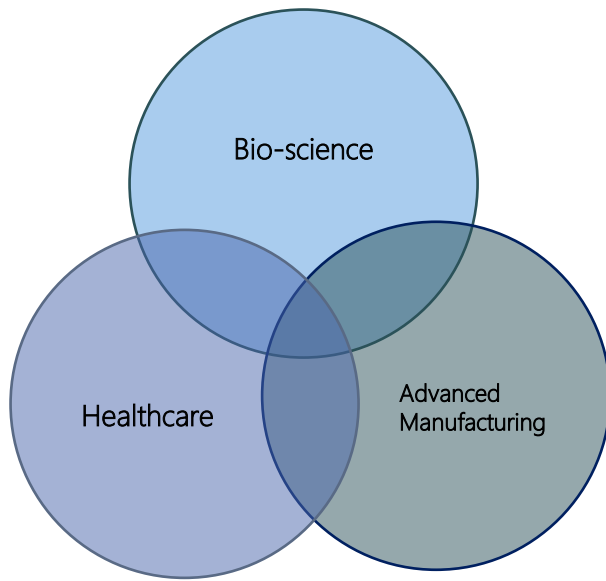


Photo: In this July 2011 Day aerial file photo, Pfizer headquarters of Groton with the main research facility, Building 220, seen foreground, lower right, and Building 118, behind and to the left of Building 220, which has now been razed.



CURE Commons located in former Pfizer Building, Groton





(though underutilized), the recent addition of CURE, and a small network of individuals committed to the success of the cluster represent assets to build on. Keys to success will be to further support and leverage these distinct assets, improve quality of life infrastructure and amenities in the region to be able to attract and retain talent and entrepreneurs, and begin to develop synergies with the growing healthcare cluster in the region. This should remain among the primary clusters to focus on in the region due to historic strength, global and national importance, innovation, and high wages.



UCONN Avery Point - Technology Incubation Program Facility



Eastern CT State University. Photo: Winter Caplenon



Ann Chambers (seCTer) and Steve MacKenzie(formerly with seCTer) with U.S. Coast Guard Cadets at presentation of Capstone Project

### 2.5.6 AGRICULTURE, FISHING, AND FOOD PRODUCTION INDUSTRY

This cluster includes activities related to food production and distribution including crop and animal production and fishing; and food and beverage related manufacturing, wholesale, and distribution. It excludes any retail and restaurant businesses. While they are part of the supply chain and ultimate end providers to the consumer market, they are covered under a separate cluster.

#### Key Findings

- This cluster consistently makes up between 1% and 2% of the seCTer region employment with 2,144 jobs<sup>11</sup> and contributes about 1% or \$175 million to the seCTer region GRP.
- The two largest 6-digit NAICS industries within the cluster are Animal Production and Aquaculture, with 846 jobs, or 39% of jobs in 2016, followed by Crop Production with 626 jobs, or 29%. Together, these industries contribute about \$115 million to seCTer GRP.
- The Agriculture, Fishing, and Food Production cluster within the seCTer region has shown growth over the past five years adding about 181 jobs, about a 9% increase. Growth was driven by Animal Production and Aquaculture which added 314 jobs. The cluster is projected to continue growing by about 3% adding 60 jobs in the upcoming five-year period. Similarly, this cluster is also expected to grow slightly in Connecticut by more than 360 jobs, a 2% increase. This cluster is also expected to grow slightly across the United States, adding about 46,000 jobs over the next five-year period, which contributes to a 1% increase.
- Average earnings for the agriculture cluster in 2016 within the seCTer Region are the lowest at \$41,233, compared to Connecticut at \$52,203, and the United States at \$48,755. Average earnings in this cluster are lower than average earnings for all sectors.
- The two most prominent occupation groups in the industry include Farmworkers and Laborers, Crop, Nursery and Greenhouse, as well as Farmers, Ranchers, and Other Agricultural Managers, employing 558 and 508 people, respectively, in 2016.

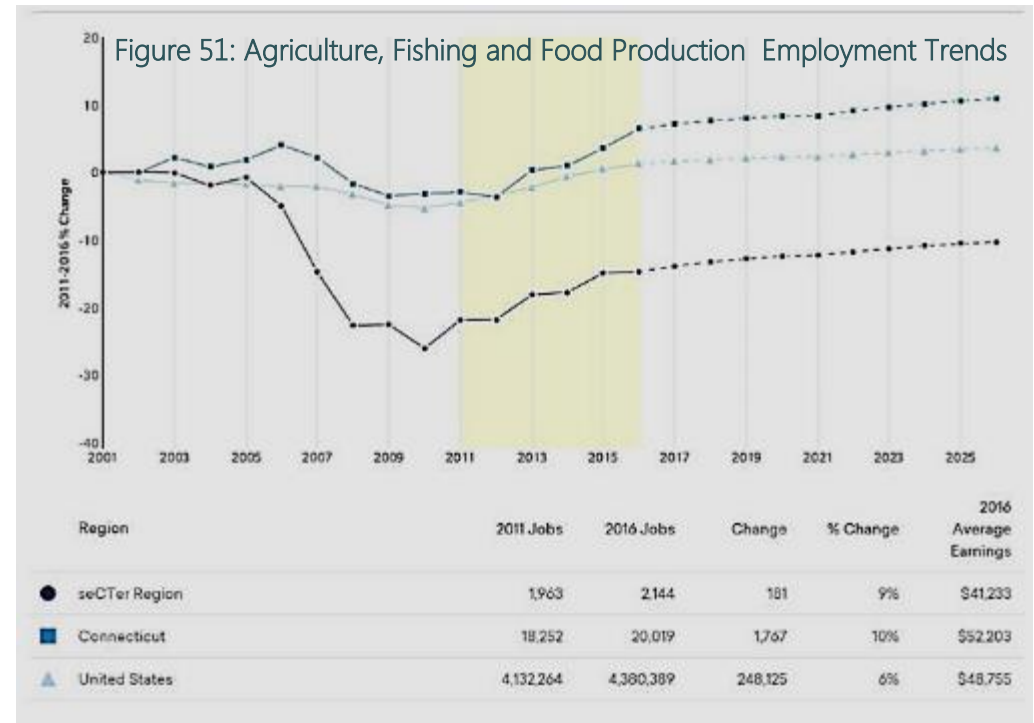


Photo: Brian Civitello flipping cheese in a ripening room at Mystic Cheese Company. Credit Christopher Capozziello for The New York Times

## Findings from Camoin Interviews

### Challenges

- Overall agriculture in Connecticut is shrinking, and large-scale agriculture has largely left the state.
- Factory farms have largely replaced small operations.
- Coast Guard regulations tightened and have impacted fishing operations.
- It is difficult to site aquaculture facilities/areas.
- Farmers' markets are unsuccessful without a critical mass of farmers. Many of the farmers' markets in the region are more like craft markets.
- Organic certification is a time-consuming process and precludes small farmers from entering health food stores that require it.
- Abutting neighbors complain about farms and create issues for farmers, even in right-to-farm jurisdictions.
- "Every farmer for him-/herself" mentality impedes ability to spread farming knowledge to younger farmers.
- A lack of slaughterhouses is a challenge for local meat production.
- The lack of a pervasive "local food" mentality in the region is another challenge.

### Opportunities

- Education of consumers on the benefits of locally sourced, humanely farmed agriculture is key to driving demand and boosting the industry in the state.
- The geographic location of the region is a significant advantage given access to large population centers (NYC, Boston, etc.) within a relatively short distance.
- Larger regional farmers' markets are more effective than small ones within each community. The customer base is present; it is the vendors that are lacking.
- Actual farmers need to be engaged alongside advocates.
- Food preservation programs and food hubs are an opportunity to reroute agriculture locally.
- Connecting farmers and restaurants is an opportunity to expand the agriculture market.
- The region can do a better job marketing agriculture assets by creating guides, organizing tours, and undertaking other marketing efforts.
- There are synergies between agriculture and health that should be leveraged. Communities can promote health and agriculture simultaneously.
- Audit and update local ordinances to allow greater agriculture opportunities – create model ordinances and educate local officials



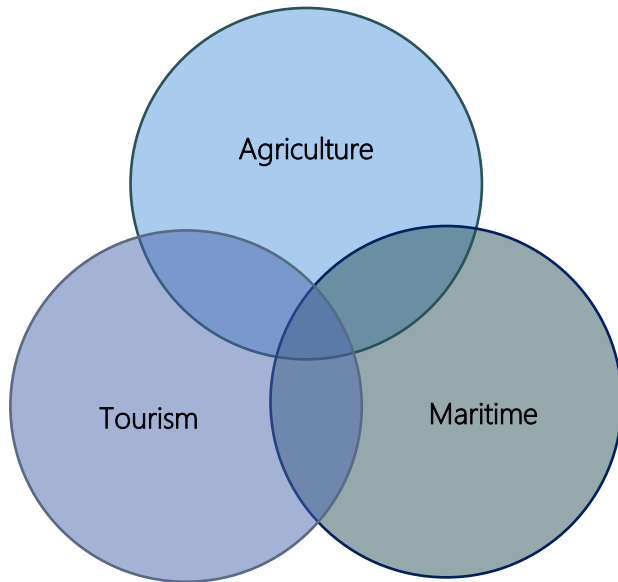
Stonington Farmers Market | Christine Corrigan, The Westerly Sun





## What This Means for Regional Economic Growth Strategies

Agriculture, fishing, and food production is a small cluster in the seCTer region with little recent growth. Though small it is important to the region for creating opportunities for local business and entrepreneurs, maintaining and improving land and open space, providing local goods to the region and beyond, and supporting quality of life. Though not a primary cluster to focus on, we recommend including initiatives to strengthen and connect these industries to regional economic growth strategies particularly in terms of local sustainability, connections to food culture, quality of life, visitation, and tourism. Focus should be placed upon supporting small farms and producers to be competitive, by providing technical assistance to communities on land use strategies to support the industries; increasing marketing and education to increase local and regional demand; and tying into regional health initiatives.



Willimantic Farmer's Market. Photo: Winter Caplenson



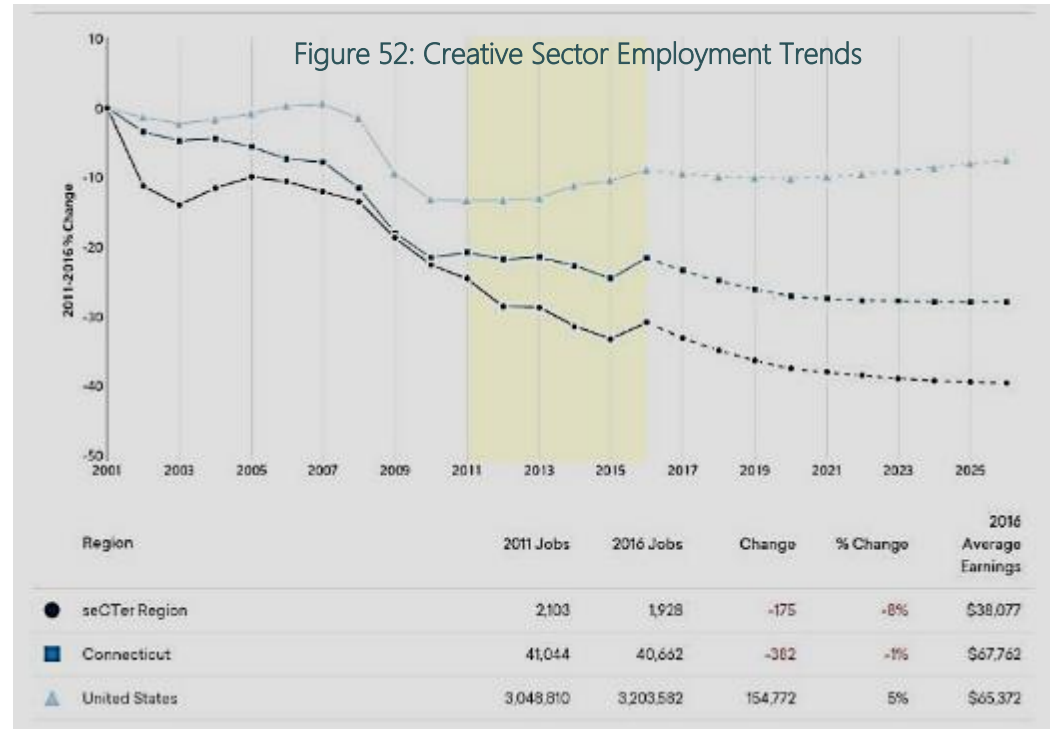
Green Wall installation at J Crew by seCTer client AgroSci of Colchester

## 2.5.7 CREATIVE INDUSTRY

The Creative cluster was defined to include 39 NAICS codes identified by the The Southeastern CT Cultural Coalition as commonly included in definitions of the creative economy.<sup>12</sup>

### Key Findings

- This cluster makes up only about 1% of the seCTer region economy with 1,928 jobs in 2016 and contributes less than 1% or \$112,972,887, to the entire seCTer region GRP.
- The two largest 6-digit NAICS industries within the cluster are Museums and Newspaper Publishers, with 393 and 333 jobs, respectively, and together making up nearly 38% of jobs in 2016. These industries contribute \$39,190,157 to seCTer GRP.
- The Creative cluster within the seCTer region has shown decline over the past five years by 175 jobs, an 8% decrease, and is projected to continue to decline by another 201 jobs in the upcoming five-year period which would contribute to another 10% decrease. Similarly, this cluster has shown decline in Connecticut by more than 380 jobs, a marginal 1% increase, over the past five-year period. Conversely, this cluster grew 5% across the United States, adding over 154,000 new jobs over the past 5-year period.
- Graphic designers, teachers, advertising sales agents, photographers, and musicians make up the top five occupations within Creative sectors in the region.
- Average earnings for 2016 in the seCTer Region being about \$38,000 are substantially lower than that of Connecticut, and the United States being over \$67,00 and \$65,000, respectively. Average earnings for Creative sectors combined within the SeCTER region are also lower than the average for all industries.



View of the Sabino, Mystic



Miranda Creative, Norwich



## Findings from Camoin Interviews

## Challenges

- Finding and retaining skilled labor is a challenge across industries.
- There is little in the region that attracts/retains younger workers, such as place-based amenities, networks, housing and transportation options.
- Quality of life is limited for Millennials due to lack of critical mass of young people, lack of interesting things to do, poor access to affordable housing, and few continuing education opportunities.
- Not a well-defined, dense cluster in the region. Region is not known as a creative talent brand or a place for creative talent.
- Employers must create their own culture to retain talent since the region as a whole lacks it.

## Opportunities

- Commitment to quality of place amenities and related investment in paces (infrastructure, housing, transportation)
- Marketing to change the perception of the area is an opportunity to attract Millennials.

## What This Means for Regional Economic Growth Strategies

The group of industries that make up the Creative cluster represent a relatively small portion of employment within the seCTer region. As a whole, this group has also experienced recent decline, while both the state and nation have experienced increases. Outside of a concentration of STEM-related occupations which exist primarily for the larger industries, namely defense, advanced manufacturing, and pharmaceuticals, the region lacks an identity as a creative economy region. We therefore do not recommend this as a primary industry focus area for the CEDS. However, many of the same needs exist within these creative industries to support future growth including quality of place amenities and infrastructure and stronger networks to attract and retain talent. Furthermore, there are opportunities for these industries to overlap with key sectors in the region including tourism, food and agriculture, and the STEM-intensive industries. It is therefore important that the region continue to assess opportunities and efforts to build capacity to support these creative industries and related occupations.



Cafemantic and Frog Bridge, Downtown Willimantic. Photos: Winter Caplenson



Sonalysts Studios, New London

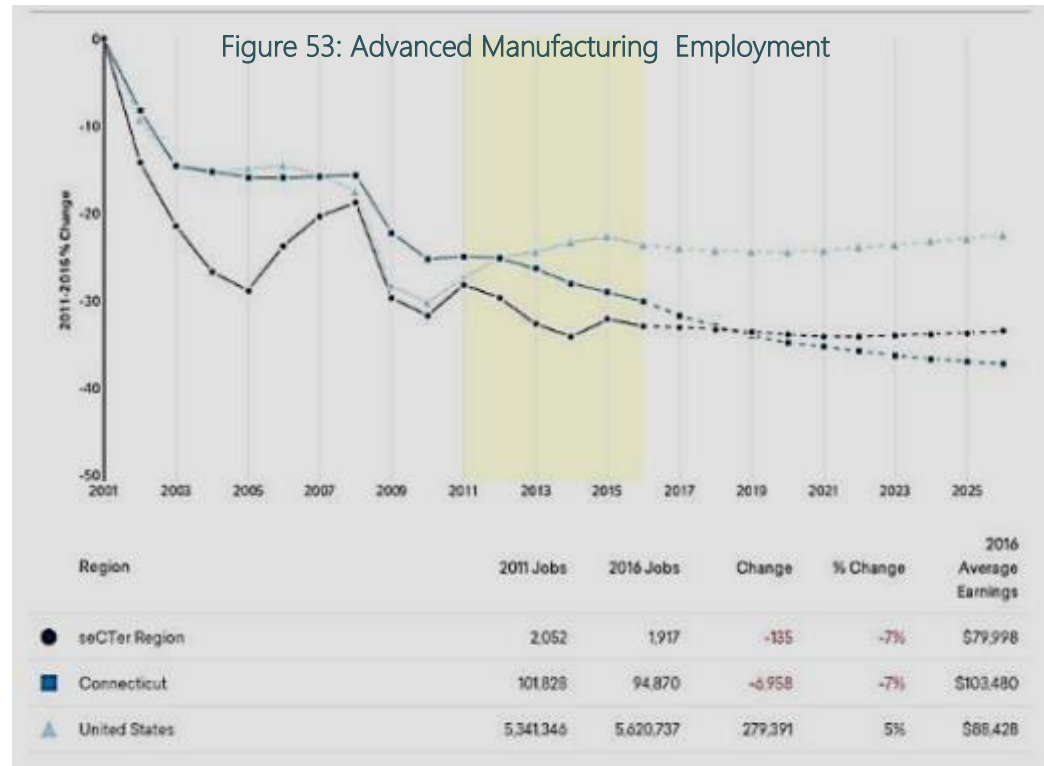


## 2.5.8 ADVANCED MANUFACTURING INDUSTRY

This cluster includes all manufacturing industries that require advanced technologies or skills but excludes pharmaceutical and medical-related manufacturing, which is included under the examination of the Bioscience cluster; shipbuilding because it is included in the Defense cluster; and boat building which is included in in the Marine cluster.

### Key Findings

- This cluster makes up about 1% of the seCTer region economy with 1,917 jobs in 2016 and contributes about 1.6% or \$239,246,665 to the entire seCTer region GRP.
- Computer and Electronic Product Manufacturing; Electrical Equipment, Appliance, and Component Manufacturing; and Aerospace Product and Parts Manufacturing industries represent over half of the employment in this cluster.
- The Advanced Manufacturing cluster within the seCTer region has shown decline over the past five years, losing 135 jobs, a -7% decrease. Projected increases in the Defense Cluster due to federal contracts should allow this cluster to grow.
- Occupations in the industry include highly skilled machinists, assemblers, technicians and engineers.
- Average earnings for 2016 in the seCTer Region at \$79,998 are considerable higher than those within all industry sectors, however, they are lower than those in Connecticut, and the United States for the same industries being \$103,480 and \$88,428 respectively.



Seconn Fabrication, Waterford



Neil Gilman of Marty A Gilman DBA Gilman Geer – shows Pylon Camera

## Findings from Camoin Interview

## Challenges

- Lack of public transportation in certain parts of the region is a challenge for employers needing to access labor pools.
- Housing and jobs within the region are isolated; better mix of uses is needed.
- Making a career in manufacturing appealing to the younger generation (and their parents and guidance counselors) is a significant challenge, making it difficult to attract and retain workers.
- There is a shortage of skilled fabricators who want to work for a small company, in part because it is difficult for small companies to match the employee benefits of larger companies.
- Natural gas infrastructure is needed in certain parts of the region. Natural gas is in demand by energy-intensive companies because it is relatively inexpensive.
- Limited broadband options are available.
- Keeping people, especially skilled workers, within Connecticut is increasingly becoming an issue.
- Access to capital for business renovation and/or expansion is an issue, as local businesses have had trouble securing loans from commercial banks.

## Opportunities

- Manufacturing training programs are largely in place through the Eastern Advanced Manufacturing Alliance (EAMA) and through solid reputation and performance of the Eastern CT Workforce Investment Board.
- A mentor program to guide students through the process of becoming a manufacturing worker could help.
- There is an opportunity to change the narrative about Southeastern Connecticut and tout the benefits of being in the region.



Danielle O'Connor, Westminster Tools

## What This Means for Regional Economic Growth Strategies

Because of its connection to the defense industry as well as supporting high-skill, high-wage jobs this is an important cluster for the seCTer region and should continue as a primary focus area. Efforts should focus on supporting EAMA and the Eastern Connecticut WIB in workforce development initiatives as well as on improving transportation, energy, broadband, and housing options in the region.



Ribbon Cutting Devine Hydraulics, Uncasville



John Beauregard, Executive Director of EWIB, presents at a Business Breakfast

### 2.5.9 MARITIME INDUSTRY

This cluster includes industries related to Boat Building (excluding Defense Ship Building), Boat Dealers, Marine Transportation, Scenic and Sightseeing Transportation, and Marine Cargo Handling.

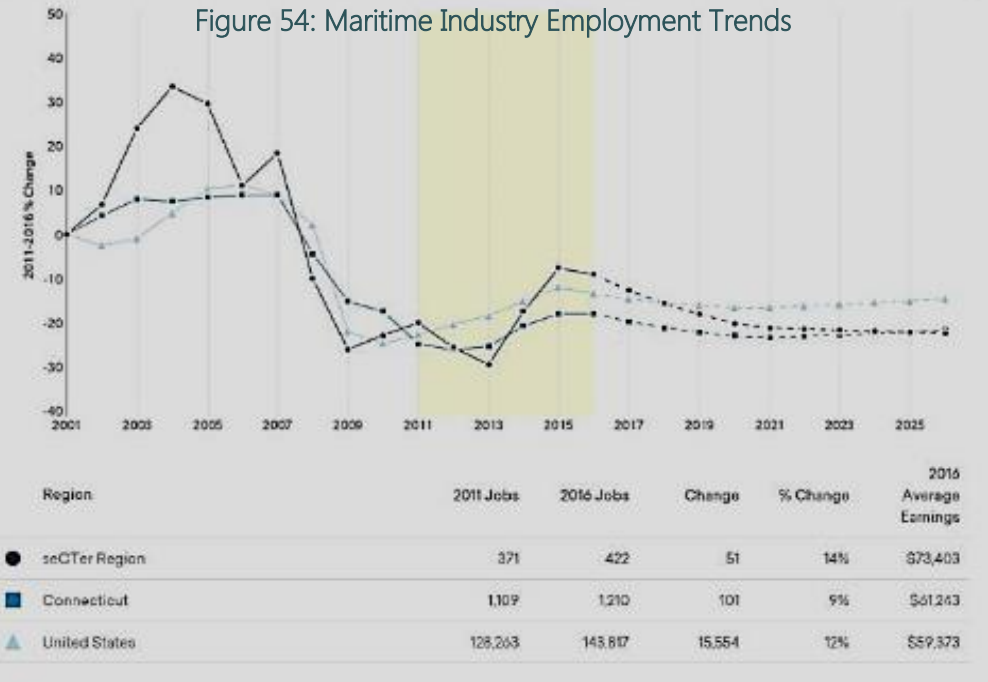
#### Key Findings

- This cluster makes up less than 1% of the seCTer region economy with 422 jobs in 2016, and contributes less than 1% or \$48,172,442, to the seCTer region GRP.
- The largest 6-digit NAICS industry within the cluster is Coastal and Great Lakes Passenger Transportation, with 165, or 39% of jobs in 2016. This industry specifically contributes \$34,631,868 to seCTer GRP. Boat Dealers is the second largest industry employing 109 workers in 2016.
- The Maritime cluster within the seCTer region has shown growth over the past five years by about 51 jobs, a 14% increase, which exceeds the growth for this group of industries in Connecticut and the US.
- The most prominent occupation within this cluster is Captains, Mates, and Pilots of Water Vessels, employing 65 people in 2016 and having median hourly earnings of about \$36.50.
- Average earnings for 2016, only within the seCTer Region are highest at \$73,403, whereas earnings in Connecticut are \$61,243 and \$59,373 in the United States.

#### What This Means for Regional Economic Growth Strategies

This is a very small cluster, but it has higher than average wages and is important to the tourism-related economy given the region's coastal location. It should therefore be considered together with the Tourism cluster as a primary focus area for regional growth and also considered in relation to marine related manufacturing and food production.

Figure 54: Maritime Industry Employment Trends



Susan Anne Ferry, Paul A. Wronowski Tug Boat, New London



<sup>1</sup> <https://www.eda.gov/>

<sup>2</sup> Mapping the Foreign-Born Labor Force, Tom Dworetsky

<sup>3</sup> All earnings figures include benefits.

<sup>4</sup> EMSI

<sup>5</sup> State of Connecticut Municipal Fiscal Indicators, January 2016

<sup>6</sup> State of Connecticut Department of Education report- Net Current Expenditures per Pupil (2011-2015) as reported in the 2017 SCCOG RPOCD

<sup>7</sup> State of Connecticut Municipal Fiscal Indicators, January 2016

<sup>8</sup> State of Connecticut Municipal Fiscal Indicators, January 2016

<sup>9</sup> CT DOL Quarterly Census of Employment and Wages (QCEW) Program - <http://www1.ctdol.state.ct.us/lmi/datatools.asp>

<sup>10</sup> Backus' Needs Assessment: <https://backushospital.org/about-us/community-outreach/health-needs-assessment/>; Uncas Health District Community Needs Assessment: [http://www.uncashd.org/Uncas\\_FullCHA\\_Revised\\_10-16-2016.pdf](http://www.uncashd.org/Uncas_FullCHA_Revised_10-16-2016.pdf); 2012 Community health Needs Assessment, Lawrence + Memorial Hospital [https://sitemanager.acsysinteractive.com/vsitemanager/LM/Public/Upload/Docs/L\\_M\\_CHNA2012\\_V2.pdf](https://sitemanager.acsysinteractive.com/vsitemanager/LM/Public/Upload/Docs/L_M_CHNA2012_V2.pdf); 2014 Community Health Needs Assessment, New London County [http://www.ct.gov/dph/lib/dph/aids\\_and\\_chronic/ctg/close\\_out/2014\\_nl\\_county\\_community\\_health\\_needs\\_assessment\\_final\\_-\\_llhd.pdf](http://www.ct.gov/dph/lib/dph/aids_and_chronic/ctg/close_out/2014_nl_county_community_health_needs_assessment_final_-_llhd.pdf)

<sup>11</sup> Considering that farms do not have the same reporting requirements as other businesses, the number of jobs in the NAICS 11 industry sector is an estimate. The 2007 USDA County Estimates Book shows 1,855 farm workers in New London County and EMSI reports 1,614 in this industry sector for 2007, secondly the 2012 USDA County Estimates Book shows 1,983 farm workers in New London County and EMSI reports 1,495 in this industry sector for 2012. Therefore, after cross referencing this source, we can conclude that the estimates from EMSI are comparable and useful in our comparison among other industry clusters in the region. For more information regarding Agricultural Census data, please visit the following sources:

[https://www.agcensus.usda.gov/Publications/2007/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/Connecticut/st09\\_2\\_007\\_007.pdf](https://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_County_Level/Connecticut/st09_2_007_007.pdf)

[https://www.agcensus.usda.gov/Publications/2012/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/Connecticut/st09\\_2\\_007\\_007.pdf](https://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_2_County_Level/Connecticut/st09_2_007_007.pdf)

<sup>12</sup> The Southeastern CT Cultural Coalition produced a report entitled "America's Creative Economy," a meta-analysis of numerous documents analyzing the creative economy in various regions and states across the U.S. In the report, 39 NAICS codes are identified as having been included in the definition of the creative economy in at least 75% of these documents. These NAICS codes are used to define the seCTer's regions Creative cluster.

## SECTION 3

### SUMMARY OF PUBLIC INPUT

seCTer, in partnership with many local and regional organizations, stakeholders, and economic development professionals, conducted a number of events in the region to provide ample opportunity for residents and stakeholders to provide their valuable input to inform and strengthen the Comprehensive Economic Development Strategy for Southeastern Connecticut.

The region was divided into four sub-regions, and four separate SWOT Analyses were held drawing approximately 170 participants. Nine Focus groups and six targeted interview sessions were also held during the planning process, adding 114 participants to the total. The Nature Conservancy partnered with seCTer and the Southeastern CT Council of Governments to conduct three formal workshops on Economic and Environmental Resiliency. Input from the more than 75 that attended one or more of the sessions will be included in this CEDS.



A common theme emerged in all the different discussions. In order to remain competitive/relevant and to maintain any vibrancy in our communities, we need to attract and retain young professionals, innovative entrepreneurs, and affluent retirees by aggressively marketing our assets, and investing in programs and infrastructure that create or facilitate connections to economic, social and recreational opportunities here in SECT. The primary barriers identified were a lack of coordination and operative networks or collaboration between organizations (governmental, nonprofit, private) and a lack of integrated and streamlined systems (transportation, education/career pathways, regulatory), both resulting in damaging inefficiencies and in competition for increasingly scarce resources. The fiscal instability and uncertainty at all levels of government, and locally in the form of lower incomes and less

profit, have dramatically diminished the social and financial capital available to invest in the infrastructure, institutions, organizations, programs and projects designed to strengthen the communities in SECT and facilitate prosperity and growth.

Most participants recognized that the economy will not recover from the significant structural change that has occurred over the last eight to ten years and that the techniques and best practices of the past are no longer as relevant and thus will not be as effective to repair the damage. The changing demographics and constantly evolving technology bring a new set of criteria for attraction and retention and a concurrent need for continual innovation, adaptation and a new mindset that will successfully disrupt the 20<sup>th</sup> Century thought and practices that continue to confine and constrain. Knowledge, human capital/collaboration and efficiency are the new resources for economic development and the art of attraction a valued skill.

The full summary of the public input gathered can be found in Appendix B.

## 3.1 SWOT ANALYSES – KEY FINDINGS

**EMERGING THEMES - STRENGTHS**

- **Sense of Place:** history, location between NY and Boston, quality of life, recreational opportunities, villages / shoreline / open space
- **Existing economic diversity** on which to build; mature business and new economy
- Ready **economic development resources:** workforce, available investment opportunities
- **Infrastructure** assets and possibilities: rail, air, marine, utilities, broadband
- Strong **training and education** institutions

**EMERGING THEMES - OPPORTUNITIES**

- Develop **Community Leaders** – increase involvement from millennials to retirees
- **Diversify the economic base** beyond Pfizer, EB, casinos – supply chain, small business, technology, entrepreneurs
- Core components exist for efficient, integrated **infrastructure** – transportation and utilities
- Benefits for **Regionalization:** regulatory, government, education, shared services
- Streamlined **Regulations** can promote economic development, particularly zoning
- Define SECT's '**Sense of Place**' – and promote it!

**EMERGING THEMES - THREATS**

- **Less resilient** due to over-reliance on large companies like Electric Boat, Pfizer, casinos
- **Economic insecurity** drives workforce exodus
- **Sea-level rise** threatens coast-line resources
- **Resistance to change**, e.g. consider regionalized approaches or reform regulations
- **Uncertainty over state budget** for local support; burden for towns falls on inefficient property tax system
- Without a 'Sense of Place', **civic pride is undermined**

**EMERGING THEMES - WEAKNESSES**

- **Lack of leaders / visionaries** or coordinated leadership
- **Too dependent on a few businesses** (e.g. Electric Boat, Pfizer); need for business diversity
- **Not addressing skill sets needed for the new economy; brain drain**
- **Fragmented transportation** networks and **utility** service
- Failure to **regionalize**; provincialism hampers realizing economies of scale
- **Outdated regulations** stymie development

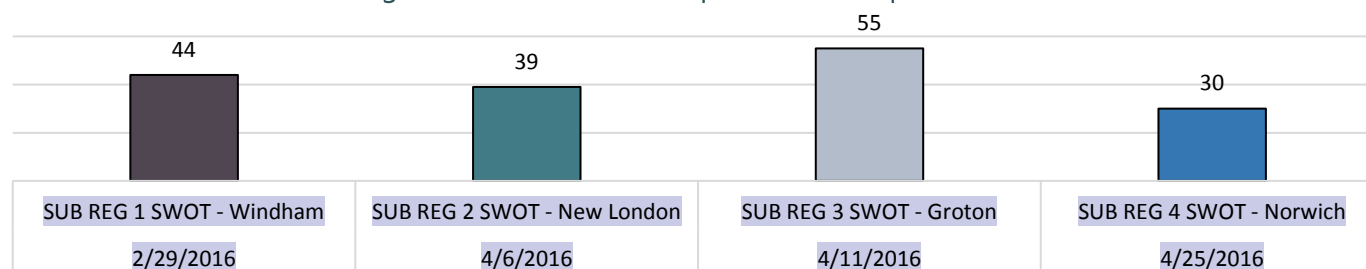
After identifying Strengths, Weaknesses, Opportunities and Threats, participants were asked to vote on those that they felt were the higher priorities. The results of the "Prioritization" vote are included below (number in parenthesis is vote total for all SWOT events combined). Of interest in these findings is the slight disconnect found between the Weakness/Threats and the Opportunities identified. This might suggest a sense of powerlessness or perceived lack of leadership and/or human capital to tackle the complex challenges/obstacles identified at the SWOT events.



STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• Quality of Life <b>(265)</b></li> <li>• Economic Development Resources &amp; Competitive Advantages <b>(145)</b></li> <li>• Transportation Systems and Existing Infrastructure <b>(71)</b></li> <li>• Water/Maritime Resources <b>(52)</b></li> <li>• Existing Businesses and Institutions <b>(37)</b></li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory Environment/ Government <b>(138)</b></li> <li>• Quality of Life/Sense of Place <b>(134)</b></li> <li>• Transportation &amp; Infrastructure <b>(112)</b></li> <li>• Diversification &amp; Resilience <b>(53)</b></li> <li>• Regionalization <b>(43)</b></li> <li>• Environmental <b>(3)</b></li> </ul>

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>• Business Expansion &amp; Retention <b>(101)</b></li> <li>• Regionalization <b>(75)</b></li> <li>• Development &amp; Re-development <b>(60)</b></li> <li>• Tourism &amp; Marketing <b>(51)</b></li> <li>• Location &amp; Industry Specific <b>(47)</b></li> <li>• Attracting &amp; Retaining Millennials &amp; Retirees <b>(41)</b></li> <li>• Regulatory – Planning for Economic Development <b>(41)</b></li> <li>• Transportation <b>(29)</b></li> <li>• Education &amp; Workforce Development <b>(28)</b></li> <li>• Diversification of the Economy <b>(24)</b></li> <li>• Agriculture: Innovation &amp; Sustainability <b>(22)</b></li> <li>• Building Social Capital <b>(15)</b></li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory &amp; Government related <b>(203)</b></li> <li>• Diversification/Economic Resilience <b>(104)</b></li> <li>• Sense of Place/Quality of Life <b>(46)</b></li> <li>• Environmental Threats <b>(21)</b></li> <li>• Lack of Regionalism <b>(17)</b></li> <li>• Infrastructure Related <b>(16)</b></li> <li>• Global Threat <b>(1)</b></li> </ul>

Figure 55: Number of Participants - Public Input Sessions



New London, Norwich and Willimantic SWOT Events

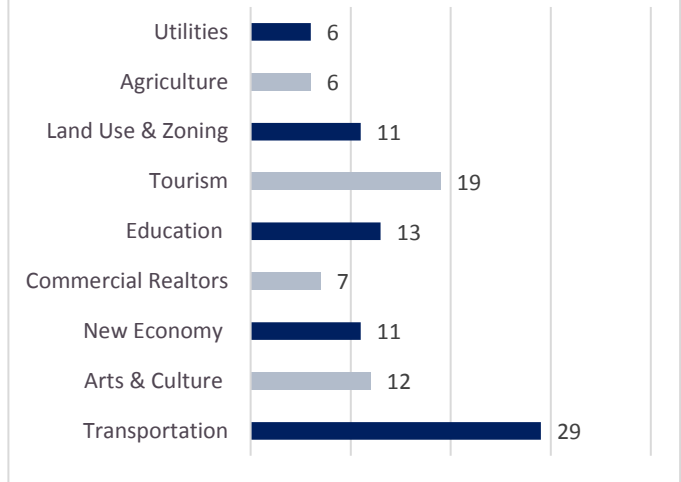
### 3.2 FOCUS GROUPS AND TARGETED INTERVIEWS –KEY FINDINGS

*Full summaries of input from Focus Group Participants can be found in Appendix B. The following highlights the major themes per “topic.”*

#### MAJOR THEMES: TRANSPORTATION

- Meet the access and mobility needs of residents, visitors, students, commercial enterprises and industry by creating a more integrated and efficient transportation system that addresses the changing demographics, our rural-suburban landscape and lack of population density, and that provides a more seamless transition from different transit and non-motorized modes .
- Utilize new technologies to increase efficiency and access - better coordination.
- Reduce conflicts between transportation modes. Eliminate access barriers and improve safety for non-motorists.
- Assess and plan to mitigate the dangers associated with climate change on transportation infrastructure.
- Embrace a mindset that values regional benefits over local benefits with a guiding principle or goal of serving the public; one that is open to new technologies and new modes of transportation.
- Accommodate one mode of transportation without negatively impacting another. Adapt existing physical infrastructure to accommodate all forms of transit in region (cyclists to submarines).

Figure 56: Focus Groups: Topic and Participation



#### MAJOR THEMES: NEW ECONOMY

- Outdated and limiting “Walmart Mentality” - We fear revolution and “settle” out of need. All the ideas are out there, but there is no network for implementation. Teach old lessons to the new generation.
- Shift away from “the job” where people are just widgets/interchangeable part. People now are interested in “work” and “experiences.” Inherent skills of the existing people are undervalued/underutilized.
- (Student) Debt creates financial barrier to entrepreneurship.
- Education system is antiquated-not aligned with reality. Curriculums cannot keep up with the changing technology; Region needs more “disruptive” education – teach critical thinking vs. standardized tests; active participation and hands on learning. There is an opportunity to create learning hubs.
- Re-localization - local production for local consumption to create economic opportunities. Reinvent “the commons.”
- Capacity Building - Bring automation available for larger industries to the small entrepreneurs and small businesses.
- Brand the “movement!” Raise awareness - create networks -leverage internet technology platforms. Continue having discussions with polite friction.

## MAJOR THEMES ARTS AND CULTURE

- Abundance of Arts and Culture Assets and self-driven, self-contained people/talent involved in the Arts community.
- Arts and culture can provide opportunities to diversify industries in SECT. SPARK Makerspace work attempting to build the economy by building capacity.
- Renovation of space suitable for Arts costly - **not an investment priority**.
- **Mindset that Arts are a luxury** – lack of funding, programming in schools, lack of public transit all threaten the Arts.
- **Competition with larger urban areas** with thriving arts and cultural sectors.
- **Not telling our story here in SECT** - not always reaching the right audience or already captive audience.
- **Not enough collaboration** between arts and cultural organizations - **competition for scarce resources and venues**.
- Cross-pollination needed between Arts and technology (schools and elsewhere) - **attract and retain new audiences and new talent** (millennials) by blending new technology and traditional mediums.
- **Promote "story-telling"** - need to develop "OUR" REGIONAL story and promote on a REGIONAL scale.
- Increase corporate buy-in and support through **career pathway programs**.
- **Quantify the cultural and economic impact of Arts on the economy**-promote as an economic driver.
- **Increase horizontal communication and coordination between venues** - regional approach; funding through regional agency vs. individual entities; expand synergy between tourism and businesses.

## MAJOR THEMES EDUCATION

- Antiquated mindsets; Fear of change; Resistance to removing existing "structure."
- Must transition from an educational system designed for the industrial age to a system (with new curriculums) designed for emerging economy - focused on preparedness, competency, design and creativity. Success in the 21<sup>st</sup> Century requires a "growth mindset" which recognizes the importance of critical thinking, collaboration, creativity and communication.
- Need to stop creating careers that actively avoid critical skills.
- **Regional Schools:** This region is too small to be competitive at the k-12 level. Process too structured. Taught to go to college and get a job. Students lack the basic skills needed to be a successful entrepreneur. Soft-skills training necessary.
- **Partnership and funding challenges** - impact on education: Lack of Angel Networks in SECT. Collaboration needed to create pathways and networks to attract investors.
- **Void in the region** – need to cooperate- not compete for resources. Diversity a plus in SECT – many opportunities for collaboration.
- The value to investors or partners must be made clearer through better marketing our opportunities and assets. Enthusiasm within an industry not sufficient – need investment to achieve strategies.
- **Career Pathways:** Joint responsibility between schools and businesses to ensure that students are prepared. Clear education to career pathways must be developed for ALL industries in SECT. Progressive immersion programs with local business needed.
- "Country Club Generation" – challenging generation – Not willing to start at the "bottom" – have different ideas about the workplace.



### MAJOR THEMES – COMMERCIAL REALTORS

- Mom & Pops are driving economy – need support.
- Regionalism - more cooperation between urban municipalities; Streamline permitting and regulations at local and regional level.
- Hartford sentiment is poor - Legislature is complacent and arrogant; No bipartisanship.
- Companies will not locate to CT given uncertainty in Hartford (taxes, regulations).
- Communication needed!

### MAJOR THEMES - AGRICULTURE

- Very few USDA licensed slaughterhouses or processing facilities making diversification of product a problem.
- Availability, cost, and quality of seasonal labor.
- **Finances.** Capital investments needed to succeed or diversify product – business model.
- **Food safety** a concern as microbes change.
- Available Department of Agriculture **funds for farmers' markets and direct market sales**, but participating in farmers' markets costly and time consuming.
- Eastern CT a good place to be located due to **proximity to 45,000,000 people**. Great opportunities for Agriculture.
- **Agro-tourism** as an alternative to Farmers' Markets.
- Cost saving opportunities with **new technology**.
- SECT a great place to do business. UCONN School of Agriculture is an asset.

### MAJOR THEMES: LAND USE AND ZONING

- Permitting and review process involves review by multiple boards and commission making it lengthy and costly. Encourage more administrative review/approval. Reduce # land-use agencies (e.g. combine EDC and PZC), and streamline the permitting and review process.
- Update outdated, confusing, and inflexible regulations. Align regulations with existing market conditions and/or emerging trends. **Simplify the Zoning Regulations**
- Reduce number of zoning categories. Resist using Special Permits as a tool to control development. Zoning (and NIMBYism) can be barriers to development.
- Address disconnect between commissions and professionals and between different review Boards and commissions.
- Train volunteer board and commission members. Restructure commissions to increase representation of larger community, and reduce length of terms. Remove real and perceived barriers to participation on boards and commissions. **Utilize technology to facilitate greater participation.**
- NIMBYism is a barrier to growth. Planning has become reactionary not intentional.
- Enable the private sector to take advantage of opportunities. Align risk management sensibilities to economic realities.
- **Actively and intentionally plan and be more flexible and open to change.** Incentivize the type of development that millennials want. Create a sense of place and use it as a unifier.



## MAJOR THEMES: TOURISM

- Lack of technology to effectively market all the assets/attractions in the region –Need real leadership for tourism (not DECD) with meaningful budget. **Create a centralized APP – utilize technology to market sites.**
- Distrust in the State. Shrinking budgets. Hotel (tourism) tax revenues hijacked by Hartford.
- Lack of necessary data (stats) on the impact or contribution of tourism on (to) the economy.
- Lack of transportation/wayfinding to facilitate streamlined exploration of Region.
- SECT in **“Brand Limbo”** – have lost our sense of place. **Regional branding effort** to tie all the assets together. Create a strong distinctive, sense of place. Not always good to paint an area with one brush. SECT is many things.
- **Shift the marketing model** toward “Authentic Branding” model.
- **Create an ongoing forum** – or opportunities for people in tourism industry to meet and discuss issues. “Urban Workshop.”
- Change the way we do business – **fund tourism locally** (by region) – not through centralized office of tourism.
- Create hospitality **training to increase skilled workforce.**
- Increase public safety – real or perceived.
- Leverage visitors to larger area attractions (casinos).
- Re-open State operated visitor centers.



## MAJOR THEMES: UTILITIES

- **Unique area so rural yet so connected with a lot of infrastructure.** Several local utility companies advantageous, but State regulatory process a barrier to new and expanding businesses.
- **Strong utility infrastructure** and sensitivity to evolving customer needs. **Great collaborative efforts** between local utilities and strong investments being made in SECT.
- **Disaster preparedness** is exemplary in CT vs other states. Past storms and trend toward more extreme weather has prompted resiliency and disaster preparedness work across all utilities.
- **Resiliency programs** resulted in reduction in number and duration of outages. Ongoing monitoring and systems upgrades.
- **SECT competitive** with respect to BB capacity - multiple carriers for **redundancy** purposes.
- Install **“wireless cells”** to increase wireless capability. Gas line expansion has greatly increased supply (E-lateral line); excellent water volume and quality in SECT- Opportunities to expand Water service.
- **Need more flexibility at the town level** to utilize less expensive means of installing infrastructure (e.g. **“micro-trenching”**)
- **Threats:** Extreme weather, drought, old infrastructure in the ground (“repair plan” vs “replacement plan”), water supply system vulnerable to terrorism.
- **Disconnect between State and Local plans** which affects project timeframe for completion and cost – putting CT at a competitive disadvantage to more streamlined states. Local knowledge needs to influence state plans with respect to underlying logic and timeframes.
- State has its own rules – not accountable to a timeframe; processes are inflexible and lengthy. Complying with State regulations often has associated high cost which is passed on to the customer.
- **Marketing:** There is lots to do here – a lot of good energy!
- **Gridlock on I-95** a huge deterrent to Economic Development in the area.

## SECTION 4

### STRATEGIC DIRECTION/ACTION PLAN

The vision, goals and strategies introduced in this document were developed with the benefit of significant public input and “expert” analysis. Residents, professionals, stakeholders, and public officials provided input to the CEDS Strategy Committee on a strategic vision that not only positions the *region* as the principal economic unit, but acknowledges a known **benefit from operating as one united region**.

From this vision, two primary **Shared Outcomes** were identified that reflect a collective desire for a more resilient, inclusive, vibrant, evolving, economy in SECT. The subsequent goals and objectives suggest the need for a true willingness to work collaboratively as a region, aligned behind a common vision, to develop new flexible systems and innovative economic development strategies that will move us *beyond* the status quo toward more beneficial “frontier-expanding” growth. Participants agreed that our current traditional management and governance approaches may actually work *against* resiliency and our ability to adapt to the complexity of the new economy.

The issues contained within the goals and strategies will direct the formation of strategic alliances between stakeholders from “affected” sectors who will then be responsible for developing strategies that will be accountable to the relevant shared outcomes. This “**Collective Impact Approach**” essentially emphasizes the need to appreciate the complexity of the challenges that organizations, cities, regions, etc. face as we attempt to adapt to new conditions and agree to work together to develop systems to overcome barriers and accommodate any future reality.

Those who participated in the planning process (“Participants”) recognized that there were already many existing stakeholders with a vested interest in broad-based prosperity and who are motivated by the

### Collective Impact Approach – 5 Elements

**Common Agenda** – *Develop a common understanding of the problem, identify the organizations/individuals that intersect with the issue, and agree to work together.*

**Shared Measurement** – *Develop shared outcomes (cross-sector collective effort) vs. (individual) shared strategies – Develop short list of indicators consistent over time.*

**Mutually Reinforcing Activities** – *Work within your area of expertise, but coordinate with other organizations.*

**Continuous Communication** – *Build and maintain trust.*

**Backbone Organization** – *Create the necessary support structure, e.g. dedicated support staff*

economic advantages of regional alignment and cooperation. This group – or consortium – simply needed to be formally “activated” and empowered through the provision of resources.

Participants identified both global and regional impact factors that significantly influence our ability to achieve our shared outcomes, strategies, and vision for the region. The region is challenged by vulnerabilities from more frequent extreme storms and sea level rise attributed to climate change, as well as to terrorism - from issues of cyber security to the potential of being a target due to the significant

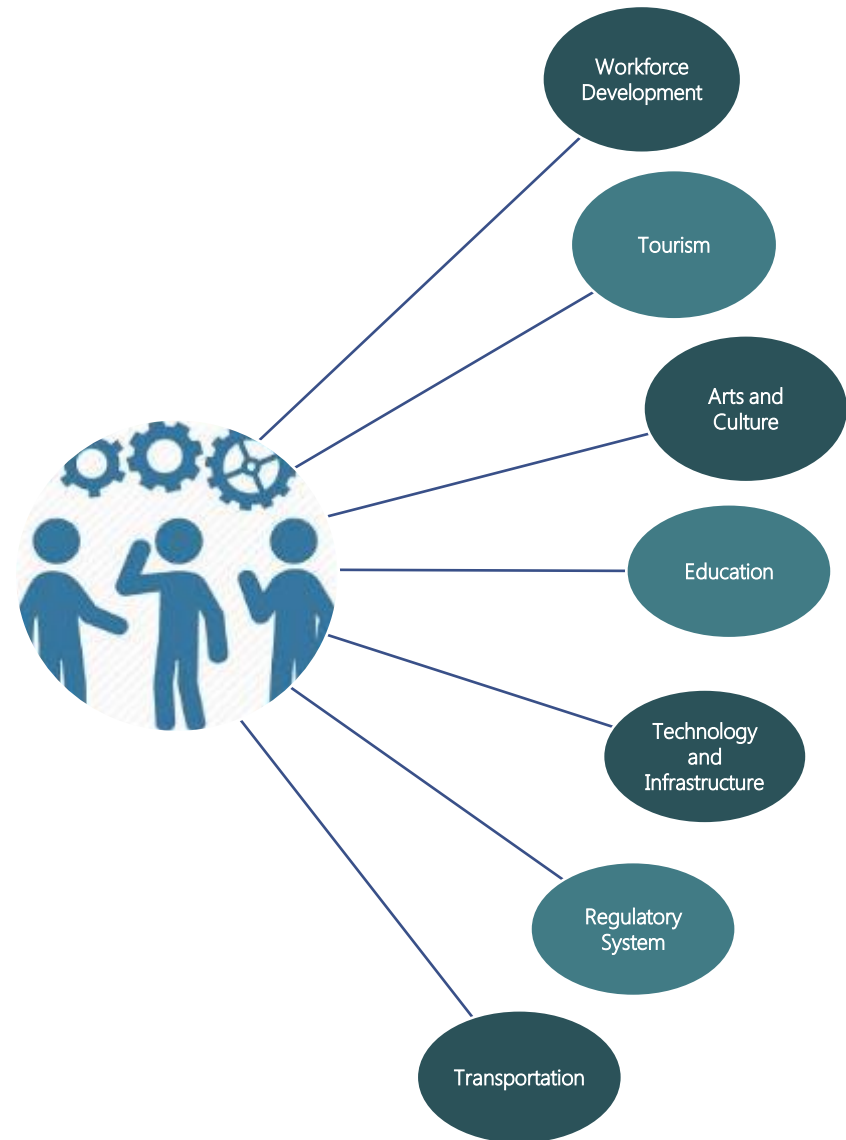


military presence, defense industry, and location along one of the busiest corridors in the Northeast.

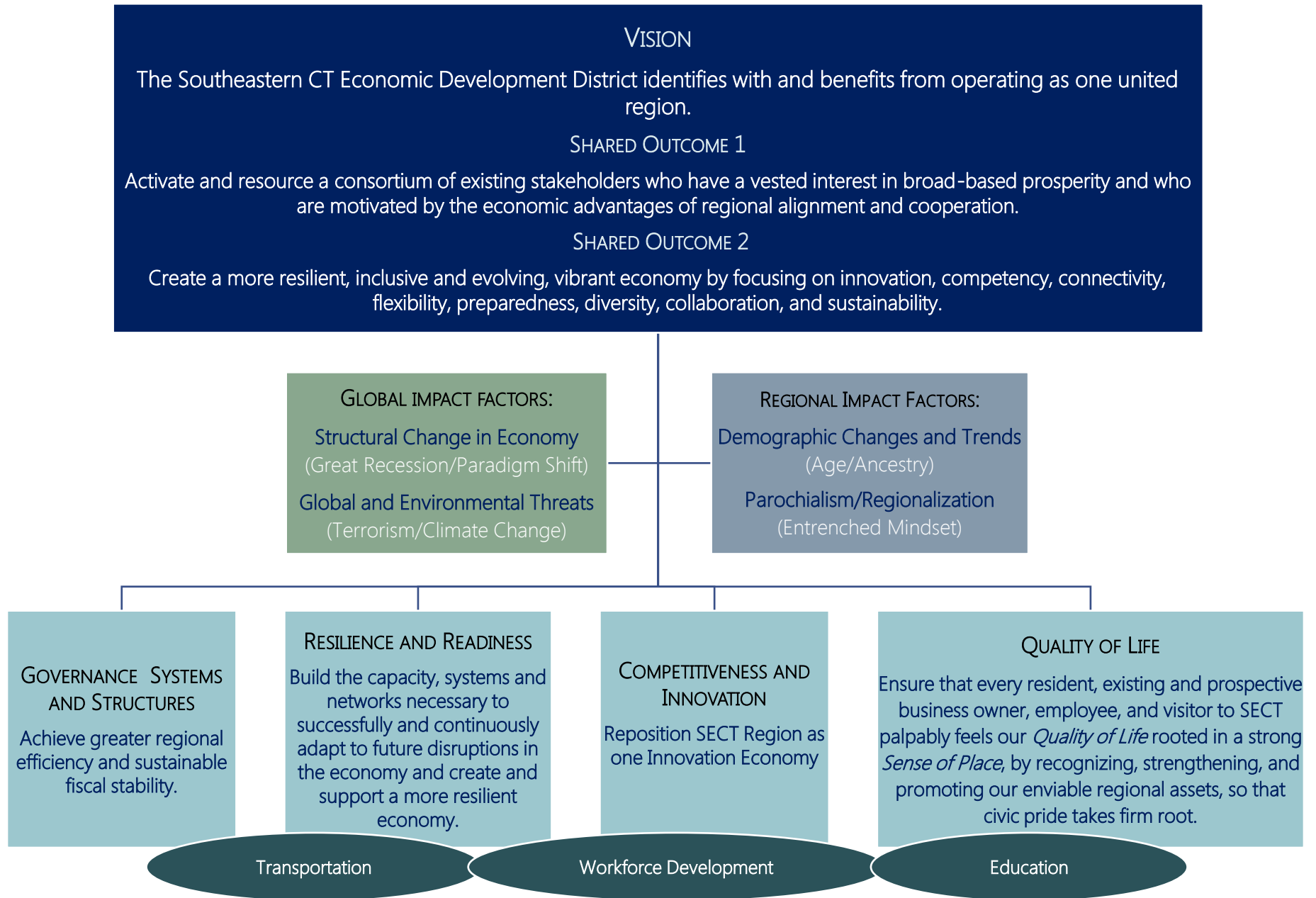
The regional impact factors identified are more predictable. Consequences of demographic changes can be anticipated and managed. Changing the provincial mindset that perpetuates fiscal inefficiency and competition for resources into one that embraces cooperation and unity, however, will be more difficult.

With the global and regional impacts in mind, and after distilling all the public input, Participants classified the strengths, weaknesses and opportunities identified into four broad categories that relate back to the broad vision and shared outcomes: Governance Systems and Structures; Resilience and Readiness; Competitiveness and Innovation; and Quality of Life – which includes Economic, Environmental, and Social elements. Goals and objectives were developed for each category, which emphasized continual innovation; skills competency; facilitating access to resources and opportunities; providing the regulatory and systems flexibility necessary to remain competitive in the current and emerging economy; building strong networks and coordinated systems; and focusing on economic/demographic diversification to better prepare for future disruptions and achieve greater sustainability in general.

The following section maps out these broad categories in the form of goals and strategies and suggested inputs/actions. Chapter 5 will identify the Regional Indices and Metrics relating to the goals and objectives and will discuss the method for tracking and reporting them.



## 4.1 REGIONAL VISION AND IMPACT FACTORS



## 4.2 STRATEGIC PLAN/GOALS MAP

The following section is considered to be the formal Strategic Plan. The Broad Goals and Objectives developed by the CEDS Strategy Committee provide the necessary connection between the Inputs and Actions suggested in the boxes to the far right, and the larger Regional Vision and Shared Outcomes identified above. These Inputs and Actions were derived from the opportunities identified as priorities during the numerous stakeholder feedback sessions and are intended to provide a *starting place* for collaborative implementation efforts. **[Note: The purple filled boxes indicate existing or ongoing Actions/Inputs being directed by the organizations highlighted in green within the box.]**

### 4.2.1 GOVERNANCE SYSTEMS AND STRUCTURES

The first and perhaps the most vital Broad Goal is to achieve greater regional efficiency and sustainable fiscal stability. Central to the ability to achieve this outcome are collaboration, regional alignment, and agility. Each town and city in the SECT region has a role to play in the regional economy. Failure to recognize *the region* as the economic unit is short-sighted and contrary to the direction the global economy is taking us.

The pool of available state and federal resources is shallow, and the providers are looking for their investment to have more of a multiplier effect. The traditional provision of matching funds is no longer sufficient to secure state and federal investment. Resources must be leveraged on a much greater scale that is tipped toward fiscal self-sufficiency and capacity building. Scarce resources will force competitors to collaborate and fuel efforts to create a more unified and streamlined regulatory process. This process must be agile enough to keep pace with dynamic markets and to eliminate barriers to much needed investment in the region.

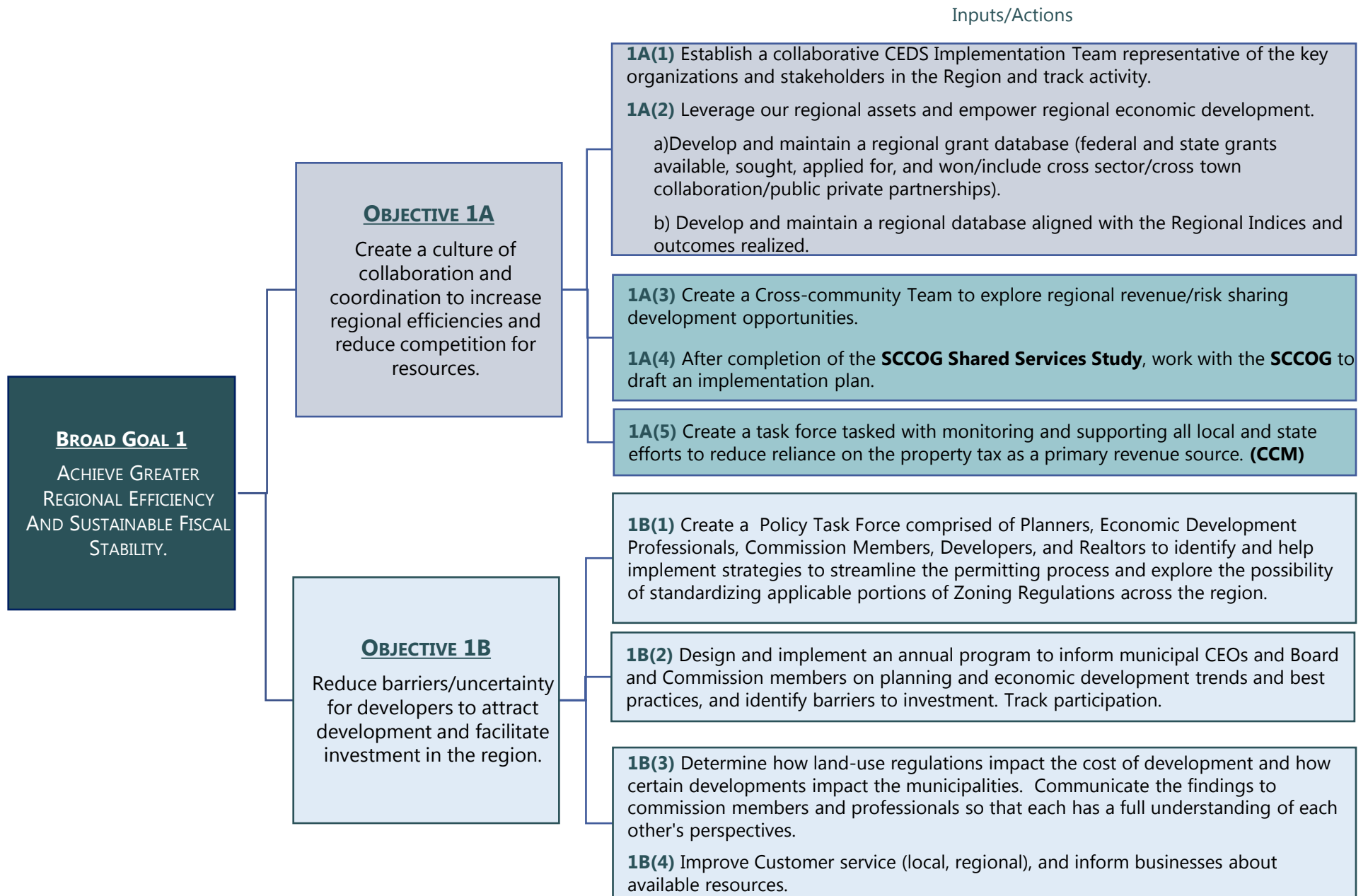
Based on public input, the following objectives were identified in relation to Governance Systems and Structures:

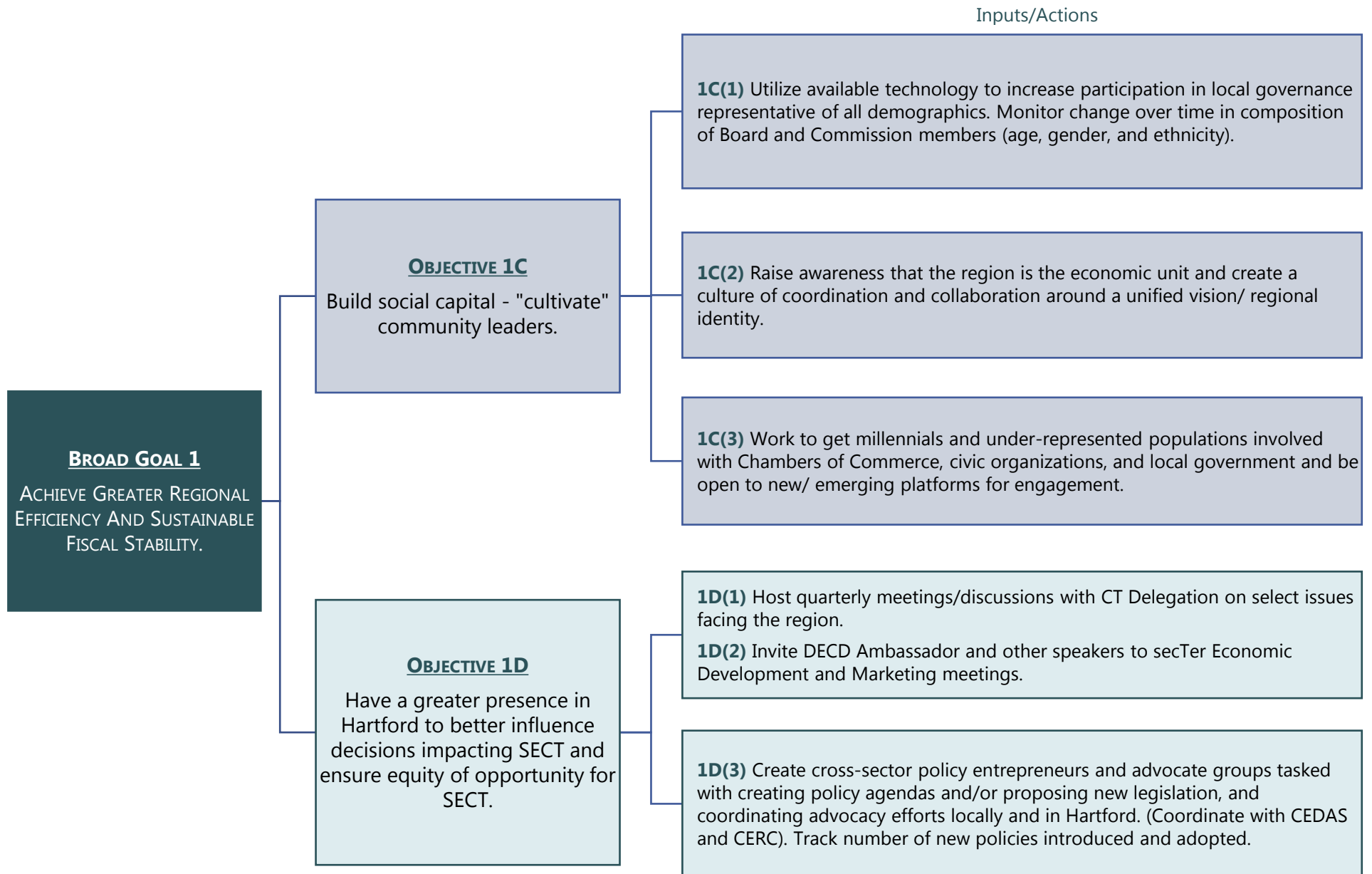
- 1A Create a culture of collaboration and coordination to increase regional efficiencies and reduce competition for resources. *Are we working together to achieve efficiencies?*
- 1B Reduce barriers/uncertainty for developers to attract development and facilitate investment in the region. *Are people and companies investing in the region?*
- 1C Build social capital - "cultivate" community leaders. *Are our citizens engaged?*
- 1D Have a greater presence in Hartford to better influence decisions impacting SECT and ensure equity of opportunity for SECT. *Do we have good representation in Hartford?*

#### WHAT WE HEARD

- Region lacks coordinated leaders and visionaries.
- No influence in Hartford - SECT overlooked - Not enough clout to ensure equity of opportunity.
- Current mindset values local benefits (often short term) over regional benefits (longer-term/sustainable).
- Outdated regulations and lengthy permitting process are barriers to investment and diversification.
- Fiscal instability/uncertainty in Hartford for local support - burden to towns falls on inefficient property tax system.
- Lack of regional coordination resulting in inter-municipal competition for resources and development (Grand List).
- High cost of living and cost of doing business a barrier to growth (over regulation and over taxation).







#### 4.2.2 RESILIENCE AND READINESS: SETTING THE STAGE FOR LONG-TERM PROSPERITY

BROAD GOAL 2: Build the capacity, systems and networks necessary to successfully and continuously adapt to future disruptions in the economy and create and support a more resilient economy.

*Resiliency* is the ability of a system to adapt and change in response to stresses and strains, and *Economic Resilience* is the ability to return to a previous level and/or growth rate of output, employment, or population after experiencing an external shock.

In order to make SECT more *resilient and ready* to adapt to future economic and environmental changes, community leaders and policy makers must first understand the implications of, and adapt to, the economic impact of shifting global roles, technological advances, changing demographics, and climate change. Then building the capacity to adapt to these disruptions and addressing the significant economic and environmental vulnerabilities identified during this and many other planning efforts must become a priority focus for SECT.

The economy of SECT has relied heavily on (and continues to rely on) the defense industry and other legacy institutions. Despite the Great Recession, the urgency to diversify has not yet translated into bold strategies untangled from the deep-rooted politics that intimidate implementation. *Resilience* and *Readiness* must form the foundation of a broader “growth mindset,” and not simply addressed through isolated projects posing as an operational system. Goals must focus on both fiscal stability and sustainability, as well as disaster preparedness and recovery. This will not only to ensure a faster return to “previous levels,” but will disarm the disruption itself.

The Great Recession has revealed weaknesses of the current economic system and people’s or businesses’ inability adapt or recover. The current economy is less dynamic than decades past. Strategies in this section will address capacity building, economic mobility, access to resources, workforce readiness, diversification and flexibility, disaster preparedness and business recovery.

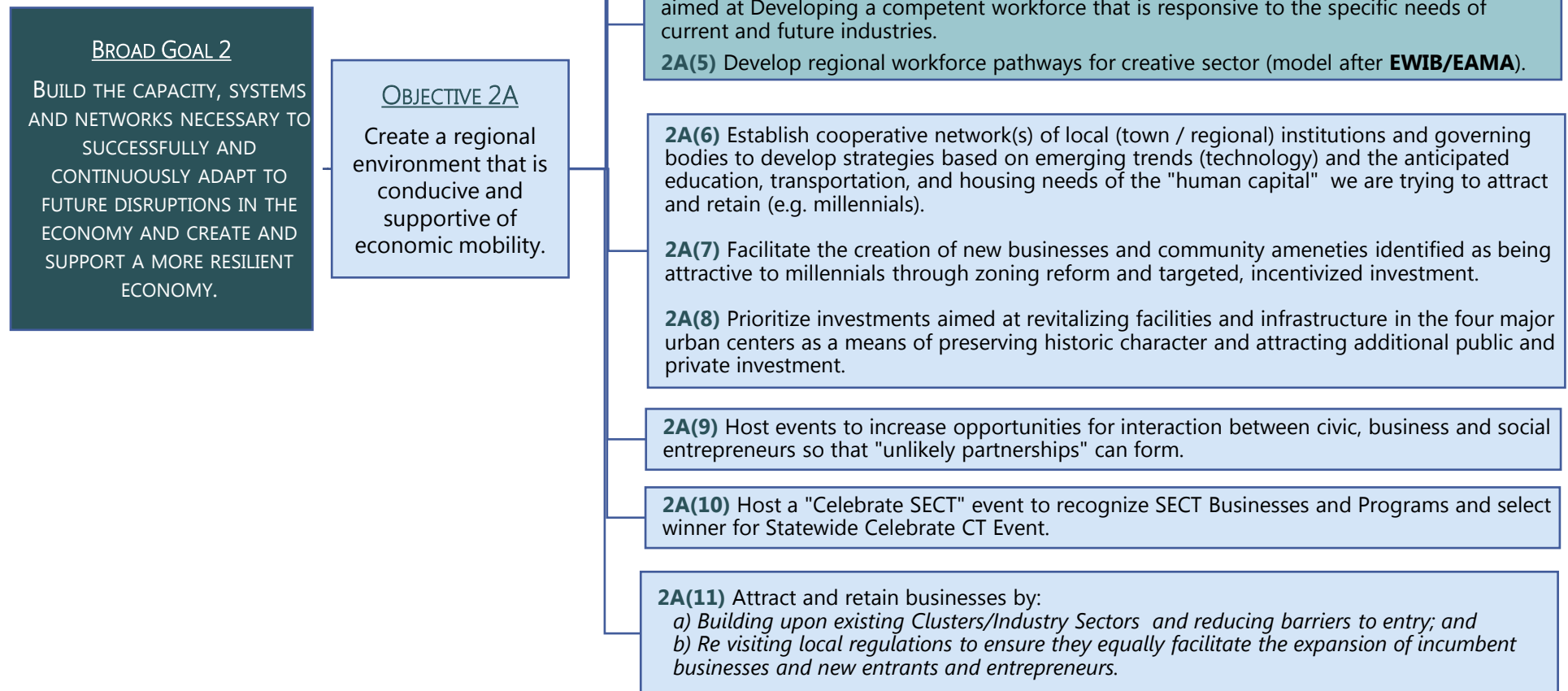
Based on public input, the following objectives were identified in relation to Resilience and Readiness:

- 2A Create a regional environment that is conducive and supportive of economic mobility. *Do we provide resources/environment to allow economic mobility across all demographics?*
- 2B Provide access to resources that will facilitate self-reinforcing personal and economic resilience. *Is there perceived mobility, accessibility and connectivity? Is there seamless access to opportunity?*
- 2C Foster an environment that provides opportunities for cross-sector interaction resulting in proactive strategies to diversify the regional economy. *Do we incentivize cross-sector collaboration?*

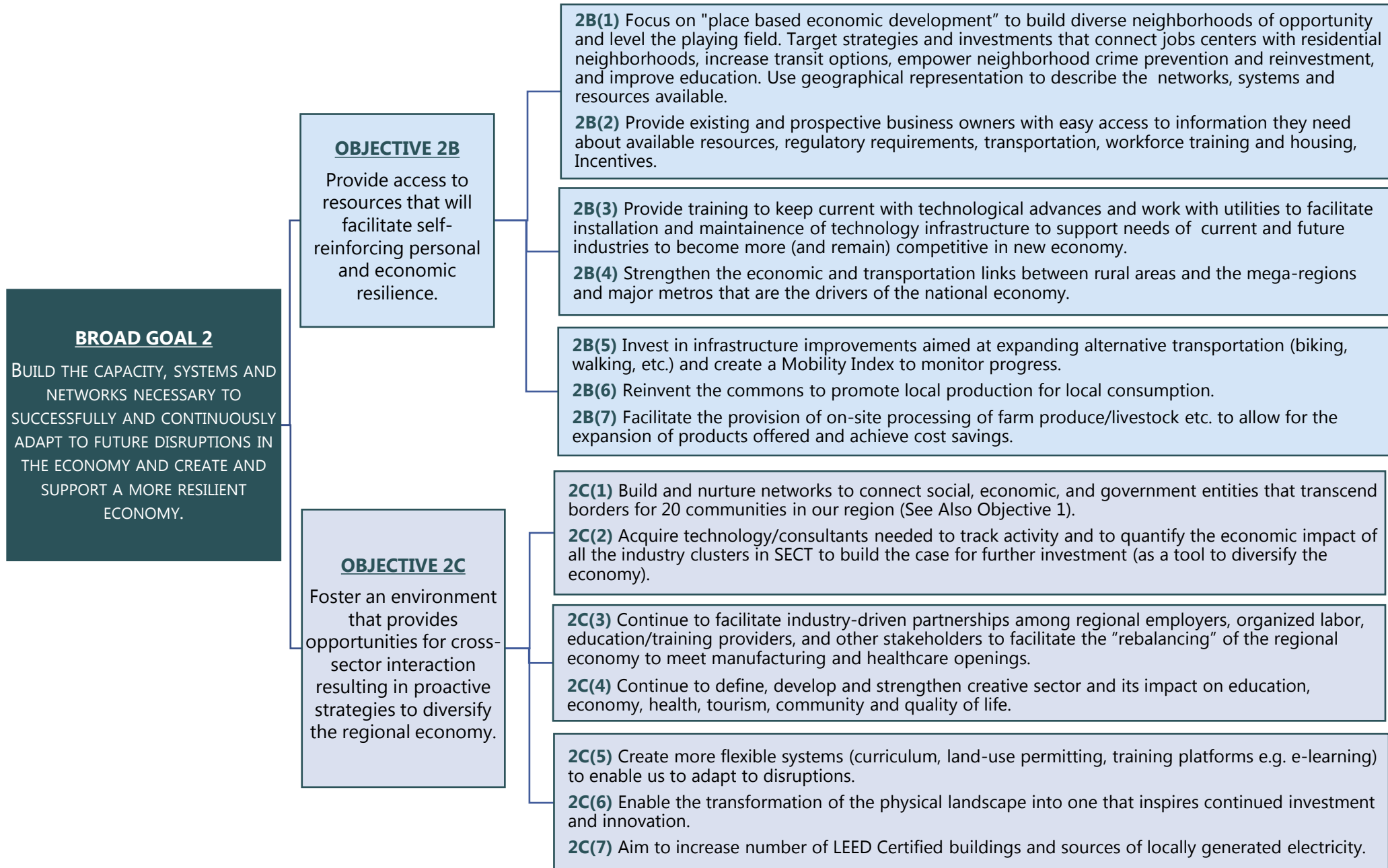
#### WHAT WE HEARD:

- Climate change – extreme weather and sea-level rise a real threat to the economy. Significant transportation and utility infrastructure, critical facilities, and high value residences along coastline particularly vulnerable.
- Region too dependent on large legacy institutions despite existing economic diversity upon which to build.
- If we do not provide the economic, educational, and social opportunities within physical structures and landscapes that satisfy the distinct demands of the younger generations, the outmigration of youth and talent will continue – and will erode the vitality of the region.
- Technology is underutilized as a means to increase citizen engagement and build the human capacity we urgently need to address issues facing the region.
- Need “growth mindset”, “critical thinking” & more visionary leaders to promote collaboration, flexible regulations, and new nimble an educational system (and other systems)t to align with emerging conditions.
- Better connection needed between educational institutions and businesses – need for more workplace learning – Progressive emersion programs.





## Inputs/Actions



The previous two goals focused on Economic Resilience. These next objectives specifically address resilience in terms of Hazard Mitigation, Disaster Preparedness and Recovery. SECT benefits from its location along the coast and its many rivers and extensive tree cover in regard to tourism and quality of life, but these same assets present a challenge during extreme weather events. In partnership with the Nature Conservancy, SCCOG and seCTer participated in a series of workshops tasked with identifying Challenges and Opportunities facing communities particularly vulnerable to Sea Level Rise and other aspects of Climate Change. The full (draft) report can be found in Appendix C. The following is a high level summary. The aim is to continue to work with participants on creating a formal action plan for the challenges identified.

Participants identified the following Top Challenges.

## WATER

- Nonpoint source pollution impacts the health of the region's surface and ground water.
- Aging and outdated storm water systems are overburdened by intense rainfall and the effects of sea level rise.
- Important infrastructure vulnerable to storm surge.
- Rising sea levels will intrude into aquifers and septic systems.
- Lack of clear policies in place to handle water shortages.
- Homeowners most vulnerable to coastal storms impacts are often some of the town's highest tax payers.

## FOOD

- Regulatory hurdles (state and local organizations) for farmers
- Limited infrastructure for producers and distributors (lack of nearby processing facilities)
- Competition for farmland with other, more profitable land-uses:
- Food deserts in Groton and Norwich
- Environmental threats to agriculture

## ENERGY

- Insufficient preparedness and capacity to recover from flooding and high wind weather events
- Communications disconnect between energy consumers and providers
- Uncertainty surrounding inner workings of energy grid
- Fluctuations in energy quality and stability across the regional grid

## TRANSPORTATION

- Flood vulnerability to New London transportation center
- Primary arterial roads vulnerable to flooding, tree falls, and ice
- Unreliable public transportation to emergency shelters and employment centers:
- Aging infrastructure
- Conflict between use of Thames River Amtrak Bridge and access to the Groton Submarine Base
- Limited access to ambulances and difficulty for EMS to reach vulnerable populations; difficult to evacuate large scale facilities such as regional hospitals and nursing homes

## ECONOMY

- Short and long-term economic effects of flooding and power outages on business continuity
- Need for food, transportation, and shelter in emergency situations
- Limited training in and testing of preparedness plans for municipalities and social service organizations
- Vulnerability of tax base to storm damage and sea level rise
- Limited willingness or ability to invest in infrastructure improvements
- Local permitting processes a significant burden for new businesses

## ECOSYSTEMS

- Impacts of changing water quality and quantity on ecosystems
- Loss of or alteration in ecosystem services
- Lack of smart, balanced, and resilient built environment



Highlights of top solutions identified.

## WATER

- Develop a regionally specific decision support process to help municipalities assess and plan for flooding, efficient use/reuse, and nonpoint source pollutions, simultaneously.
- Engage in water planning that is integrated across challenge areas in order to maximize the return on infrastructure investments and avoid contamination between different water uses.
- Develop a regionally specific planning process to help planners prioritize areas to focus on in the region and provide templates for conducting town-wide assessments.
- Encourage efficient water use and reduce the load on storm water infrastructure to prevent flooding and contamination of waterways. Encourage green infrastructure, rainwater re-use, and a general culture of water conservation amongst users.
- Focus outreach efforts in school classrooms. The Last Green Valley has an established curriculum in local middle schools about the water cycle.

## FOOD

- Explore cooperative funding, sourcing, and distribution models in order to meet growing demands for local foods among area residents, schools, and other institutions.
- Identify opportunities for commercially viable on-site processing that do not have excessive permitting costs associated with them.
- Streamline regulatory requirements across multiple state agencies to encourage the growth of the food economy. Create model ordinances at the municipal level for permitting and even incentivizing new agricultural practices (i.e., greenhouses, aquaponics) and non-farm uses (i.e., breweries) to enable small farms to succeed.
- Reduce competition for farmland with more profitable land uses. Create greater housing opportunities in currently developed areas and take steps to promote agricultural careers the next generation.
- Develop an agriculture internship and/or pipeline program for local youth to encourage next generation to farm.
- Explore ways to accommodate the uncertainty of future environmental conditions; e.g. crop diversification, value-added products, and additional on-farm uses.
- Increase focus on reducing flood risk to farmers through dam removal, soil erosion control measures, and watershed management plans.
- Conduct a food-shed mapping effort across the region to determine sources and quantities of locally produced food.



## ECOSYSTEM

- Continue to support collaborative efforts to promote and quantify the value of the services provided by natural assets when making decisions within the context of economic growth and development across the region.
- Reduce conflicts between built environment and ecosystem function. Strictly enforce and/or enact stricter standards for rebuilding in high hazard areas.
- Utilize new MS4 storm water permitting that requires municipalities to reduce the amount of pollutants entering their waterways via storm sewers.
- Explore and catalogue financial mechanisms and incentives for property owners to maintain and enhance natural infrastructure and associated services.
- Integrate natural infrastructure into zoning codes.
- Conduct outreach and education for residents and business owners on where and what natural alternatives could be considered alongside standard hard engineering approaches to improve resilience.
- Change the cultural dialogue associated with the very individualistic “coastal dream” that does not fully consider the true cost to society and to the environment from living in high risk areas.
- Prioritize regional water conservation. Make an effort to communicate the economic impacts of reduced water quantity and quality from environmental degradation and consider mandatory conservation policies based on land use.



## TRANSPORTATION

- Improve coordination of resources and personnel between town public works departments to reduce the costs of maintaining local roads.
- Create longer-term assessments of the regional transportation network to better prioritize investments for regional resilience.
- Prioritize state and local funding for infrastructure improvements that will contribute to future community resilience.
- Facilitate cross-municipality collaboration to identify largest regional transportation vulnerabilities and share planning, engineering, and monetary resources to enhance regional resilience.
- Integrate green infrastructure and natural assets into transportation upgrades and retrofits through design standards and codes.
- Explore ways to mitigate infrastructure vulnerability and improve evacuation communications.
- Establish mutual aid agreements with nearby inland urban areas to share busses with real-time mapping of available resources to reduce needs of transit-dependent communities during emergencies.



## ENERGY

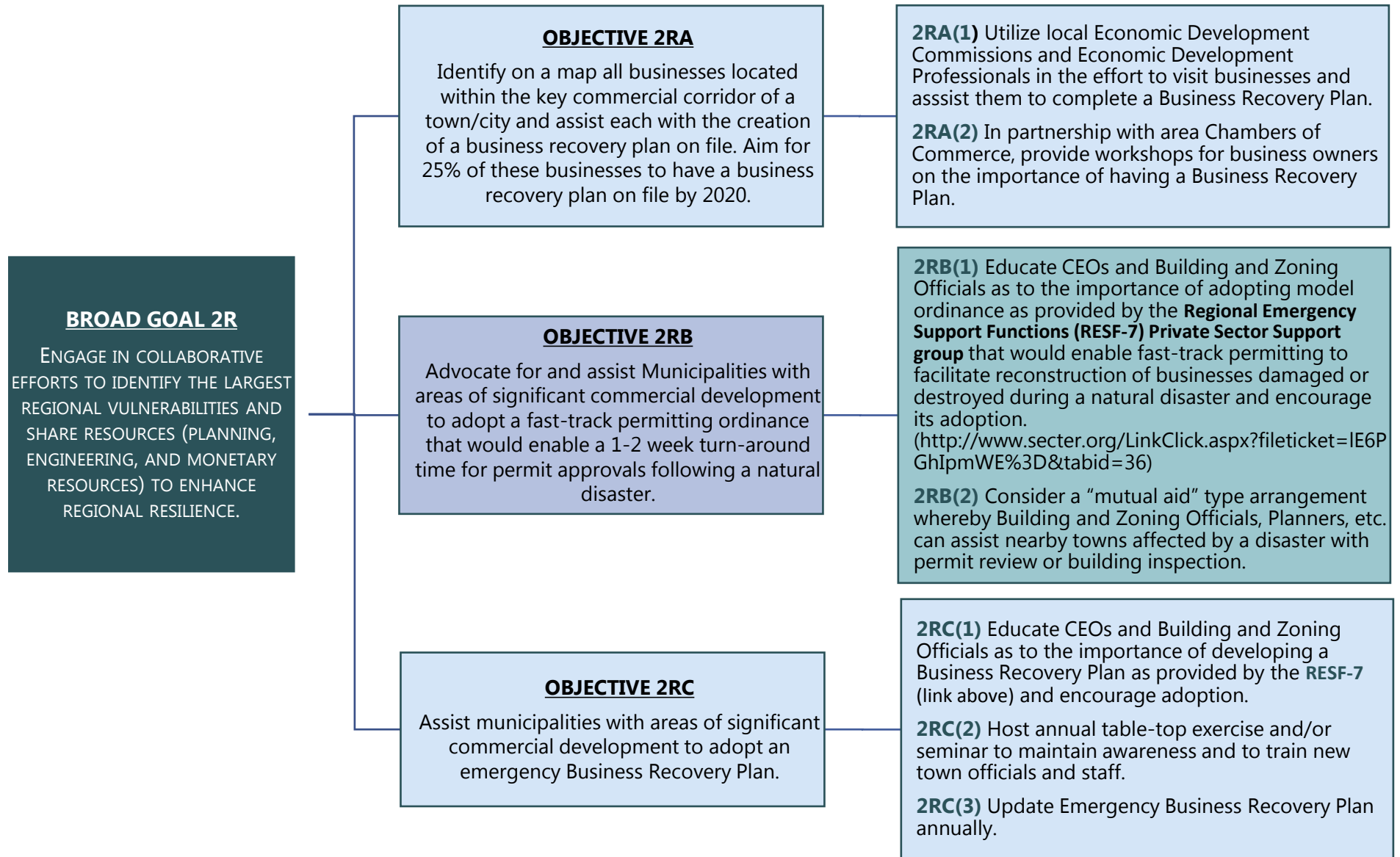
- Strengthen the distribution system through use of microgrids and other similar strategies that provide redundancy and that can isolate damage to the electrical distribution system to reduce infrastructure damage and interruptions.
- Ensure that state and local emergency response plans include provisions for speeding up recovery of energy infrastructure.
- Strengthen and expand Mutual Aid Agreements and Memorandums of Understanding with other energy service entities to utilize technicians from other regions.
- Ensure that Millstone Power Plant is properly prepared for extreme weather events.
- Target and incentivize consumer behavior such as in-home energy conservation (i.e., Smart Living) and tree removal on private property as a strategy to improve overall regional energy resilience.
- Encourage community leaders to look more closely at opportunities for locally produced energy sources.
- Lobby for regularly updated state building codes with energy efficiency standards.



## ECONOMY

- Conduct a fiscal impact study on what the effects of a catastrophic storm would have on town revenue to help justify investment in resilience planning and emergency management.
- Restructure the tax code to reduce the over-reliance on high value residential properties for revenue.
- Incentivize future development in inland, well-protected areas and facilitate movement of development off the coast to decrease the vulnerability to grand lists from sea level rise and extreme weather events.
- Ensure that planning documents prioritize more compact mixed use areas with smaller footprints that are out of the way of current and future coastal ecosystems.
- Diversify the economy to help reduce the residential development demands on local ecosystems and minimize the loss of these scenic and recreational assets.
- Enforce mandatory evacuations pre-storm to reduce emergency service costs.
- Expand disaster recovery drills to include local businesses and encourage municipalities to adopt the RESF-7 model ordinance establishing a Recovery Management Organization to help coordinate business recovery.
- Establish mutual aid agreements between towns to assist with permitting and inspections post-disaster.
- Inventory available space for temporary operations and coordinate with relevant parties to ensure that enough space is available in immediate aftermath of disaster.
- Improve coordination of disaster recovery between public and private stakeholders.





Inputs/Actions

**BROAD GOAL 2R:**

ENGAGE IN COLLABORATIVE EFFORTS TO IDENTIFY THE LARGEST REGIONAL VULNERABILITIES AND SHARE RESOURCES (PLANNING, ENGINEERING, AND MONETARY RESOURCES) TO ENHANCE REGIONAL RESILIENCE.

**OBJECTIVE 2RD**

Develop a plan to prioritize and move solutions identified in the Resiliency Guidebook forward based on maximum regional impact and/or benefit.

**2RD(1)** Conduct fiscal impact studies to quantify the "cost" of extreme weather events. Use analyses to develop business case for proposed solutions.

**2RD(2)** Create a Resiliency Index as a means of prioritizing and monitoring actions related to building regional resiliency.

**2RD(3)** Map the Regional Food shed.

**OBJECTIVE 2RE**

Support existing organizations currently engaged in disaster preparedness - resiliency - efforts.

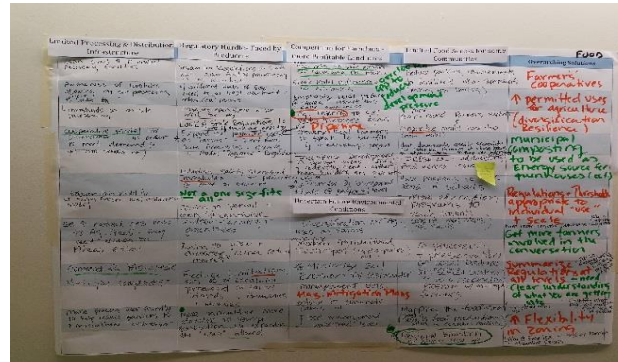
**2RE(1)** Continue to support the **RESF-7** with the implementation of the **Disaster Recovery Plan**.

**2RE(2)** Coordinate quarterly meetings with area planners to continue the work started by the **Nature Conservancy, SCCOG and seCTer** - using the **Resiliency Guidebook** as framework.

**OBJECTIVE 2RF**

Reduce conflicts between the built environment and ecosystem function.

**2RF(1)** Support **SCCOG's** and other ongoing efforts to identify highly vulnerable areas for both the built environment and functionally important ecosystems and consider the possible relocation of coastal transportation and other infrastructure to restore ecosystem services along the highly developed coastline (**see SCCOG Multi-Jurisdictional Hazard Mitigation Plan**).



### 4.2.3 INNOVATION AND COMPETITIVENESS

*"Prosperity emerges from a carefully constructed ecosystem that nurtures and sustains skilled labor, innovative entrepreneurs, research breakthroughs, and well-capitalized start-ups. Such an ecosystem builds on the strengths that already exist in a city or region or a state; and as it spins off wealth it plows a good portion of the profit back into the enterprise." (Placeholder1)*

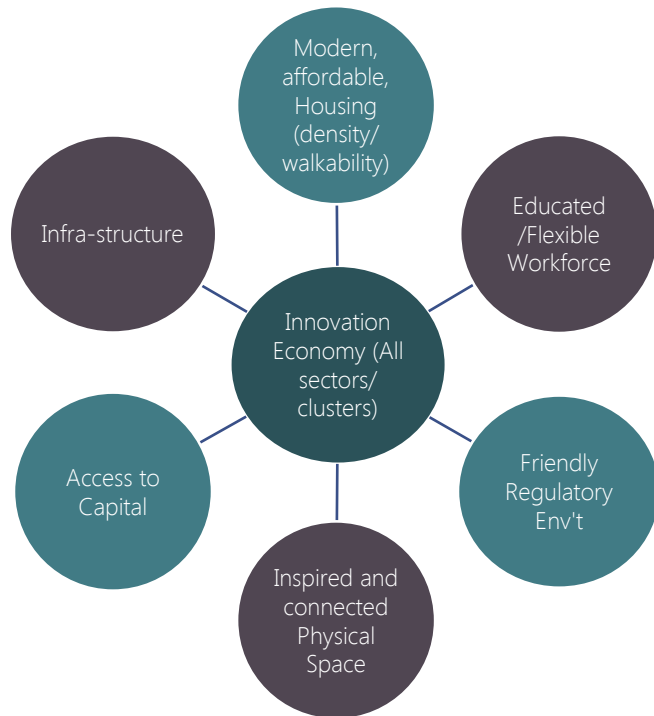
Most will agree that SECT has an impressive set of assets and an enviable location between New York and Boston with a lower cost of living and access to nearly 45 million people within a three hours' drive. SECT is also home to educated and skilled workers, in part due to the growing alignment between education and industry to address current needs. However, unless we can successfully and continually create NEW pathways and conditions for equitable economic

opportunity and security suitable for the economy that is emerging now, we will lose any competitive edge attributed to our strengths.

Opportunities exist, but barriers to entry are high. It is no longer about static improvements in efficiency; it is about expanding the *fundamental capacity of our economy itself*. Our ability to achieve the broad-based prosperity and vibrancy sought depends on our ability to create the political will necessary to build a coordinated, *regional network* to support innovation and all stages of entrepreneurship.

There are opportunities for innovation in all the existing systems and networks that

specifically impact the regional economy: transportation, workforce development, education, infrastructure, technology, healthcare, and regulatory systems. Creating a culture of innovation will only strengthen our position as the region that connects New York, New Haven and Boston.



#### WHAT WE HEARD

- Great elements that provide SECT with an identity and competitive advantage: history, location between NY and Boston, QOL, recreational opportunities, villages / shoreline / open space.
- Proximity to larger urban centers; skilled, productive & educated workforce; convenient location with lower operating costs (than larger urban centers).
- Multiple transportation modes (passenger & freight rail, airports, deep water port w/ rail connection, Port Authority, ferry, highway system) and water/maritime resources (rivers, LI Sound, Ocean/Coastline; recreational and economic opportunities; shipbuilding/Seaport)- but are underutilized.
- Transportation networks and utility service are fragmented; Transportation and other infrastructure are disconnected, deteriorated, and underutilized; lack of shovel ready sites & no one willing to pay to make them so.
- Strong training and education institutions, but not addressing skill sets needed for the new economy; Educational system outdated – designed for the industrial economy and not aligned with current reality.
- SECT experiencing brain drain.
- Failure to regionalize; provincialism hampers realizing economies of scale.
- Outdated regulations impede development – other cities and states have fewer regulatory barriers.
- No strong, coordinated “innovation ecosystem.”
- Need real leadership for tourism (not DECD) with meaningful budget.

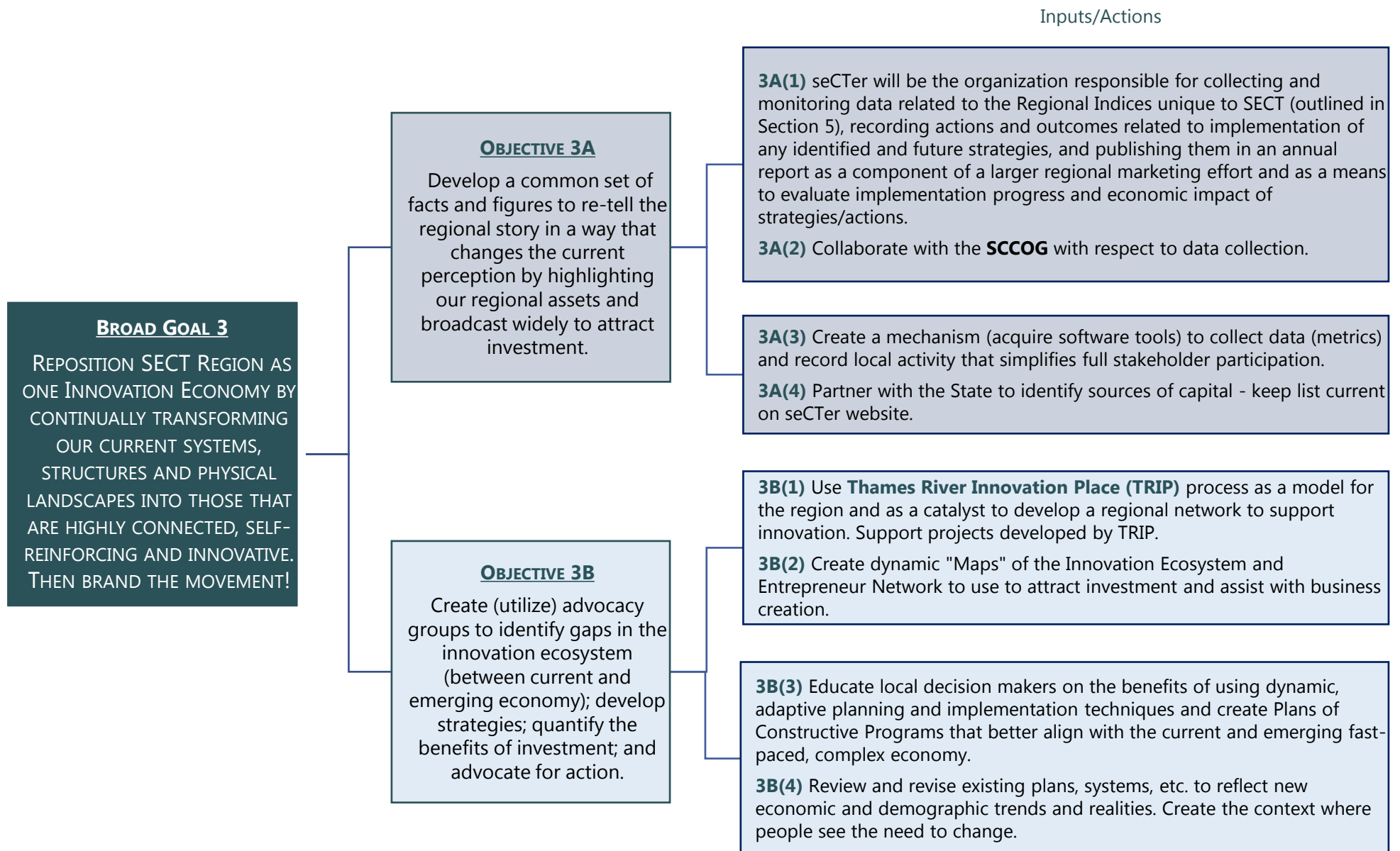


Broad Goal 3: Reposition SECT Region as one Innovation Economy by continually transforming our current systems, structures and physical landscapes into those that are highly connected, self-reinforcing and innovative. *Is our regional economy competitive in the emerging economy?*

- 3A Develop a common set of facts and figures to re-tell the regional story in a way that changes the current perception by highlighting our regional assets and broadcast widely to attract investment. *Do we have the tools necessary to accurately capture data and measure impact over time?*
- 3B Create (utilize) advocacy groups to identify the gaps between current and emerging economy (see chart below); develop strategies; quantify the benefits of investment; and advocate for action. *Do we have the leadership and strong networks in place to implement strategies in the CEDS?*

Current Economy	Identify Gaps and Priorities  	Emerging Economy
Manufacturing Economy		Innovation Economy
Classically trained workforce		Tech-savvy workforce
Infrastructure gaps		More effective transportation, utilities, etc.
Abundance of under-utilized, outdated space		Shared, flexible workspaces
Rigid, local, "use-based" regulations		Flexible, regional, "form-based" regulations
Large single-family sprawling developments		Rental or "millennial-friendly" housing alternatives near downtowns or transportation centers
Tight capital constraints		Ready sources of capital (grants, TIF, etc.)
Fragmented attractions and underutilized assets		Holistic experience – strong base

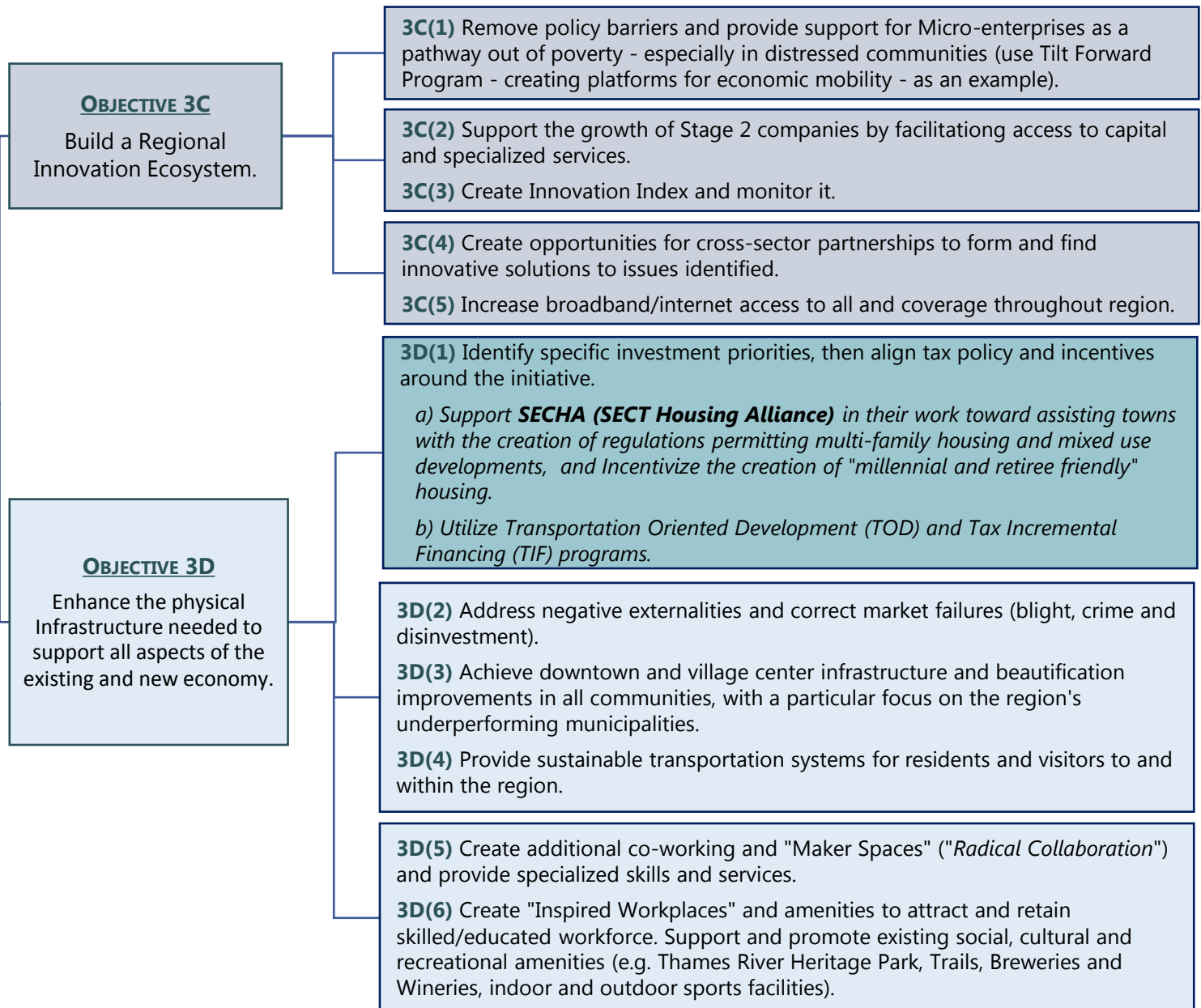
- 3C Build an *innovative* Regional Innovation Ecosystem. *Do we have the capacity to transform?*
- 3D Enhance the physical Infrastructure needed to support all aspects of the existing and new economy. *Do we have the types of places, infrastructure, and support for innovation to take place?*



## Inputs/Actions

**BROAD GOAL 3**

REPOSITION SECT REGION AS ONE INNOVATION ECONOMY BY CONTINUALLY TRANSFORMING OUR CURRENT SYSTEMS, STRUCTURES AND PHYSICAL LANDSCAPES INTO THOSE THAT ARE HIGHLY CONNECTED, SELF-REINFORCING AND INNOVATIVE. THEN BRAND THE MOVEMENT!





## 4.2.4 QUALITY OF LIFE

*"Until economic and social rules work for all Americans, they're not working."<sup>i</sup>*

In every meeting and public input session conducted for the preparation of this plan, the most consistently celebrated and prioritized strength was the region's exceptional *Quality of Life* which somewhat loosely encompasses economic, social and environmental factors captured in part in the "What We Heard" box to the right. Looking at the first list of assets, it is easy to recognize that SECT's high Quality of Life is one of our biggest competitive advantages. Our challenge lies in our ability to effectively protect, leverage, and market these assets such that it results in investment in the region. We must first agree that taken separately, our individual assets in each town simply cannot compete with similar assets in the larger urban centers or tourist destinations that surround us. Our strength lies in the sheer number of assets contained



within what most would consider a small geographic region. When we look at our cultural, environmental, recreational, educational and other assets collectively, it tells a much more compelling story.

The economic aspects of quality of life that are addressed in the goals are most concerned with access to education, jobs, training, social and recreational opportunities, healthcare, childcare, affordable housing, and a safe environment in which to thrive. They also relate to mobility and supporting the transportation systems necessary to make these connections happen. Vibrant economies are possible when we enable mobility, social progress, and access to opportunity. It is also important to recognize that the whole regional economy will suffer if there are individual underperforming towns because they do not fully contribute to the

economy. Goals in this section focus on "place based economic development" to increase civic pride and empower residents and community leaders to continually find new ways to connect people to resources and opportunity.

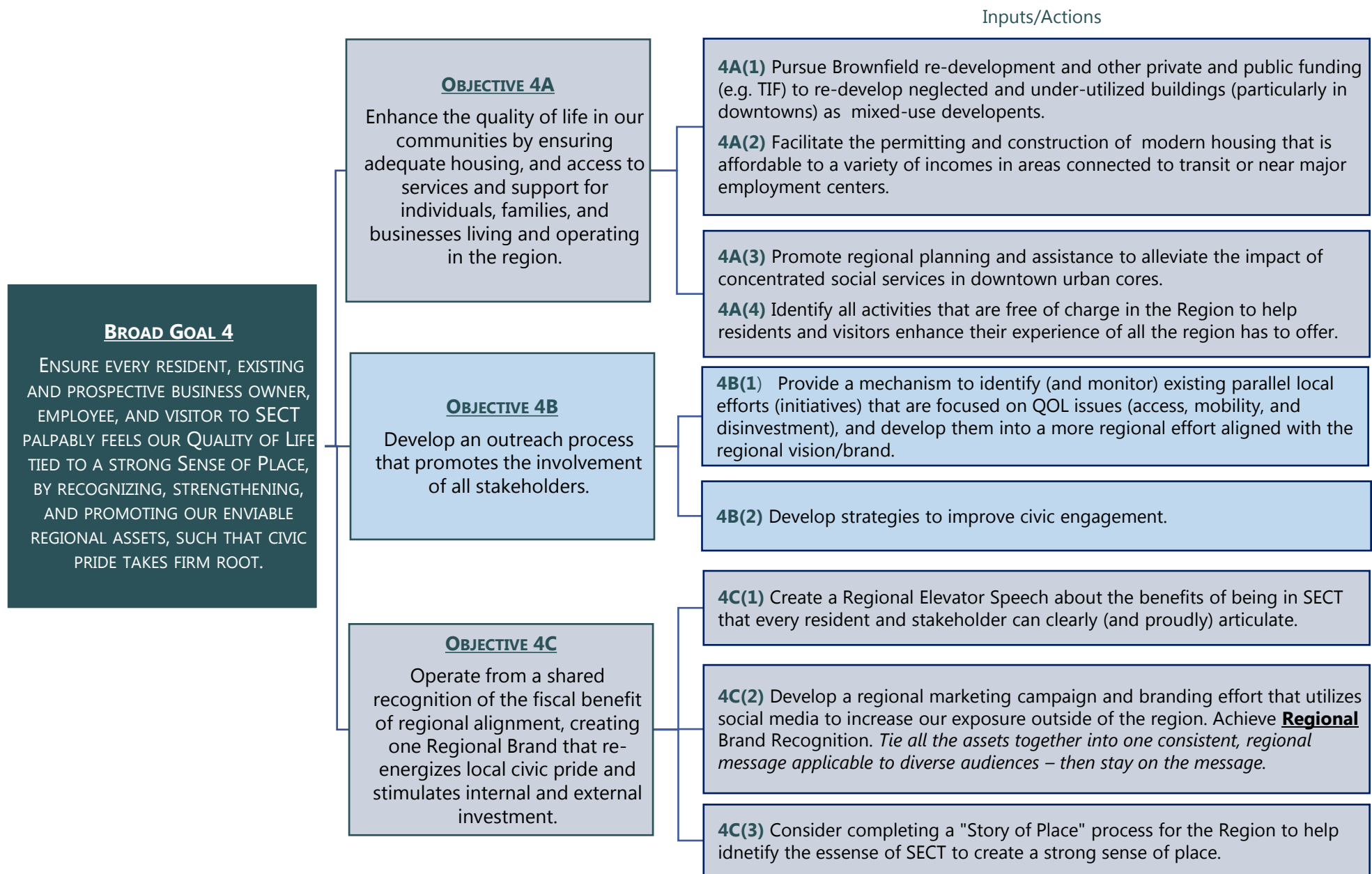
### What We Heard

- SECT possesses remarkable assets that contribute to a notable high Quality of Life. Assets include arts, cultural, historic and natural resources; tourism and recreational opportunities (shoreline); rural-urban mix; quality schools, higher education institutions and healthcare; legacy institutions and a strong military presence.
- Need to market and/or educate people about assets and attractions to reduce people's negative perceptions re: affordability, business friendliness, jobs, and social opportunities.
- **Sense of Place is not obvious. Without a 'Sense of Place', civic pride is undermined.**
- Region needs to be more millennial friendly; need greater housing choice & affordability; need convenient coordinated (regional) public transit to connect to larger urban centers and economic and social opportunities.
- Need to redevelop old historic buildings, downtowns and outdated commercial area into walkable mixed-use development – with modern amenities, services and entertainment that will attract millennials and other desired demographics.
- Need to develop one regional marketing and branding campaign to promote our success/assets and build our regional pride.
- Must utilize technology to better market events and all attractions for a more holistic experience.
- Need to provide necessary data on the impact or contribution of tourism (and other industries) on (to) the economy.
- Need transportation/shuttles to facilitate visitor exploration of the region. I-95 and transportation woes in general are a detriment to tourism.

Broad Goal 4: Ensure every resident, existing and prospective business owner, employee, and visitor to SECT palpably feels our Quality of Life tied to a strong Sense of Place by recognizing, strengthening, and promoting our enviable regional assets, such that civic pride takes firm root. *What is at our core that makes us proud to be in SECT?*

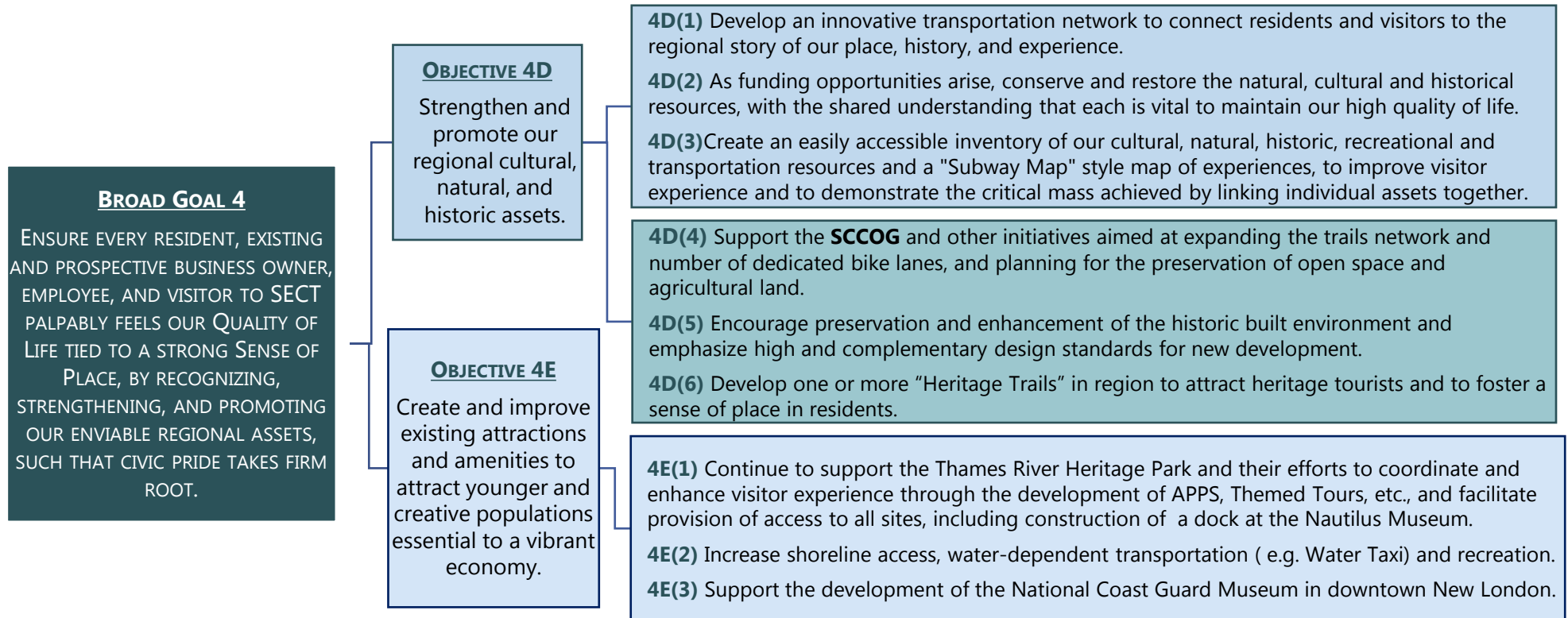
- 4A Enhance the quality of life, in urban centers, rural areas and suburban communities by ensuring adequate housing, and access to services and support for individuals, families, and businesses living and operating in the region. *Does everyone, everywhere in the region enjoy a high quality of life?*
- 4B Develop an outreach process that promotes the involvement of all stakeholders. *Are we successfully engaging a diverse cross-sector of stakeholders?*
- 4C Operate from a shared recognition of the fiscal benefit of regional alignment, creating one Regional Brand that re-energizes local civic pride and stimulates internal and external investment. *What drives us?*
- 4D Strengthen and promote our regional cultural, natural, and historic assets. *Do people and companies from outside the region know who we are and what we have to offer?*
- 4E Create and improve existing attractions and amenities to attract younger and creative populations essential to a vibrant economy. *Do we have enough of the right types of social, educational, cultural, and recreational opportunities here in SECT?*







## Inputs/Actions



The Southeastern CT Cultural Coalition has identified the following additional actions for inclusion in the 2017 CEDS that relate to Objectives 4A –E:

- Communicate creative sector report (identify industry, economic impact, mapping, and connections).
- Communicate results of New London County nonprofit arts and cultural economic impact study, Arts and Economic Prosperity 5 (due June 2017)
- Conduct regional cultural facilities assessment report.
- Develop regional cultural facilities investment/grant fund. Increase funding from local and regional grant makers to support arts and culture.
- Communicate and elevate the role arts and culture plays in our cities and towns (economy, education, healthcare, crime & poverty rates, business/entrepreneurship, innovation, etc.).
- Increase funding to arts and cultural institutions from state and federal grants through grant writing workshops, access to grant information, collaborative grant writing workshops, and fostering cross sector partnerships.
- Increase private investment and support for arts and culture.
- Survey and map regional arts in education pathway (from kindergarten through college).
- Establish local/municipal support for arts and culture programs, initiatives and/or economic development programs utilizing the arts.



*"Successful strategies that attract and engage underrepresented populations throughout each community will be a critical element of the playbook, as will a national convening of people and organizations who build the capacities for innovation and entrepreneurship in their communities." EDA*

**When considering the broad regional goals, three major themes cut across all four goals and each are important for future regional economic growth.**

- Transportation – improving infrastructure, access and mobility to support changing demands by workers, businesses, and entrepreneurs.
- Workforce development –continuing and expanding the work of EWIB and its partners and integration with business and economic development.
- Education – re-evaluating the current system and better preparing students for emerging economy. Emphasize skills competency.

**The following section addresses each individually and outlines goals and objectives already in play for the region through other organizations and other additional strategies by the CEDS strategy committee.**

#### 4.2.5 TRANSPORTATION: ACCESS AND MOBILITY

As described in Section 1.4.1, SECT has an abundance of multi-modal transportation assets. The opportunities and challenges that resonated with most concerned their underutilization, regulatory concerns, and lack of regional coordination that would help increase mobility across all demographics. Participants in the public input process acknowledged the potential future challenges caused by significant advances in transportation related technology and ride share platforms (e.g. autonomous vehicles and Uber), and some are already feeling the impact from increased competition and discrepancies in the relevant licensing and safety regulations. Benefits in the form of increased mobility, however, were also attributed to these emerging transportation platforms.

The Southeastern CT Council of Governments is the primary regional agency involved with transportation and is responsible for drafting the [Long Range Regional Transportation Plan for Southeastern CT](#). The current plan covers 2015-2040. Transportation planning at the regional level emphasizes the need for a balanced transportation system that meets the needs of the region's diverse users. The 2017 Regional Plan of Conservation and Development contains the following (draft) goals and strategies that are in line with the goals of this CEDS and have been endorsed by the Strategy Committee:

##### RPOCD Goals

- Transit that meets the needs of the region, especially businesses, low-income workers and aging residents.
- "Complete Streets" that encourage transit use, biking and walking.
- Coordinated transportation that makes use of technologies to improve mobility.
- Safety and Reliability that meets the future needs of the region and can withstand potential natural hazards.

##### WHAT WE HEARD

- Regulatory issues concerning licensing and background checks for cabs and other personal transport companies need to be addressed so that they can remain competitive with new transportation platforms such as Uber.
- The transportation infrastructure is underutilized and in need of investment – especially in services or infrastructure that address the "last mile" or connections between the different modes. Zoning updates needed.
- Desire for infrastructure and policies that support alternative modes of transportation such as bike and pedestrian use (safety, bridge crossings, designated paths) and also for electric vehicles (charging stations). Single-pay system favored.
- Need to reduce conflicts between modes. Competition for track time.
- Real-time information and wayfinding are lacking in the region. Need to facilitate better mobility throughout the region for residents, commerce, and visitors.
- Need better regional coordination to address all barriers identified. Insufficient use of technology!
- Need to prioritize projects with regional benefit – not just ones with local benefits.
- Need increased and more efficient movement of goods and people between urban centers, regional transportation centers, and between residential areas and employment, healthcare, social, and educational opportunities. Geography of SECT an issue.
- Depth and width of channel may be an issue (new subs longer).
- Need to continue to advocate for the expansion and improvement of passenger and freight rail. Tap into excess capacity of Freight RR network – possible use of freight rail lines for passenger service; marine highway (shipping container > rail connection).



### RPOCD Strategies:

- Prioritize the expansion and improvement of sidewalks and bike facilities. Create bike routes connecting neighborhood centers, parks, and along or parallel to major corridors. Implement Complete Streets strategies to build safety and a sense of place.
- Incorporate transportation demand management (TDM) and transportation systems management (TSM) to shift demand for roadway space away from congested roadways and times of day.
- Coordinate public and private providers of transit service (SEAT, Windham Regional Transit, District, 9 Town Transit, Pfizer, Electric Boat, Eastern CT State University, Casinos). Produce coordinated map/schedule information where appropriate.
- Develop performance measures that will make region more competitive for funding.

### CEDS Strategies

The group of participants in the two Transportation Focus Group discussions have expressed a desire to meet on a more regular basis to address the concerns raised during the CEDS planning process, and to hear about new concerns and/or initiatives as they are proposed. The Strategy Committee identified five recognized *components of transportation* to consider when developing strategies.

1. Transportation Infrastructure
2. Motor Vehicles and Containers
3. Mobile Workforce
4. Propulsion system
5. Power Supply and Operation

Based on the input to date, the following goals, objectives and actions are offered for inclusion in the 2017 CEDS:

**Broad Goal:** Identify and work to resolve challenges impacting economic and community development related to each of the five components of the transportation network.

**Objective T1:** Improve access and mobility across all demographics throughout the region.

**Objective T2:** Facilitate holistic visitor experience through increased and better coordinated transportation and wayfinding to area attractions.

**Objective T3:** Continue to advocate for investment in freight rail capacity and facilitate development of abutting parcels.

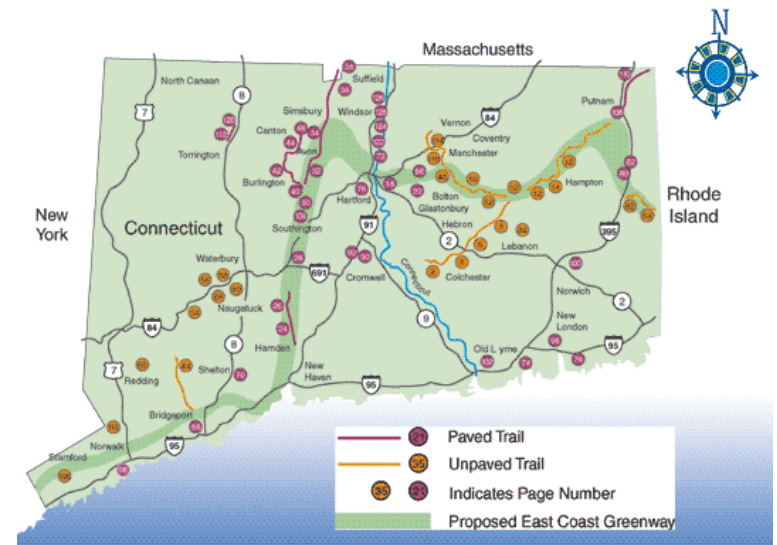
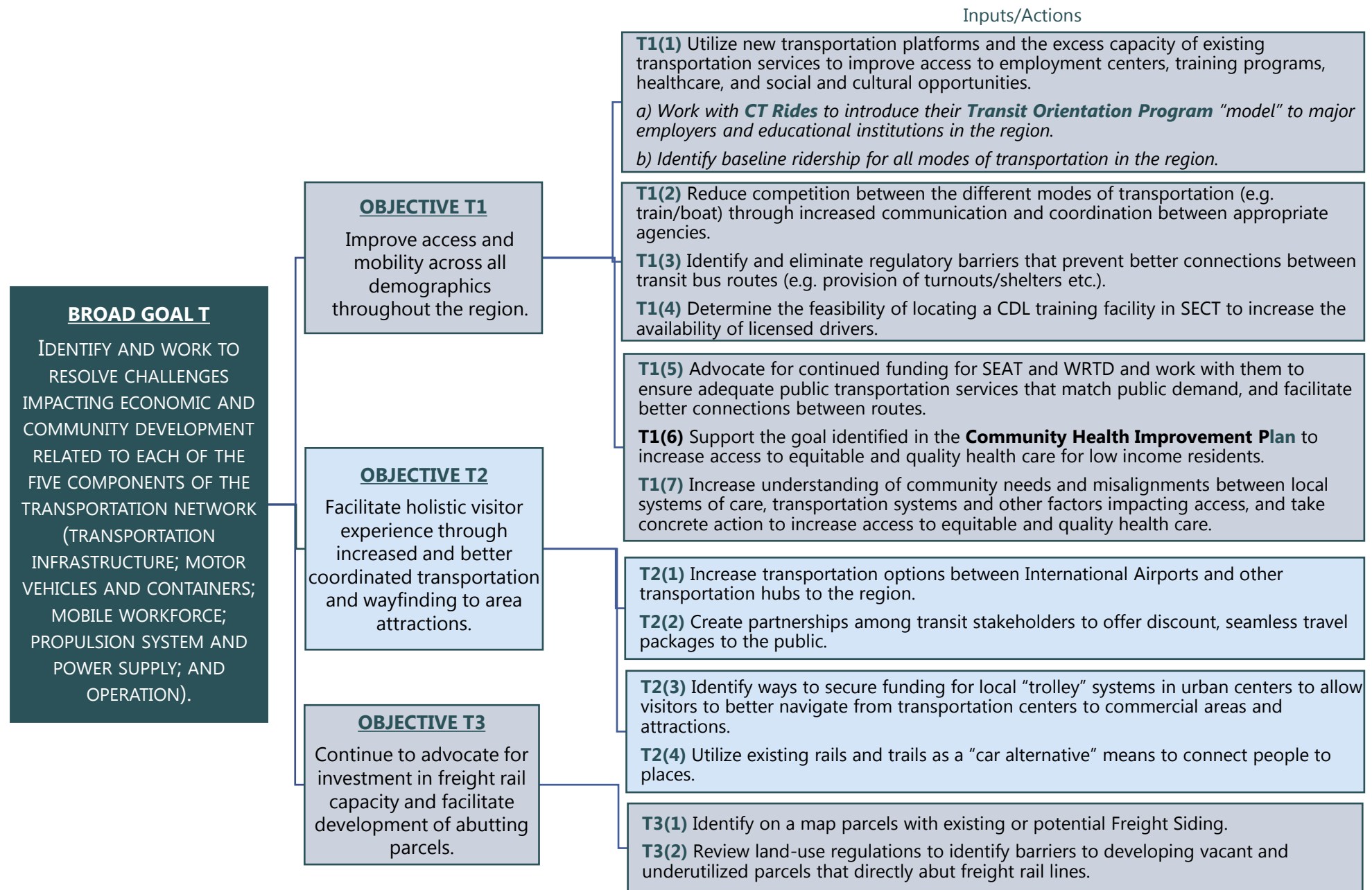


Figure 57: CT Trails

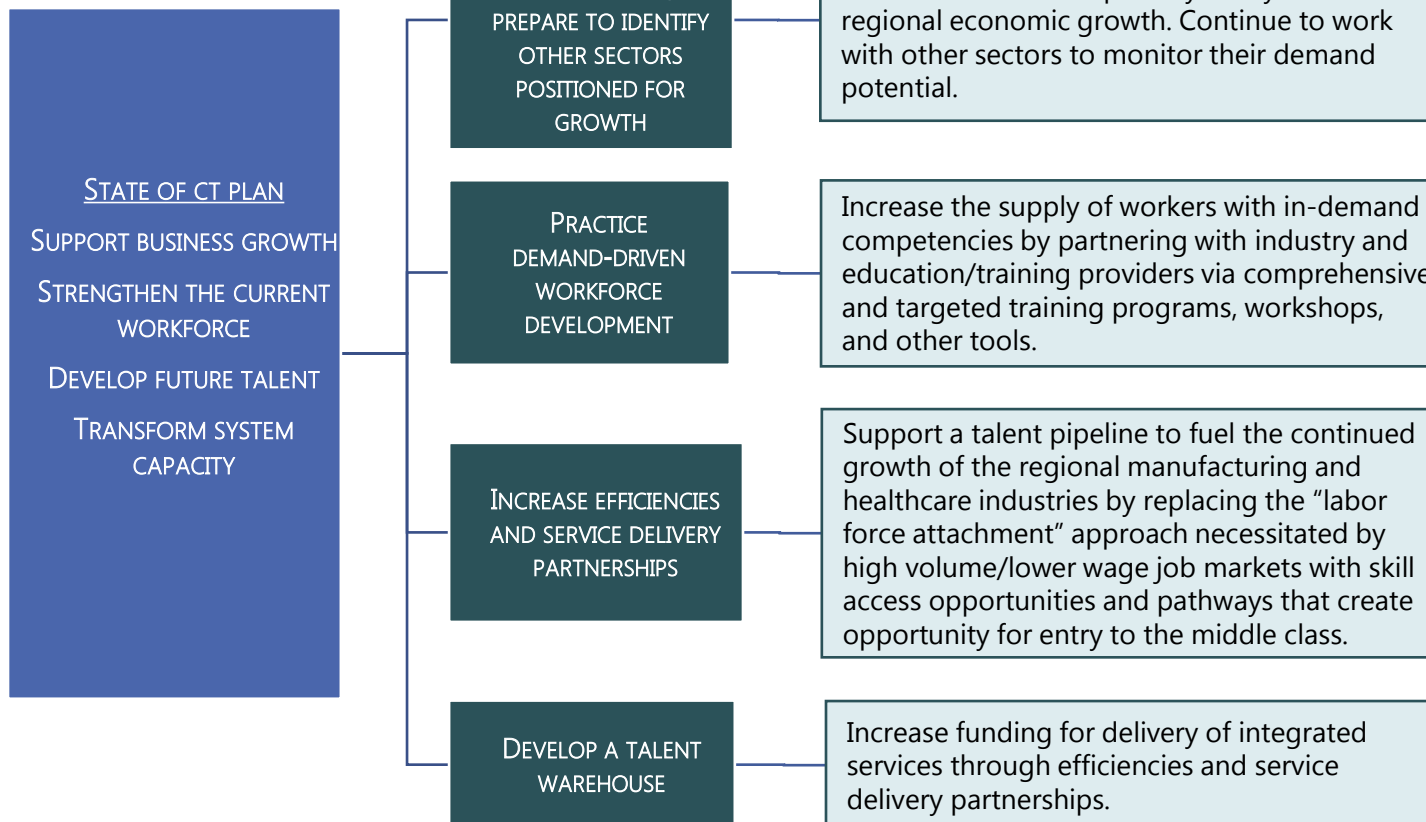


## 4.2.6 WORKFORCE DEVELOPMENT



The Eastern Connecticut Workforce Investment Board (EWIB), a non-profit agency mandated through the Federal Workforce Innovation and Opportunity Act (WIOA) of 2014, oversees a network of workforce-related programs and coordinates with the state Department of Labor for the operations of American Job Centers (AJCs) located throughout EWIB's 41-town service area (consisting of 442,000 residents and a labor force of 226,000). EWIB and its contractor partners serve more than 12,000 jobseekers annually at four regional AJCs. EWIB completed its new Comprehensive Plan in May, 2016. **The Vision and Goals outlined in the four-year plan are considered to be the Workforce Development goals for the region and will not be altered for inclusion in this CEDS.** The CEDS goals align with the State and EWIB workforce

goals in their focus on building the human capacity necessary to fill positions and create new businesses; on providing strategies to improve or create new systems that increase access to the resources and economic and educational opportunities outlined in the Workforce Plan; and on creating the culture of collaboration essential to the successful implementation of any regional plan. The chart to the left outlines the Workforce Goals contained within the 2016-2020 Plan.





### TASKS/METRICS

- Quarterly review LMI (*DOL, Monster, etc.*) the growth or decline of employment in these two sectors.
- Annually review growth/decline of employment in all sectors to determine new sectors that should be added.
- Develop an industry curriculum review process for new training programs.
- Demonstrate training need with job openings.
- Catalogue # of training program graduates in demand areas per year.
- Map pathways for growth in manufacturing & healthcare including occupations where training is available.
- Diversify funding sources to exceed grant performance & meet LMI.



Figure 58: Workers by Age, 2009-2014  
seCTer Region

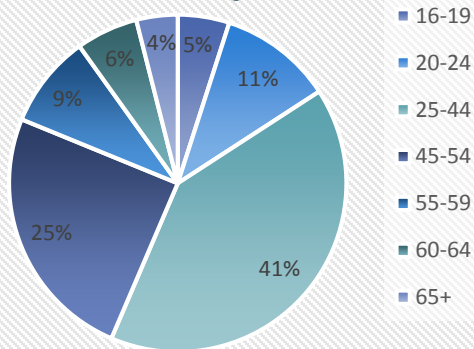


Figure 59: Workers by Ancestry,  
2009-2014 seCTer Region

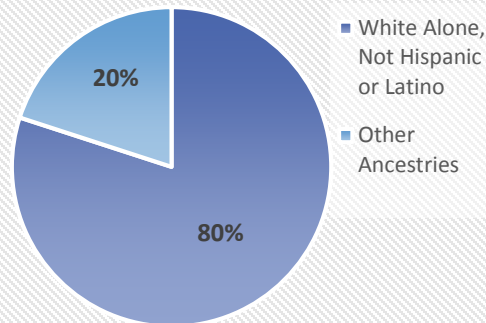
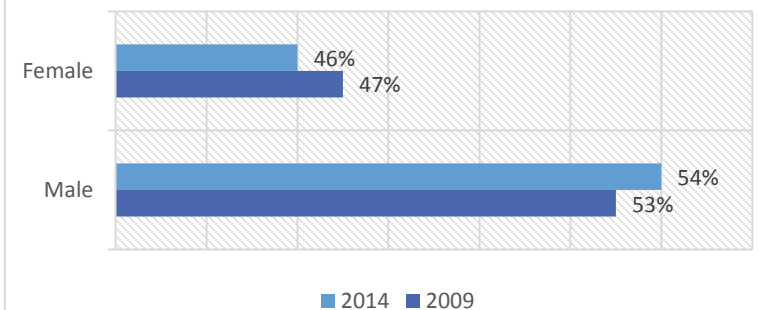


Figure 60: Workers by Gender, 2009-2014 seCTer Region



### Norwich-New London-Westerly(RI) Labor Market Area Employment

Seasonally Adjusted

Current Employment Statistics (1990 - present)

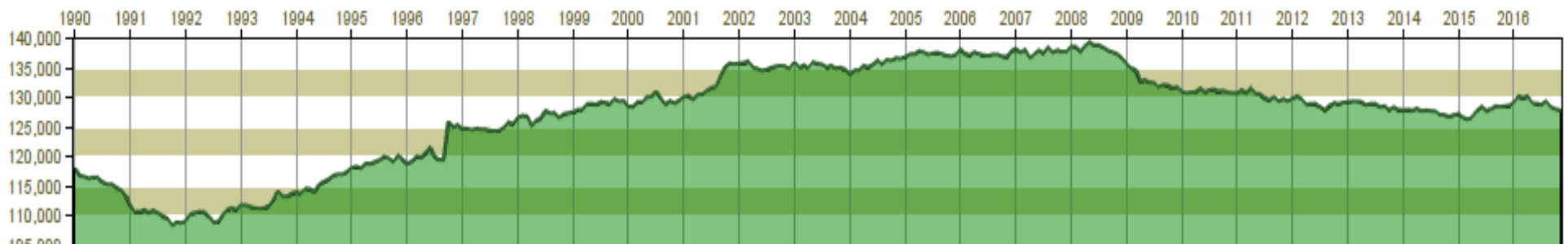


Figure 61: Seasonally Adjusted Employment: Norwich - New London - Westerly, RI LMA

© State of Connecticut Department of Labor - Office of Research

## 4.2.7 EDUCATION

*"Levels of funding for education must keep up with the new value of knowledge."<sup>ii</sup>*

Education is fundamental to our competitiveness, capacity for innovation, resilience, quality of life, and readiness. In the age of globalization and international trade, countries and their economies continually compete with each other. The same competition occurs at the state and regional level. Every region would like to hold competitive and comparative advantages over neighboring regions – and having a skilled productive workforce can provide that advantage. SECT is fortunate to have numerous public and private educational institutions that are actively engaged in preparing their students for success in the difficult economic climate that lingers in the region. As a region, developing innovative strategies that address inefficiencies and fuel new investment in education will be crucial to our ability to provide the types of programming that align with current realities. Also crucial is investment in STEM education and skills training, teaching entrepreneurship, and the critical thinking skills needed in the high tech world we live in.

Broad Goal 1: Invest in tools needed to transition from an educational system designed for the industrial age to a system designed for future business needs - one that focuses on preparedness, competency, design and creativity.

Objective 1: Create an all-inclusive talent supply that meets current and future industry needs.

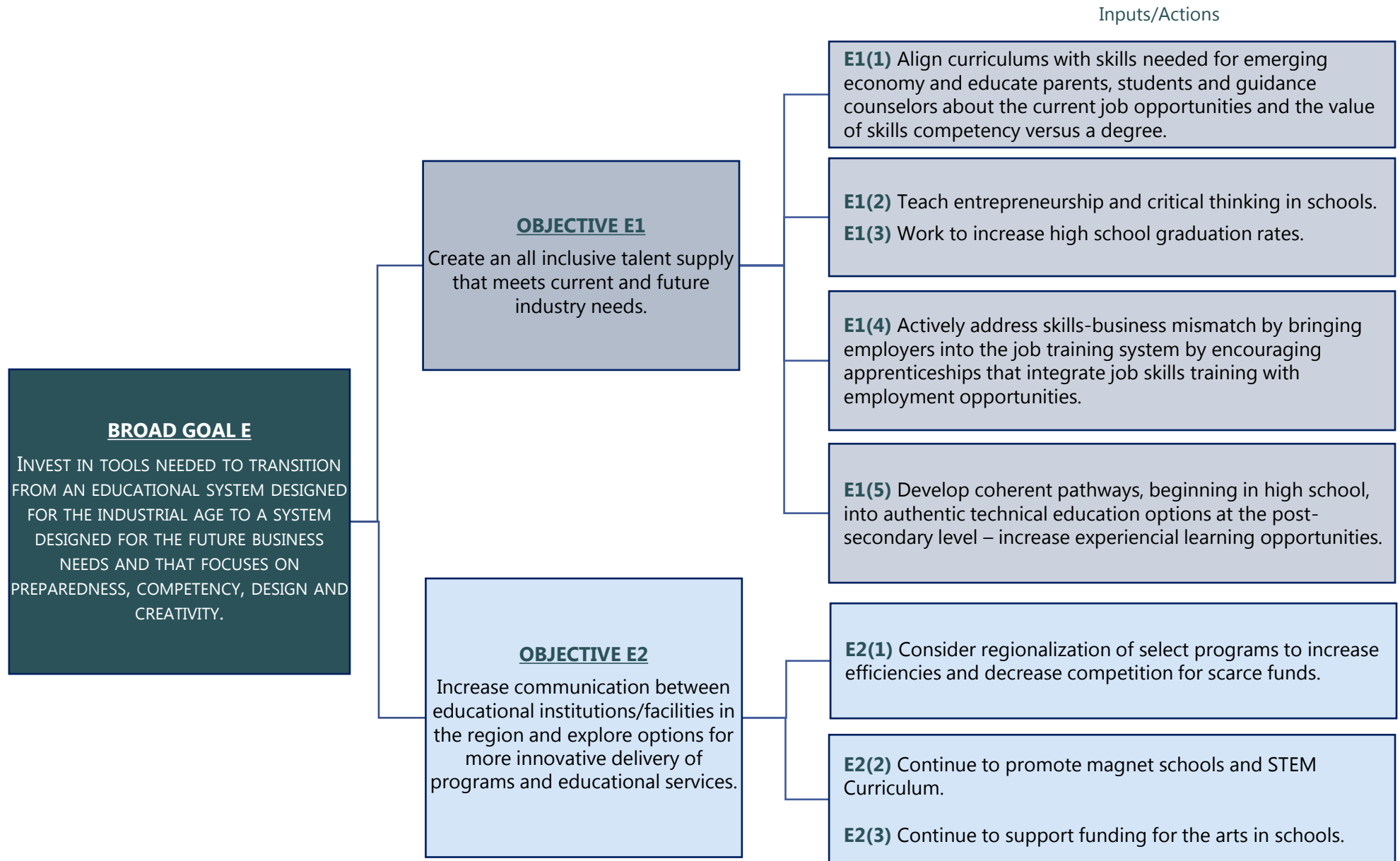
Objective 2: Increase communication between educational institutions/facilities in the region and explore options for more innovative delivery of programs and educational services.

*[Action: **2A(1)** Invest in education (subsidies) to improve curriculum and engage disadvantaged populations through alternative and/or affordable platforms for learning and teaching entrepreneurship to expedite personal resilience. a) Engage students earlier – focus on competency & skills development.]*

### WHAT WE HEARD

- The academic-dominated approach is not working. The common outcome of our current strategy—"bachelor's degree or bust"—is that a young person drops out of college at age 20 with no post-secondary credential, no skills, and no work experience, but a fair amount of debt.
- Skills competency vs degrees. Current Education system does not teach critical thinking which is critical in the new economy. Experiential learning is key.
- Curriculums are not in line with skills needed for emerging economy/current careers. Still designed to serve the Industrial Economy.







#### 4.3 ALIGNMENT WITH FEDERAL, STATE AND OTHER REGIONAL INITIATIVES

**This CEDS was informed by the 2015 Economic Development Strategy Plan (DECD), the 2013-2018 State Conservation and Development Policies (OPM) and Principles of Smart Growth as defined by Public Act 09-230.**

##### THE STATE OF CT DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT: 2015 ECONOMIC DEVELOPMENT STRATEGY PLAN GOALS AND OBJECTIVES

###### BUILD ON OUR ESTABLISHED STRENGTHS; INVEST IN GROWTH AND EMERGING SECTORS; DIFFERENTIATE BASED ON OUR KEY ASSETS:

###### **GROW THE BUSINESS CLUSTERS THAT DRIVE CONNECTICUT'S ECONOMY AND ENCOURAGE ENTREPRENEURIAL DEVELOPMENT**

1. Retain and grow our existing job base.
2. Facilitate ecosystems for industries to strengthen, connect, and collaborate.
3. Support entrepreneurial activities.
4. Build exports and encourage foreign direct investment.
5. Promote Connecticut's brand effectively nationally and internationally.

###### **ENSURE A WORKFORCE THAT MEETS THE NEEDS OF THE FUTURE**

1. Understand the future needs of employers.
2. With education partners, grow and enrich our talent pool and develop both short and long range initiatives to invest in our institutions around the key STEAM (science, technology, engineering, arts, and mathematics) skills.

###### **CREATE LIVABLE, VIBRANT COMMUNITIES**

1. Create vibrant neighborhoods through innovation, art, culture, and historic preservation.
2. Ensure quality housing at a broad range of prices.

###### **INVEST IN INFRASTRUCTURE AND SUPPORT SYSTEMS THAT WILL FOSTER BUSINESS GROWTH**

1. Continue to strategically invest in transportation infrastructure.
2. Work to reduce or offset the cost of energy while reducing greenhouse gas emissions.
3. Continue efforts to create a more responsive government that reforms the regulatory environment and makes it easier to do business in the state.
4. Encourage environmentally-friendly, modern, and resilient development.

##### THE STATE OF CT OFFICE OF POLICY MANAGEMENT CONSERVATION & DEVELOPMENT POLICIES: THE PLAN FOR CONNECTICUT 2013-2018 SIX GROWTH PRINCIPLES:

1. Redevelop and Revitalize Regional Centers and Areas with Existing or Currently Planned Physical Infrastructure.
2. Expand Housing Opportunities and Design Choices to Accommodate a Variety of Household Types and Needs.
3. Concentrate Development Around Transportation Nodes and Along Major Transportation Corridors to Support the Viability of Transportation Options.
4. Conserve and Restore the Natural Environment, Cultural and Historical Resources, and Traditional Rural Lands.
5. Protect and Ensure the Integrity of Environmental Assets Critical to Public Health and Safety.
6. Promote Integrated Planning Across all Levels of Government to Address Issues on a Statewide, Regional and Local Basis.



Marine Science Magnet High School, Groton

"PRINCIPLES OF SMART GROWTH" AS DEFINED BY PUBLIC ACT 09-230 MEANS STANDARDS AND OBJECTIVES THAT SUPPORT AND ENCOURAGE SMART GROWTH WHEN USED TO GUIDE ACTIONS AND DECISIONS, INCLUDING, BUT NOT LIMITED TO, STANDARDS AND CRITERIA FOR

- A. integrated planning or investment that coordinates tax, transportation, housing, environmental and economic development policies at the state, regional and local level;
- B. the reduction of reliance on the property tax by municipalities by creating efficiencies and coordination of services on the regional level while reducing inter-local competition for grand list growth;
- C. the redevelopment of existing infrastructure and resources, including, but not limited to brownfields and historic places;
- D. transportation choices that provide alternatives to automobiles, including rail, public transit, bikeways and walking, while reducing energy consumption;
- E. the development or preservation of housing affordable to households of varying income in locations proximate to transportation or employment centers or locations compatible with smart growth;
- F. concentrated, mixed-use, mixed income development proximate to transit nodes and civic, employment or cultural centers; and
- G. the conservation and protection of natural resources by (i) preserving open space, water resources, farmland, environmentally sensitive areas and historic properties, and (ii) furthering energy efficiency.



Early stages of renovation at Ponemah Mills, Taftville section of Norwich

#### 4.3.1 STATEMENT OF CONSISTENCY

Though the State Goals are understandably broader in nature, the 2017 CEDS for SECT aligns with all six State Growth Principles and OPM's Principles of Smart Growth and with the general aim of taking an asset-based approach to economic development. The CEDS goals and objectives encourage the need for regionalization and integrated planning; increasing local efficiencies and reducing competition for resources; increasing personal and economic mobility through expanded transportation choice and other livability measures; and prioritized infill and redevelopment in areas serviced by utilities and transportation and away from vulnerable or sensitive areas (environmental, historic, etc.).

STATE BROAD GOALS	2017 CEDS BROAD GOALS AND OBJECTIVES	
GROW THE BUSINESS CLUSTERS THAT DRIVE CONNECTICUT'S ECONOMY AND ENCOURAGE ENTREPRENEURIAL DEVELOPMENT	GOVERNANCE SYSTEMS AND STRUCTURES Achieve greater regional efficiency and sustainable fiscal stability.	Objectives in Goal 1 speak to reducing barriers to development to facilitate investment, leveraging our assets to empower regional development, and improving the business climate and achieving greater fiscal stability.
ENSURE A WORKFORCE THAT MEETS THE NEEDS OF THE FUTURE	RESILIENCE AND READINESS Build the capacity, systems and networks necessary to successfully and continuously adapt to future disruptions in the economy and create and support a more resilient economy.	Objectives related to Goals 2 and 3 address building the capacity and systems necessary to support entrepreneurship and providing the education and training to prepare the workforce for the existing and emerging economy.  This CEDS endorses the EWIB Four-year Workforce Development Plan and the goals and objectives contained within.
CREATE LIVABLE, VIBRANT COMMUNITIES	QUALITY OF LIFE Ensure every resident, existing and prospective business owner, employee, and visitor to SECT palpably feels our <i>Quality of Life</i> rooted in a strong <i>Sense of Place</i> , by recognizing, strengthening, and promoting our enviable regional assets, such that civic pride takes firm root.	Objectives in Goal 4 speak to the need to build a regional identity defined by our assets to create civic pride and receive the benefits associated with this regional alignment. Indices in Section 5 provide the framework for the development of strategies specifically aimed at increasing livability, health and well-being, affordability, mobility – all recognized as components of a vibrant economy.
INVEST IN INFRASTRUCTURE AND SUPPORT SYSTEMS THAT WILL FOSTER BUSINESS GROWTH	COMPETITIVENESS AND INNOVATION Reposition SECT Region as one Innovation Economy	Goals 2 and 3 address transforming our current systems and physical spaces, strengthening our infrastructure assets, and building a regional Innovation Ecosystem that will facilitate economic growth.





## SECTION 5

### IMPLEMENTATION AND EVALUATION

#### 5.1 PERFORMANCE MEASUREMENT

Perhaps one of the most important mechanisms needed to implement this plan is coordinated collaboration. seCTer envisions that the role of the Economic Development and Marketing Committee, with dedicated support from seCTer staff, is to facilitate meetings, workshops, and networking events aimed at engaging individuals and organizations in the implementation process. As referenced in Section 4, this implementation process will mirror the Collective Impact Approach, with the goal of facilitating the formation of “teams” or “coalitions” of individuals/organizations that intersect with a particular issue identified in this CEDS (or identified as being an issue that needs attention). This method has enjoyed some success since the adoption of the 2011 CEDS as reflected by the successful creation of the Southeastern CT Cultural Coalition and the Eastern Advanced Manufacturing Alliance (EAMA) both with missions specific to their industries that recognize the value of harnessing the collective energy of all partners, businesses, and/or assets through planning, workforce development, advocacy, and member education activities. The aim is to continue to encourage this formal type of coordinated and resourced alliance of public and private sector individuals and organizations/institutions – organized around a prioritized issue or specific segment of the economy, and aligned with the regional vision. These self-selecting teams would then take the lead in developing and implementing appropriate strategies to “solve the problem” and would be responsible for reporting actions and outcomes to be included in the semi-annual reports described below. Once the “teams” are formed, seCTer can turn its focus to the next CEDS objective or action to be implemented. In summary, seCTer will be the agency that oversees implementation of the CEDS. This includes the following:

- knowing where existing data sources and indices related to this plan reside, and capturing them;
- developing data and indices that do not currently exist that are reflective of our region;
- supporting the work of high functioning teams that are already in place working on projects related to the CEDS (e.g. EWIB, SCCC, SECHA, EAMA, SCCOG);
- helping to move groups forward that are working on projects related to the CEDS but that are facing barriers to success;
- creating and facilitating groups for projects that are not currently being addressed, or bringing together different groups that are working on the same issue but would have more success combining their efforts; and
- aligning local efforts to this regional plan, such that entities in this region come to accept and appreciate the CEDS as a vehicle by which all local efforts are aligned to shared goals for *the region*. The more we can get key constituents in the region comfortable with, and aware of, the CEDS’ regional strategies, the better outcomes will be.

Measuring the performance of the strategies and actions identified is also a vital step in any planning process. Measuring performance will help ensure that participants in the planning and implementation process are spending their time on high-value activities for which they are accountable (to self, organization, and elected officials), with a quantifiable return on investment (time, talent, capital) that will help justify future investment in the region. That said, performance measurement is difficult in economic development as the results of one's efforts are often not immediate and their impact not obvious.

## 5.2 METRICS AND REGIONAL INDICES

As emphasized in several sections of this CEDS, the economy has changed, and the role of the economic developer and the focus of strategic planning efforts have changed with it. Planning has become almost entirely performance-based whereby strategies and actions are expected to be data-driven and linked to specific, trackable and reportable metrics and performance measures. This plan is very high level, and specific actions related to strategies will continue to be refined going forward. Part of the goal of this CEDS is to establish a process or mechanism to monitor the condition of the Region's economy on an ongoing basis and to assess the effectiveness of ongoing and future economic development initiatives. seCTer, with input from its regional partners, will create a set of **Broad Regional Indices** each associated with a component identified by the CEDS Strategy Committee as being vital to a "vibrant economy." The information collected associated with the Broad Indices (and metrics) will be utilized as content for a formal *Annual – State of the Region Report* which will include and assessment of the success of regional initiatives on a broader basis than solely the CEDS objectives. This report will be prepared by seCTer staff with the assistance of the Economic Development and Marketing Committee for seCTer Board review and approval. Information will also be used for the required semi-annual EDA CEDS Status reports. The evaluation will also be used to modify activities or initiate new activities to meet the goals.

Each Regional Index is comprised of several sub-indices and associated metrics which are directly or indirectly linked to specific Inputs, Actions, Outputs, and Outcomes aligned with the goals and objectives articulated in Section 4. Each metric will be assigned a value that totaled, will form the regional index score that is meant to be generally indicative of the overall vitality of the region.

### Data Collection

seCTer understands that the value or accuracy of the *impact calculation* is directly related to the ability to access and track key data, inputs and outcomes from a variety of sources, and report it in a way that is consistent and valuable to our clients and partners. The mechanism to accomplish this measurement must involve a data collection process that is easy to maneuver and lends itself to easy reporting. Assigning responsibility for specific metrics to a particular person or organization responsible for a certain task will ensure greater accountability across Economic

#### BROAD REGIONAL INDICES

- LIVABILITY
- COMPETITIVENESS
- RESILIENCY
- QUALITY OF LIFE

**Inputs:** Resources such as money, staff time, and other items used to produce outputs and outcomes. Inputs indicate the amount of a particular resource that is actually used to produce a desired result.

**Activities:** The actions a program takes to achieve a particular result.

**Outputs:** The amounts of products created and services delivered in a reported period, such as number of training programs conducted, number of classes taught, or number of clients served.

**Outcomes:** Changes in knowledge, skills, attitudes, values, behavior, or conditions that indicate progress toward achieving the program's mission and objectives. Outcomes are linked to a program's overall mission.

Development and partner organizations in the region. It also helps to ensure completion of tasks associated with the particular metric. To this end, seCTer will explore the means available to provide this valuable service to the region.

*For the purposes of this CEDS, metrics were selected based on the availability of data and ease of access given the current resources available. As the system evolves, more economic indicators will be added and tracked. seCTer staff and the CEDS Implementation Committee will oversee all aspects of implementation and reporting and will work to acquire the necessary data tracking software and Content Management System to achieve this. The CEDS will be updated annually to reflect updated data and changes to strategies based on the new data.*

The Regional Indices and sub-indices with associated metrics are outlined below:



## Livability

Health & Wellbeing

- % Health Insured
- Crime Rates
- Access to BB Internet
- Availability & Quality of Healthcare Services - Providers per capita
- Morbidity/ Mortality Rates
- Acres open space/ Recreation per capita
- Food Security
- Health & Wellness Facilities



Affordability

- Median and Disposable Income
- Average Wages
- Housing Costs (and % of Income)
- % Home Ownership/Rental
- Housing Type Mix (%)
- Cost of Energy (fuel, electricity, etc.)
- % Living in Poverty
- % Unemployed
- Vacancy Rates and foreclosures
- % Affordable/subsidized Housing



Access and Mobility  
(to jobs, housing)

- Rail & Bus Service Availability
- Mode Share %
- Walkability Score
- Ridership on Public Transit/ Senior Transit
- Use of UBER or Rideshare
- Miles of Trails/Bikeways
- Commute Times/ Distances
- Traffic Delay Time/Road Grade



## Competitiveness

### Workforce

- Education Attainment & Occupations
- # and Graduates - Certificate Programs and Incubator Space
- Specialized Programs (e.g. ECO)
- Labor Force Age and Diversity
- Housing type & Availability
- State & Local Investment in WF Dev. programs
- # \$ Quality of Ed. Institutions/programs
- Student "Input/Export"

### Business Climate

- # Permits & Investment Value
- Ave. Approval Time (urban areas)
- Cost of Doing Business
- # New Businesses/Age of Businesses & #Stage 2
- Tax Rates/Mill Rates
- Per capita Lending (\$ from Alt. Lending)
- # EDPs and/or EDOs
- # & SF Incubator/Co-work space & # Graduates
- Available Inventory
- BB Capability & Reliability
- \$ Foreign Investment
- Hotel Occupancy

### Fiscal Health/ Sustainability

- Growth Grand List % Breakdown
- # Cost-sharing programs
- Mill Rates
- Bond Rating
- Debt per Capita
- Total VC investment
- Total spent on Capital Improv.
- Growth in # and total \$ of Federal and State Grants
- Per student Education cost
- Value of EZ and other Special Zones

### Specialized Services & Incentives

- Specialized Zones & Incentive Programs
- Free Business Assistance (# clients, hours counseling)
- #/Type Specialized Services
- SECTen & CURE Activity
- Innovation Ecosystem
- State Investment

### Population Growth & Diversity

- Population Growth
- % Foreign Born
- Millennial Attraction Retention
- Population Age
- Ancestry

## Resiliency

### Industry Diversification

- # New business
- Age of Business
- # Sole Proprietor vs #Corporate HQ
- Industry Cluster Profile
- Occupation Profile

### Disaster Preparedness

- # Emergency Response Programs
- # Businesses w/ Recovery Plan
- # Towns with Disaster Ordinance in Place
- # & Length of Utility Outages
- Land Use Regulations in Place to Address Hazard Mitigation
- # Structures in Flood Zone
- \$ Damage from Extreme Weather Events
- # Energy Generation Facilities

### Adaptability

- Towns with Flexible Zoning Regulations
- SF Flex Space
- SF Available Shovel Ready Sites
- # Collaborative Initiatives and Cost-sharing (Regional & Inter-municipal)

### Innovation

- # and SF of Incubator Space
- # Graduates from Incubators
- # New Patents
- # Start-ups and Stage 2 Businesses
- Venture Capital
- \$ Angel Investment
- # New Partnerships/ Collaborations
- YP Memberships

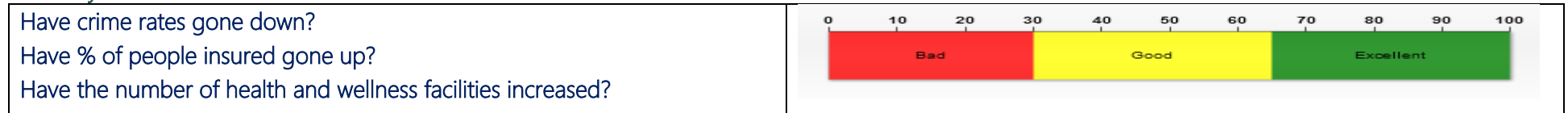


### 5.3 SCORING AND REPORTING

The 2017 CEDS is the baseline from which the region's economic development activities will be reported. This is meant to be a nimble, accountable plan that is able to evolve in order to be responsive to the rapidly changing factors impacting the region's economy. As discussed above, seCTer staff and partners recognize that there is significant data development work necessary to truly evaluate whether the "needle has been moved" with respect to vibrancy.

Initially, we will give a very general progress rating (shown below as an example for a portion of the Livability Index) and work toward a much more detailed analysis of the effectiveness of our strategies based on our access to data and regional participation with data collection efforts pertaining to local activity. Initial implementation meetings will include discussions as to visual representations of progress that are most meaningful and useful for the stakeholders.

#### Livability



## 5.4 CURRENT AND ONGOING PROJECTS ALIGNED WITH 2017 REGIONAL GOALS

To address concerns raised during the review and comment period for the 2017 CEDS, ongoing projects and those in the advanced planning stages that align with the goals and objectives of this CEDS will be identified and attached as Addendum A. As strategies and tangible projects directly related to articulated plan objectives are developed they will be added to the list. seCTer's role will be to maintain the project list and monitor any progress. seCTer will not assign tasks to organizations to ensure implementation of projects identified. The municipality or organization that submits the project will be responsible for implementation and for providing updates for use in semi-annual progress reports required by the EDA and for use in an Annual "State of the Region" report described above. seCTer staff, with the assistance from the Board of Director's and the CEDS Implementation Committee, does have responsibility for number of actions identified in the plan, particularly associated with facilitating discussions and cross-sector collaboration, developing a regional brand and marketing strategy, and acquiring the tools necessary to provide and monitor data related to the indices and industry clusters.



## 5.5 CONCLUSION

Stakeholders have expressed a need for a more coordinated and collaborative approach to achieve common goals and efficiencies necessary for all towns, businesses, and organizations to thrive. This CEDS reflects this cry for coordination and collaboration. Previous CEDS focused heavily on municipal and business 'tactical' projects without fully articulating any *regional* strategy that they contributed to. This CEDS presents a regional strategic plan that reflects the collective input, desire, and recognition of the need to nurture and create a diverse, inclusive economy for Southeastern Connecticut.

ALIGN

COLLABORATE

FACILITATE

There are three concurrent but distinct actions taking place in the 2017 CEDS that seCTer will be accountable to and responsible for.

Action 1: Getting stakeholders aligned behind one regional vision, and one regional identity - and understanding the benefit of operating as one united region.

This alignment will lead to greater efficiency and less overlap of services and competition for resources. In the global economy, the region is the economic unit. By promoting the assets of the entire region, we can achieve greater economies of scale which increases our competitiveness. Regional alignment and messaging will help us change the story of Southeastern CT and attract investment.

Action 2: Creating the culture of collaboration, building capacity, and developing new systems and strengthening networks necessary to compete in the new highly connected economy.

The new economy is defined by constant connection and collaboration and the sharing of information. Innovative solutions are born from continual cross-sector collaborations. seCTer, as the regional economic development agency, will facilitate these cross-sector collaborations with the further aim of inspiring groups of stakeholders to then begin to work together to develop and implement strategies directly



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Community leaders and stakeholders must be supportive of and willing to participate in efforts to convene stakeholders, guided by seCTer. The significant effort to elicit public input for this plan was intended to assist buy-in among the region’s key economic development stakeholders. This process of collaborative problem solving is the first step in developing a culture of continuous innovation and in building the capacities for a new type of economic development involving as many citizens as possible with distributive intelligence.

As we navigate the challenges caused by the historic convergence of three separate and distinct economic development paradigms, and embrace a new more inclusive process of developing strategies, it will become clear that collaboration is the key to innovation. This CEDS embodies this inclusivity by recognizing the efforts and expertise of our key regional and state partners and by being the repository of, and aligning with, their plans and goals and principles. SECT is fortunate to have motivated, passionate professionals, residents, stakeholders, and officials who recognize the competitive advantages that our *collective* assets and enviable location provide. They also understand the benefit of telling a new story for SECT that highlights these advantages. Understanding and articulating our strengths and weaknesses from a regional, place-based perspective will provide a much needed context to guide local efforts. Likewise, understanding how individual efforts relate to one, shared regional vision will inspire and empower continued action and stakeholder engagement.

Strong legacy institutions and industries have driven the local economy of SECT for decades, resulting in an economy that ebbs and flows with the changes in these businesses. Setting up the systems and networks to support entrepreneurship and innovation, related to both existing and new industries, and practicing cross-sector collaboration will allow a more adaptable, flexible, and nimble economy to organically form in SECT. seCTer and other key organizations must continue to build their own capacity in order to be catalysts for ongoing conversations focused on aligning existing capacities and creating new capabilities to attract the talent and investment that will benefit all who visit, work or live in SECT.

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## SECTION 5

### IMPLEMENTATION AND EVALUATION

#### 5.1 PERFORMANCE MEASUREMENT

Perhaps one of the most important mechanisms needed to implement this plan is coordinated collaboration. seCTer envisions that the role of the Economic Development and Marketing Committee, with dedicated support from seCTer staff, is to facilitate meetings, workshops, and networking events aimed at engaging individuals and organizations in the implementation process. As referenced in Section 4, this implementation process will mirror the Collective Impact Approach, with the goal of facilitating the formation of “teams” or “coalitions” of individuals/organizations that intersect with a particular issue identified in this CEDS (or identified as being an issue that needs attention). This method has enjoyed some success since the adoption of the 2011 CEDS as reflected by the successful creation of the Southeastern CT Cultural Coalition and the Eastern Advanced Manufacturing Alliance (EAMA) both with missions specific to their industries that recognize the value of harnessing the collective energy of all partners, businesses, and/or assets through planning, workforce development, advocacy, and member education activities. The aim is to continue to encourage this formal type of coordinated and resourced alliance of public and private sector individuals and organizations/institutions – organized around a prioritized issue or specific segment of the economy, and aligned with the regional vision. These self-selecting teams would then take the lead in developing and implementing appropriate strategies to “solve the problem” and would be responsible for reporting actions and outcomes to be included in the semi-annual reports described below. Once the “teams” are formed, seCTer can turn its focus to the next CEDS objective or action to be implemented. In summary, seCTer will be the agency that oversees implementation of the CEDS. This includes the following:

- knowing where existing data sources and indices related to this plan reside, and capturing them;
- developing data and indices that do not currently exist that are reflective of our region;
- supporting the work of high functioning teams that are already in place working on projects related to the CEDS (e.g. EWIB, SCCC, SECHA, EAMA, SCCOG);
- helping to move groups forward that are working on projects related to the CEDS but that are facing barriers to success;
- creating and facilitating groups for projects that are not currently being addressed, or bringing together different groups that are working on the same issue but would have more success combining their efforts; and
- aligning local efforts to this regional plan, such that entities in this region come to accept and appreciate the CEDS as a vehicle by which all local efforts are aligned to shared goals for *the region*. The more we can get key constituents in the region comfortable with, and aware of, the CEDS’ regional strategies, the better outcomes will be.

Measuring the performance of the strategies and actions identified is also a vital step in any planning process. Measuring performance will help ensure that participants in the planning and implementation process are spending their time on high-value activities for which they are accountable (to self, organization, and elected officials), with a quantifiable return on investment (time, talent, capital) that will help justify future investment in the region. That said, performance measurement is difficult in economic development as the results of one's efforts are often not immediate and their impact not obvious.

## 5.2 METRICS AND REGIONAL INDICES

As emphasized in several sections of this CEDS, the economy has changed, and the role of the economic developer and the focus of strategic planning efforts have changed with it. Planning has become almost entirely performance-based whereby strategies and actions are expected to be data-driven and linked to specific, trackable and reportable metrics and performance measures. This plan is very high level, and specific actions related to strategies will continue to be refined going forward. Part of the goal of this CEDS is to establish a process or mechanism to monitor the condition of the Region's economy on an ongoing basis and to assess the effectiveness of ongoing and future economic development initiatives. seCTer, with input from its regional partners, will create a set of **Broad Regional Indices** each associated with a component identified by the CEDS Strategy Committee as being vital to a "vibrant economy." The information collected associated with the Broad Indices (and metrics) will be utilized as content for a formal *Annual – State of the Region Report* which will include and assessment of the success of regional initiatives on a broader basis than solely the CEDS objectives. This report will be prepared by seCTer staff with the assistance of the Economic Development and Marketing Committee for seCTer Board review and approval. Information will also be used for the required semi-annual EDA CEDS Status reports. The evaluation will also be used to modify activities or initiate new activities to meet the goals.

Each Regional Index is comprised of several sub-indices and associated metrics which are directly or indirectly linked to specific Inputs, Actions, Outputs, and Outcomes aligned with the goals and objectives articulated in Section 4. Each metric will be assigned a value that totaled, will form the regional index score that is meant to be generally indicative of the overall vitality of the region.

### Data Collection

seCTer understands that the value or accuracy of the *impact calculation* is directly related to the ability to access and track key data, inputs and outcomes from a variety of sources, and report it in a way that is consistent and valuable to our clients and partners. The mechanism to accomplish this measurement must involve a data collection process that is easy to maneuver and lends itself to easy reporting. Assigning responsibility for specific metrics to a particular person or organization responsible for a certain task will ensure greater accountability across Economic

#### BROAD REGIONAL INDICES

- LIVABILITY
- COMPETITIVENESS
- RESILIENCY
- QUALITY OF LIFE

**Inputs:** Resources such as money, staff time, and other items used to produce outputs and outcomes. Inputs indicate the amount of a particular resource that is actually used to produce a desired result.

**Activities:** The actions a program takes to achieve a particular result.

**Outputs:** The amounts of products created and services delivered in a reported period, such as number of training programs conducted, number of classes taught, or number of clients served.

**Outcomes:** Changes in knowledge, skills, attitudes, values, behavior, or conditions that indicate progress toward achieving the program's mission and objectives. Outcomes are linked to a program's overall mission.



Development and partner organizations in the region. It also helps to ensure completion of tasks associated with the particular metric. To this end, seCTer will explore the means available to provide this valuable service to the region.

*For the purposes of this CEDS, metrics were selected based on the availability of data and ease of access given the current resources available. As the system evolves, more economic indicators will be added and tracked. seCTer staff and the CEDS Implementation Committee will oversee all aspects of implementation and reporting and will work to acquire the necessary data tracking software and Content Management System to achieve this. The CEDS will be updated annually to reflect updated data and changes to strategies based on the new data.*

The Regional Indices and sub-indices with associated metrics are outlined below:



## Livability

Health & Wellbeing

- % Health Insured
- Crime Rates
- Access to BB Internet
- Availability & Quality of Healthcare Services - Providers per capita
- Morbidity/ Mortality Rates
- Acres open space/ Recreation per capita
- Food Security
- Health & Wellness Facilities



Affordability

- Median and Disposable Income
- Average Wages
- Housing Costs (and % of Income)
- % Home Ownership/Rental
- Housing Type Mix (%)
- Cost of Energy (fuel, electricity, etc.)
- % Living in Poverty
- % Unemployed
- Vacancy Rates and foreclosures
- % Affordable/subsidized Housing



Access and Mobility  
(to jobs, housing)

- Rail & Bus Service Availability
- Mode Share %
- Walkability Score
- Ridership on Public Transit/ Senior Transit
- Use of UBER or Rideshare
- Miles of Trails/Bikeways
- Commute Times/ Distances
- Traffic Delay Time/Road Grade



## Competitiveness

### Workforce

- Education Attainment & Occupations
- # and Graduates - Certificate Programs and Incubator Space
- Specialized Programs (e.g. ECO)
- Labor Force Age and Diversity
- Housing type & Availability
- State & Local Investment in WF Dev. programs
- # \$ Quality of Ed. Institutions/programs
- Student "Input/Export"



### Business Climate

- # Permits & Investment Value
- Ave. Approval Time (urban areas)
- Cost of Doing Business
- # New Businesses/Age of Businesses & #Stage 2
- Tax Rates/Mill Rates
- Per capita Lending (\$ from Alt. Lending)
- # EDPs and/or EDOs
- # & SF Incubator/Co-work space & # Graduates
- Available Inventory
- BB Capability & Reliability
- \$ Foreign Investment
- Hotel Occupancy



### Fiscal Health/ Sustainability

- Growth Grand List % Breakdown
- # Cost-sharing programs
- Mill Rates
- Bond Rating
- Debt per Capita
- Total VC investment
- Total spent on Capital Improv.
- Growth in # and total \$ of Federal and State Grants
- Per student Education cost
- Value of EZ and other Special Zones



### Specialized Services & Incentives

- Specialized Zones & Incentive Programs
- Free Business Assistance (# clients, hours counseling)
- #/Type Specialized Services
- SECTen & CURE Activity
- Innovation Ecosystem
- State Investment



### Population Growth & Diversity

- Population Growth
- % Foreign Born
- Millennial Attraction Retention
- Population Age
- Ancestry



## Resiliency

### Industry Diversification

- # New business
- Age of Business
- # Sole Proprietor vs #Corporate HQ
- Industry Cluster Profile
- Occupation Profile



### Disaster Preparedness

- # Emergency Response Programs
- # Businesses w/ Recovery Plan
- # Towns with Disaster Ordinance in Place
- # & Length of Utility Outages
- Land Use Regulations in Place to Address Hazard Mitigation
- # Structures in Flood Zone
- \$ Damage from Extreme Weather Events
- # Energy Generation Facilities



### Adaptability

- Towns with Flexible Zoning Regulations
- SF Flex Space
- SF Available Shovel Ready Sites
- # Collaborative Initiatives and Cost-sharing (Regional & Inter-municipal)



### Innovation

- # and SF of Incubator Space
- # Graduates from Incubators
- # New Patents
- # Start-ups and Stage 2 Businesses
- Venture Capital
- \$ Angel Investment
- # New Partnerships/ Collaborations
- YP Memberships

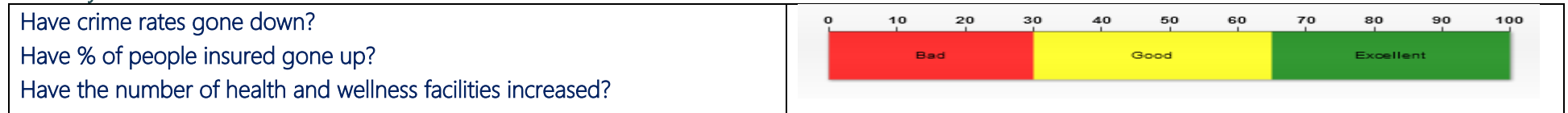


### 5.3 SCORING AND REPORTING

The 2017 CEDS is the baseline from which the region's economic development activities will be reported. This is meant to be a nimble, accountable plan that is able to evolve in order to be responsive to the rapidly changing factors impacting the region's economy. As discussed above, seCTer staff and partners recognize that there is significant data development work necessary to truly evaluate whether the "needle has been moved" with respect to vibrancy.

Initially, we will give a very general progress rating (shown below as an example for a portion of the Livability Index) and work toward a much more detailed analysis of the effectiveness of our strategies based on our access to data and regional participation with data collection efforts pertaining to local activity. Initial implementation meetings will include discussions as to visual representations of progress that are most meaningful and useful for the stakeholders.

#### Livability



## 5.4 CURRENT AND ONGOING PROJECTS ALIGNED WITH 2017 REGIONAL GOALS

To address concerns raised during the review and comment period for the 2017 CEDS, ongoing projects and those in the advanced planning stages that align with the goals and objectives of this CEDS will be identified and attached as Addendum A. As strategies and tangible projects directly related to articulated plan objectives are developed they will be added to the list. seCTer's role will be to maintain the project list and monitor any progress. seCTer will not assign tasks to organizations to ensure implementation of projects identified. The municipality or organization that submits the project will be responsible for implementation and for providing updates for use in semi-annual progress reports required by the EDA and for use in an Annual "State of the Region" report described above. seCTer staff, with the assistance from the Board of Director's and the CEDS Implementation Committee, does have responsibility for number of actions identified in the plan, particularly associated with facilitating discussions and cross-sector collaboration, developing a regional brand and marketing strategy, and acquiring the tools necessary to provide and monitor data related to the indices and industry clusters.



## 5.5 CONCLUSION

Stakeholders have expressed a need for a more coordinated and collaborative approach to achieve common goals and efficiencies necessary for all towns, businesses, and organizations to thrive. This CEDS reflects this cry for coordination and collaboration. Previous CEDS focused heavily on municipal and business 'tactical' projects without fully articulating any *regional* strategy that they contributed to. This CEDS presents a regional strategic plan that reflects the collective input, desire, and recognition of the need to nurture and create a diverse, inclusive economy for Southeastern Connecticut.

ALIGN

COLLABORATE

FACILITATE

There are three concurrent but distinct actions taking place in the 2017 CEDS that seCTer will be accountable to and responsible for.

Action 1: Getting stakeholders aligned behind one regional vision, and one regional identity - and understanding the benefit of operating as one united region. This alignment will lead to greater efficiency and less overlap of services and competition for resources. In the global economy, the region is the economic unit. By promoting the assets of the entire region, we can achieve greater economies of scale which increases our competitiveness. Regional alignment and messaging will help us change the story of Southeastern CT and attract investment.

Action 2: Creating the culture of collaboration, building capacity, and developing new systems and strengthening networks necessary to compete in the new highly connected economy. The new economy is defined by constant connection and collaboration and the sharing of information. Innovative solutions are born from continual cross-sector collaborations. seCTer, as the regional economic development agency, will facilitate these cross-sector collaborations with the further aim of inspiring groups of stakeholders to then begin to work together to develop and implement strategies directly



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