



Bethany

Branford

East Haven

Guilford

Hamden

Madison

Meriden

Millford

New Haven

North Branford

North Haven

Orange

Wallington

West Haven

Woodbridge

Plan of Conservation and Development

**South Central Region
June 2008**

Amended: July 2009



Bethany - Branford - East Haven - Guilford - Hamden - Madison - Meriden - Milford
New Haven - North Branford - North Haven - Orange - Wallingford - West Haven - Woodbridge

SOUTH CENTRAL REGIONAL COUNCIL OF GOVERNMENTS

Judy Gott, Executive Director

To: South Central Connecticut Municipal Planning Commissions
South Central Connecticut Chief Elected Officials
South Central Connecticut City and Town Managers
South Central City and Town Clerks
State Office of Policy and Management, Robert L. Genuario - Secretary

From: First Selectwoman Derrylyn Gorski, Chair

Date: June 25, 2008

Subject: Plan of Conservation and Development – South Central Region

Please find enclosed the Plan of Conservation and Development for the South Central Region adopted on June 25, 2008. The Region was required per CGS 8-35 (a-c) to update its Plan of Conservation and Development by July 1, 2008 and include new chapters on agriculture, potential locations for transit-oriented development and mixed use, and consistency with the State's Plan.

The Plan was developed through a two year process that included conducting extensive public outreach, developing a draft with the Regional Planning Commission and the region's planning staff, and soliciting and incorporating public comments for the creation of the final draft. The Region's Plan will from this point forward be updated every ten years.

Like the Region's previous Plan that was adopted in 2000, this Plan celebrates the diversity of the region's communities that range from urban to suburban to rural and seeks to improve upon the individual characteristics that make these places unique. The Plan provides a general regional policy guide for conservation and development that balances higher density development in the region's existing employment, transportation, and housing corridors with context-sensitive reinvestment in historic town centers and villages while also protecting the open spaces, forests, and agricultural lands that contribute to the region's high quality of life and sense of place.

A handwritten signature in black ink, appearing to read "Derrylyn Gorski", is written over a horizontal line.

The South Central Regional Plan of Conservation and Development is a general guide for land use conservation and development for the 15 town region comprised of Bethany, Branford, East Haven, Guilford, Hamden, Madison, Meriden, Milford, New Haven, North Branford, North Haven, Orange, Wallingford, West Haven, and Woodbridge. The chapters and content of this regional document are determined by State Statute (CGS 8-35a) and must be consistent with the State's Plan of Conservation and Development. Once adopted, this document must be updated every 10 years. This plan was developed and reviewed extensively with planning staff in each town and by each town's representative to the Regional Planning Commission (RPC) in coordination with their chief elected officials. In addition to the development of this plan, SCRCOG is indebted to the monthly contributions of the RPC in reviewing local land use policies and projects.

The RPC members and Chief Elected Officials for each municipality are as follows:

	<u><i>Elected Officials</i></u>	<u><i>RPC Representatives</i></u>
<i>Bethany</i>	First Selectwoman Derrylyn Gorski	Sharon Huxley
<i>Branford</i>	First Selectman Anthony DaRos	Charles Andres, <i>Chair</i>
<i>East Haven</i>	Mayor April Capone Almon	<i>Vacant</i>
<i>Guilford</i>	First Selectman Carl Balastracci	Rudy Horowitz
<i>Hamden</i>	Mayor Craig Henrici	Edward Grant Robert Roscow, <i>Alternate</i>
<i>Madison</i>	First Selectman Al Goldberg	Neil Payne Christopher Traugh, <i>Alternate</i>
<i>Meriden</i>	Mayor Mark Benigni	Daniel Brunet, <i>Secretary</i> Dominic Caruso, <i>Alternate</i>
<i>Milford</i>	Mayor James Richetelli, Jr.	Kim Rose Kathy Patterson, <i>Alternate</i>
<i>New Haven</i>	Mayor John DeStefano, Jr.	Karyn Gilvarg
<i>North Branford</i>	Mayor Michael Doody	Dennis Hrabchak, <i>Vice-Chair</i>
<i>North Haven</i>	First Selectwoman Janet McCarty	Brian Cummings James Giuletti, <i>Alternate</i>
<i>Orange</i>	First Selectman James Zeoli	Paul Kaplan
<i>Wallingford</i>	Mayor William Dickinson, Jr.	James Fitzsimmons
<i>West Haven</i>	Mayor John Picard	John Panza
<i>Woodbridge</i>	First Selectman Edward Sheehy	Peggy Rubens-Duhl Jeff Kaufman, <i>Alternate</i>

Plan of Conservation and Development: South Central Region

Amendments adopted by the Regional Planning Commission and the SCRCOG Board: July 2009

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<i>Branford</i>	First Selectman Anthony DaRos	Charles Andres
<i>East Haven</i>	Mayor April Capone Almon	<i>Vacant</i>
<i>Guilford</i>	First Selectman Carl Balestracci, Jr.	Michael Scott
<i>Hamden</i>	Mayor Craig Henrici	Ralph Riccio
<i>Madison</i>	First Selectman Alfred Goldberg	Christopher Traugh
<i>Meriden</i>	Mayor Michael Rohde	Daniel Brunet, <i>Chair</i>
<i>Milford</i>	Mayor James Richetelli, Jr.	Kim Rose
<i>New Haven</i>	Mayor John DeStefano, Jr.	Karyn Gilvarg
<i>North Branford</i>	Mayor Michael Doody	Rose Angeloni
<i>North Haven</i>	First Selectwoman Janet McCarty	Brian Cummings, <i>Secretary</i>
<i>Orange</i>	First Selectman James Zeoli	Paul Kaplan
<i>Wallingford</i>	Mayor William Dickinson, Jr.	James Fitzsimmons
<i>West Haven</i>	Mayor John Picard	John Panza
<i>Woodbridge</i>	First Selectman Edward Sheehy	Peggy Rubens-Duhl, Vice-Chair

Table of Contents: Revised; Appendices (including SCRCOG Resolution, Amendments 7/09)

Map Index: Added; Appendices

- Bethany Sewer Service Map
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Public Utilities and Energy Conservation: Revision to text in the Sewer Service section and a revised Sewer Service Area Map. Existing Sewer Service Areas were updated and Future Sewer Service Areas were represented.

Appendix: Added Text; “Individual Municipal Sewer Service Area Maps,” The Corresponding maps for the municipalities in the South Central Region will be represented in the Appendix.

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Foreward

Development decisions depend on a host of factors: market demand for a given use; available infrastructure; tax policy; private controls; and, not the least, planning, zoning, and other land use regulations. While developers evaluate individual projects based on the economics of the marketplace, municipal regulators must look beyond any given project when planning for the overall appropriate development within their towns. In such planning, municipal land use officials must establish and coordinate plans for economic development, housing, transportation, open space, public facilities, public safety, emergency services, and other relevant subjects.

Home rule is now and likely will always be a foundation of Connecticut government. Nevertheless, we recognize the necessity of a regional perspective. An employer's decision to hire or fire workers in one town may affect the housing market in another town. Our working, shopping, and recreational activities typically extend beyond the reach of our individual towns. Thus, our perspective as local planning and zoning officials is wider and more encompassing when we make our local decisions within the context of a regional perspective.

The Regional Plan described in these pages contains a wealth of factual and policy information on subject matters affecting planning decisions for our region. We thank SCRCOG's Regional Planner Emmeline Harrigan for her diligent efforts in compiling the information and drafting the Plan itself. We fully expect this Plan will be a valuable resource for both public officials and private citizens in our region over the next decade.



Charles Andres
Chairman, South Central Regional Planning Commission

Introduction

The South Central Region was established in 1960 and represents 15 municipalities in the Greater New Haven area. These include Bethany, Branford, East Haven, Guilford, Hamden, Madison, Meriden, Milford, New Haven, North Branford, North Haven, Orange, Wallingford, West Haven, and Woodbridge. The region is located at the juncture of the state's primary east-west and north-south corridors with easy commuting distance to most of the state including Fairfield County's job centers and the State Capital's legislative activities. The region's southern boundary is Long Island Sound.



The South Central Regional Council of Governments (SCRCOG)

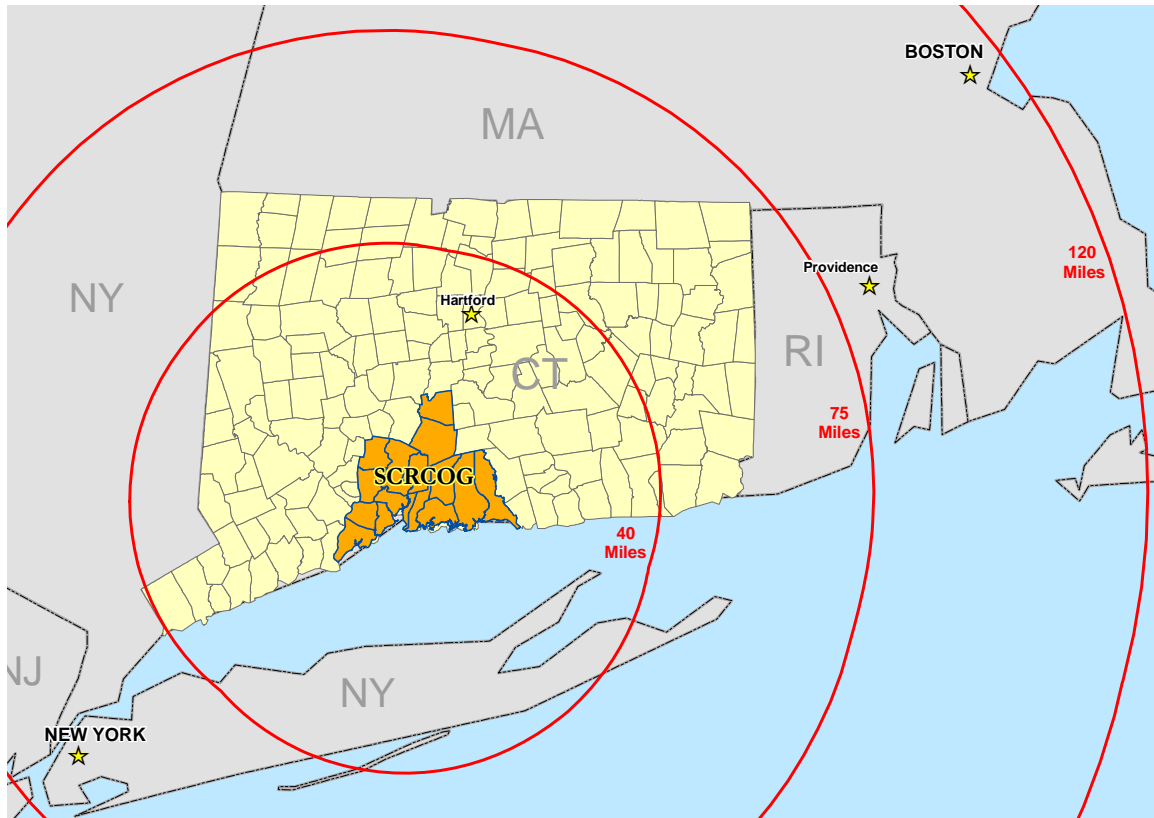
Originally a Regional Planning Agency, the South Central Region became a Council of Governments in 1985 allowing for direct management and decision making by the region's chief elected officials. SCRCOG functions as a transportation planning and coordination agency for the region and through the appointment of local land use commissioners to a Regional Planning Commission - as an advisory regional land use agency coordinating regional open space, housing, and other land use efforts.

In 2007-2008 the update to the *Plan of Conservation and Development (POCD)* has fortuitously coincided with updates to both the *Long Range Transportation Plan (LRTP)* and the region's *Comprehensive Economic Development Strategy (CEDS)* being completed by the Region's economic development arm – the Regional Growth Partnership (RGP). This timing has allowed the region the unique opportunity to discuss Transportation, Economic Development, and Land Use comprehensively. The LRTP is an update to the region's twenty-eight year multimodal transportation plan (2007-2035) that includes roadway, rail, bus, pedestrian, bicycle, airport, safety, and air quality improvements. The CEDS is an action plan for the region's economy that identifies strengths and weaknesses in our economy, provides a concrete plan for creating jobs, prioritizes infrastructure needs, and identifies strategies for improving the region's quality of life.

Similar to each Town's *Plan of Conservation & Development (POCD)*, the region's POCD is a long range land use planning document that evaluates existing conditions and identifies physical areas for growth and preservation. The last Regional Plan of Conservation and Development, *A Vision for the Future*, was published in 2000 and expressed strong goals for reinvestment of the region's existing corridors while limiting sprawl and further public utility expansion, seeking ways to reinvest in transit systems in lieu of additional highway investment and expansion, and preserving and expanding the region's open space network and regional trail facilities. Since that plan, the state's legislature has provided additional requirements¹ for the POCD to include chapters on Transit-Oriented Development (TODs), consistency with the state plan's growth management principles, a new evaluation of the region's agriculture, and policies that improve the environmental quality of Long Island Sound as mandated by State Statute.

This updated POCD builds on the existing solid policy foundation of strong regional centers - providing updated regional data, a clear statement of regional goals and potential implementation strategies in each of the chapters, and information for federal and state funding sources that may be able to assist in achieving local and regional implementation strategies. Our region's easy proximity to New York, Hartford, and Boston, and Fairfield County's expanding job opportunities - combined with quality education systems and higher education facilities, ample cultural activities and comparatively modest home prices has made the South Central region particularly desirable in the last 5-6 years as seen by the acceleration in home prices.

¹ CT General Statute, Public Act 07-239, An Act Concerning Responsible Growth, Section 6a.

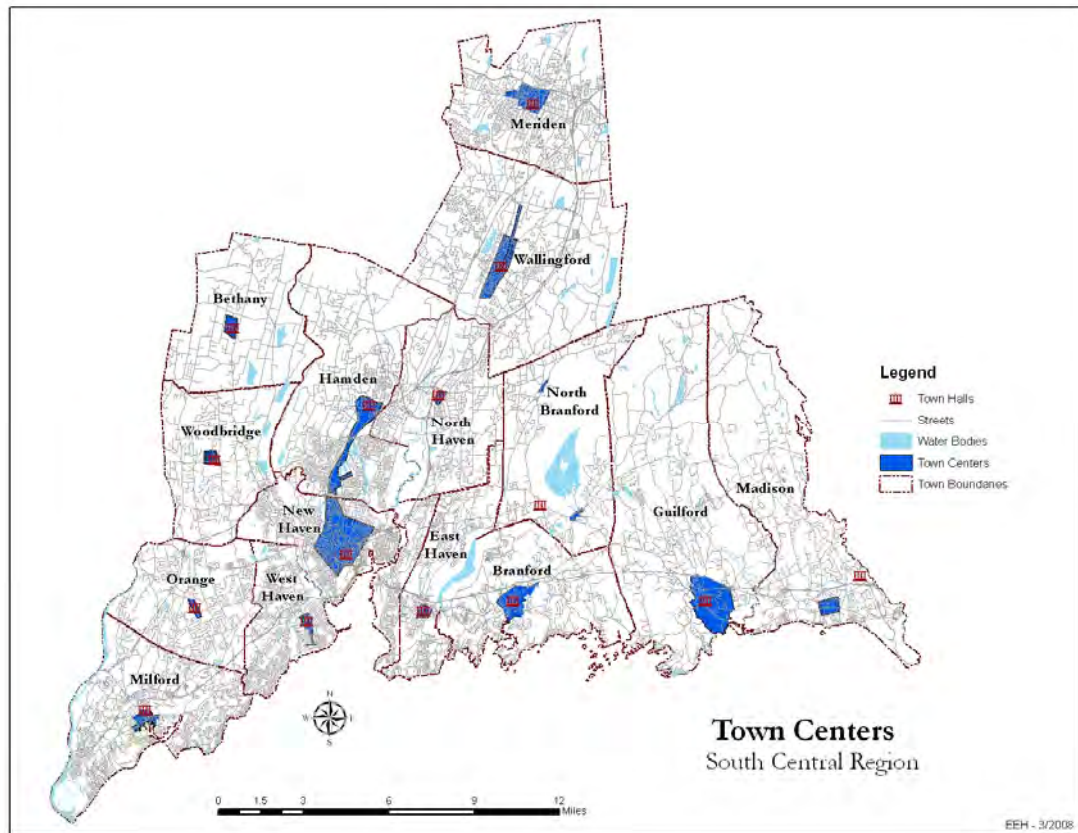


The resulting hot housing market, increasing home sales prices and issues of affordable house are further discussed in the Plan's Housing Chapter. The chapter discusses broadening the region's housing choices by filling in the gaps of choice beyond detached single family housing stock so that young people, the region's workforce, and aging residents have modestly scaled and appropriately priced housing alternatives that guarantee that everyone has a place in the region that they can call home.

At the same time, responsible growth does not occur without making specific choices about preservation and ensuring the stability of our natural environments that includes the South Central's shoreline and Long Island Sound. The challenge of ensuring that the region's future growth be targeted to areas that preserve the area's farms, forests, and coastal resources so cherished in the South Central Region is outlined through potential regional preservation efforts in the chapters on Recreation and Open Space; Agriculture as well as Air Quality and Long Island Sound. Land Use policies that encourage sprawl can no longer ignore that resulting infrastructure expansion is staggeringly expensive and shifts an unsustainable tax burden of maintaining this infrastructure to future generations. The Chapter on Public Utilities and Energy Conservation provides an overview of the region's existing infrastructure, summarizes any future upgrades and expansions, and outlines the existing state and federal policies that promote energy conservation and the future role that our towns and region may have in these efforts.

A Region not only consists of those places where we live and find quiet repose, but also the places where we and our families learn, work, and engage in cultural activities and the arts. In the South Central Region – the heart of our educational and cultural activities are focused in and immediately around New Haven, while the region's commercial corridors have expanded throughout the region along its interstate corridors and its State Routes (1, 5, and 80) as discussed in the Chapters on Schools and Public Institutions and Economic Development. The Chapter on Economic Development also reflects the Regional Growth Partnership's efforts by summarizing their CEDS which examines the region's Economic Development successes and challenges and outlines goals and strategies that will keep the Region economically competitive. A Regional land use plan cannot ignore the ways in which places are connected to each other and how the efficiency of the modes of travel affects the quality of life. The Region's available modes of transportation and plans for expansion are discussed in the Chapter on Transportation which summarizes the SCRCOG's Long Range Transportation Plan (LRTP) and also adds discussion of the region's other Transportation studies and policies adopted in the interim. The Plan's Chapter on Public Safety and Emergency Management provides information about the region's extensive public safety infrastructure and summarizes the plans and strategies that are in place to protect the region from natural and other disasters. The Region's biggest potential natural threat is damage from storm surge and flooding of its waterways and Long Island Sound.

Finally, the Chapters on Land Use and Transit-Oriented Development and Smart Growth examine the region's land use policies and efforts to introduce some changes to the status quo. Historically, the last century's planning policies were instituted to separate non-compatible uses – commercial districts and residential uses were categorically buffered from one another resulting in significant distances between where people live, work, shop, and play. This resulted in the suburban single family neighborhoods and automobile-oriented commercial thoroughfares that we are all accustomed to. In many circumstances these separations are still appropriate and in a region full of families, these choices are ideal for some. However, the state and region's loss of working young people and the influx of compact age-restricted developments suggest that these land use patterns may also exclude many others either not yet ready or past wanting to maintain a detached single family house with a sizeable portion of land around it. Expecting each individual town to fulfill the needs and desires of all of the region's residents asks too much and homogenizes what makes each town unique. For example, rural Bethany, North Guilford, and North Madison may never offer the diversity of housing choice or direct access to cultural and social opportunities that might appeal to the region's 21-30 year old population – yet this type of lifestyle is exactly what New Haven and some of the region's town centers can offer. Building up rural areas to meet more urban criteria sacrifices the region's watershed, recreational and open spaces, prime farmlands, and their unique sense of place.



As a region, we are stronger due to the sum of our parts. New Urbanist and Smart Growth theories promote mixed-uses and transit-oriented development that layer commercial and residential uses and different components of people's everyday lives together. The State's Plan of Conservation and Development has adopted these policies through the requirement that regions identify Transit-Oriented Development opportunities and potential mixed-use areas in their regions and a requirement that the region's POCD be consistent with the state's Growth Principles. Fortunately, in New England and, particularly in Connecticut's South Central Region, these land use patterns historically exist in our towns' centers and villages and are ripe for reinvestment and potential context-sensitive expansion. As a region, we need to support and assist the work of our towns in taking a fresh look at these environments and, as most have gone the way of being predominantly commercial, evaluating where new dwelling units can be added at a scale that is appropriate to each community. A better mixture of commercial and residential uses is necessary to create the pedestrian oriented environments that are crucial in attracting and/or retaining some of the region's populations and reducing our ever increasing issues with traffic congestion. The added benefit to this investment adds 24-hour populations in our town centers and villages that bring back the vitality to the heart and soul of our towns and cities - our historic main streets.

The strategies outlined in the various chapters of this document also attempt to reflect the growing impact of climate change and global warming on our built environment.

Among others, the recognition that automobile-oriented planning and zoning may not, in all instances, be appropriate for the region. Hence the emphasis on Transit-Oriented Development and a return to traditional, walkable, New England town centers by means of mixed use zoning, where appropriate. The American Planning Association in its “Policy Guide on Planning & Climate Change”, dated April 9, 2008², calls for “A dramatic new response to climate change...”. It challenges planners to go even beyond smart growth and sustainability and address climate change by both adapting to it and mitigating it. The Policy Guide “seeks to strengthen connections between traditional planning and the emerging field of community and regional climate change planning,” based on a new type of planning and public policy.

Like the region, a successful Plan of Conservation and Development is stronger due to the sum of its parts. A comprehensive discussion of all factors that contribute to the region’s success and desirable quality of life is the only way to facilitate thoughtful and appropriate land use policy suggestions. It is the sum of the region’s land use and conservation policies that must be flexible enough to address lifestyle changes and provide a place for all.

² Available at <http://www.planning.org/policyguides/pdf/draftclimatechange.pdf>.

Regional Demographics

Since Vision for the Future, the Census 2000 data has been released as well as statistical updates through the Connecticut Economic Resource Center (CERC). In addition, the American Community Survey (ACS) conducted by the Federal government has statistical data available every year for the City of New Haven and in 3 to 5 year intervals for other Public Use Microdata Samples (PUMS). Like most of CT, a current snapshot of region's demographics shows overall increased growth targeted mainly in the region's suburbs.

Population

A population drop in 2000 for SCRCOG's urbanized areas of Meriden, New Haven, and West Haven has by 2006 shown a rebound in population to 1990 statistical figures. In 2006, New Haven is the area's largest municipality with an estimated population of 130,331 people with the region's overall population is estimated to be 569,782. Projected population for 2011 includes modest growth for all communities (4% - 9% with most at 7%). The slowest growth rates are anticipated for Meriden and North Branford with the highest rate estimated for Bethany due to its smaller overall population as a percentage of new residents.

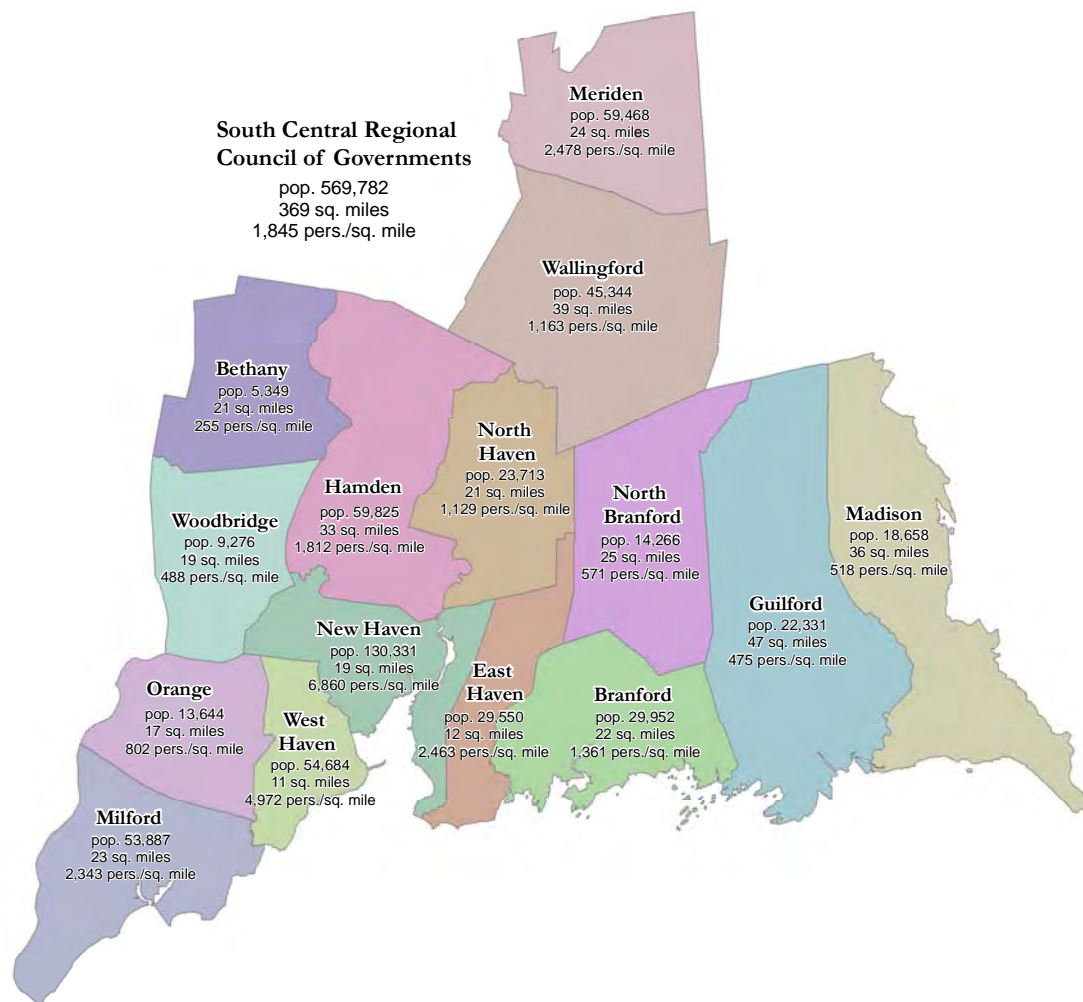
South Central Region Population¹

Town	1990	2000	2006	Projected 2011	% Change (2006-2011)
Bethany	4,608	5,040	5,349	5,596	0.9
Branford	27,603	28,683	29,952	30,999	0.7
East Haven	26,144	28,189	29,550	30,664	0.7
Guilford	19,848	21,389	22,331	23,115	0.7
Hamden	52,434	56,913	59,329	61,349	0.7
Madison	15,485	17,858	18,658	19,312	0.7
Meriden	59,479	58,244	59,468	60,522	0.4
Milford	49,938	52,305	53,887	55,223	0.5
New Haven	130,474	123,626	130,331	134,941	0.7
North Branford	12,996	13,906	14,266	14,573	0.4
North Haven	22,247	23,035	23,713	24,278	0.5
Orange	12,830	13,233	13,644	13,994	0.6
Wallingford	40,822	43,026	45,344	47,245	0.8
West Haven	54,021	52,360	54,684	56,587	0.7
Woodbridge	7,924	8,983	9,276	9,523	0.5
Region	536,853	546,790	569,782	589,755	0.63

As shown by the population density figures on the map below, the South Central region is diverse with urban environments in the city center of New Haven that

¹ Statistics from Connecticut Economic Resource Center (CERC) Town Profiles, April, 2007 (www.cerc.com)

extends into West Haven, traditional 1st ring suburban neighborhoods that follow the I-95 to I-91 interstate and rail corridors (Milford, North Haven, Wallingford, Meriden, East Haven) and outlying rural communities and secondary suburbs (Orange, Bethany, Woodbridge, Guilford, and Madison). New Haven has a pedestrian-oriented density with 6,860 people per square mile. West Haven directly to the west is the second most densely populated area with 4,972 people per square mile. Overall - the Region's 369 square miles has moderate density with an average of 1,845 people per square mile (as compared with the South Western Regional Planning Agency's 1,683 persons per sq. mile). Per county – Density is 1,453 for Fairfield County, 1,409 for New Haven County, and 1,199 for Hartford County. The unifying element in most of the South Central municipalities is a historic town center. In the municipalities along Long Island Sound, these town centers are traditionally within close proximity of a main thoroughfare that connects to the shore.



The densities for communities where the Regional Water Authority (RWA) is a significant land holder are quite different when calculated by census tract or group. For example in North Branford, the RWA owns 1/3 of the land area. This analysis will be discussed in the Housing Chapter.

Age

Demographically, the South Central region's highest density municipalities are also its demographically youngest (Meriden, New Haven, West Haven) with the exception of Hamden. New Haven's median age of 31 is much younger than any other municipality within the region and may be attributed to its large higher education student population with Yale University, Southern Connecticut State University, and Albertus Magnus all within its boundaries and Paier College of Art, Quinnipiac University, and University of New Haven all in close proximity. Currently, the challenge facing Connecticut and the South Central Region is enticing this population to find employment and housing that would allow them to remain in the state and contribute to the economy.

Estimated Aging Population in SCRCOG Towns (2006)²

Town	Median Age	Ages 50-64	Ages 65+	Total Active Adults	Total Population	2006%	2005%	2004%
Bethany	42	1,113	640	1,753	5,349	32.7%	32%	31%
Branford	43	6,340	4,771	11,111	29,952	37%	36.6%	36%
East Haven	40	5,520	4,617	10,137	29,550	34%	33.7%	33%
Guilford	43	5,410	2,797	8,207	22,331	36.8%	36%	35%
Hamden	39	10,359	9,907	20,266	59,329	34%	33.7%	33%
Madison	43	4,248	2,555	6,803	18,658	36%	36%	35%
Meriden	38	10,569	8,207	18,776	59,468	31.5%	31%	30%
Milford	41	10,871	7,666	18,537	53,887	34%	33.8%	33%
New Haven	31	18,873	13,874	32,747	130,331	25%	24%	23%
N. Branford	41	2,886	1,900	5,772	14,266	40%	33%	32%
North Haven	43	4,992	4,059	9,051	23,713	38%	38%	37%
Orange	44	2,890	2,522	5,412	13,644	39.6%	39%	38%
Wallingford	41	8,567	6,710	15,277	45,344	33.7%	33%	32%
West Haven	38	9,815	7,576	17,391	54,684	31.8%	31%	30%
Woodbridge	44	2,027	1,497	3,524	9,276	38%	37.5%	36.7%
TOTAL	40.73	104,480	79,298	184,764	569,782	34.81%	33.8%	31%

The diversity shown by the statistics is one of the Region's strengths. It suggests the region's ability to house a variety of age and income demographics that can contribute to a healthy economy and a stable workforce. The demographics show us where we are and provide a roadmap for where we need to focus efforts to make the region better. Income demographics will be discussed in the chapter on Economic Development.

² Excerpted from CERC 2007 Town Profiles available at: <http://www.cerc.com>

Land Use

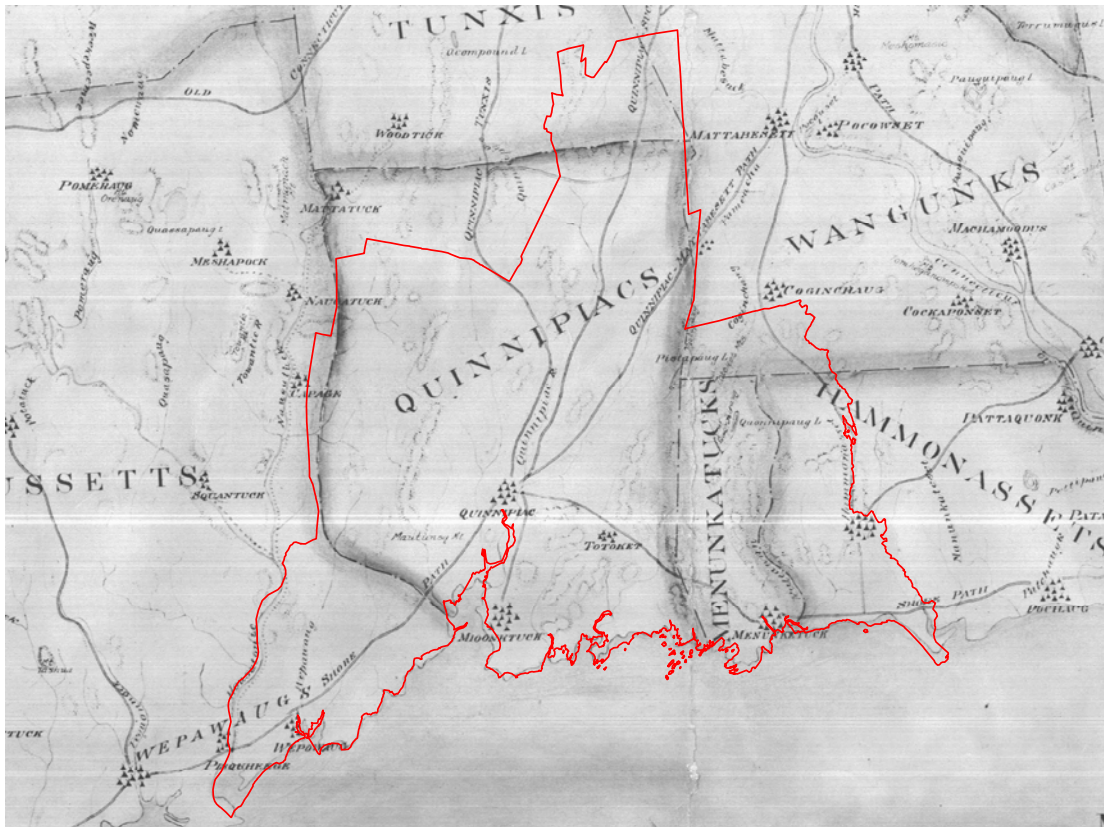
The Regional Plan of Conservation and Development (POCD) is a comprehensive look at many aspects of the region - each of which is related to the primary topic of land use and how to best use the land the region has left to accomplish its conservation and development goals that balance the equally important goals of bolstering a strong economy, but maintaining a high quality of life. The Region's last POCD recommended reinvesting in the region's strong central corridors which is consistent with the State Plan's growth management principle of promoting "the redevelopment and revitalization of regional centers and areas of mixed land uses with existing or planned physical infrastructure." In addition, the region's land use strategies reflect the overall State Plan's strategy to "reinforce and conserve existing urban areas, to promote staged, appropriate, sustainable development, and to preserve areas of significant environmental value." The South Central Region's central corridors follow the I-95 corridor from Milford eastward through New Haven along the shoreline to Madison and the north-south I-91 corridor starting in New Haven and traveling northward to Meriden.

Historic Land Use Patterns and Historic Preservation

The South Central Region abounds in natural resources such as the shoreline, waterways, and ridgelines that have long attracted people to this area. A map of historic Native American settlements and travel routes in 1625¹ reflect the foundation for our present day town centers and major arterials. This is particularly evident along the region's shoreline and along the Quinnipiac River which parallels modern highways and rail line infrastructure. Colonial settlement of the New Haven area² by Puritans started in 1638 led by the pastor John Davenport and a businessman Theophilus Eaton. The two men negotiated treaties with the local Native Americans in 1638 and 1645 for a land area which spanned all the way north to modern Meriden and Wallingford, and included Bethany and Woodbridge. The 1645 treaty did set aside an area of East Haven/Morris Cove as reservation area which was then later purchased as part of New Haven.

¹ Drawn by Hayden L. Griswold ; made for the Connecticut Society of the Colonial Dames of America. Scale ca. 1:350,000. 1 map: photocopy ; 38 x 50 cm. Relief shown by hachures. Information compiled by Mathias Spiess. Presented by Mrs. Mary Pierson Cheney. Shows location of Connecticut Indian tribes circa 1625. Online_Linkage: http://magic.lib.uconn.edu/cgi-bin/MAGIC_HistList.pl

² Settlement history and historic references are all summarized from *Connecticut: A Fully Illustrated History of the State from the Seventeenth Century to the Present*. By Albert E. Van Dusen. Random House: 1961. pp. 50-60.



Historic Native American Settlements (1625) in South Central Connecticut
(Red outline denotes current SCRCOG region adjusted to fit map scale.)

Soon after, three additional colonies were created by branches of the original New Haven settlers primarily as farming communities. In 1639, members of the New Haven Colony set off to form the new colony of Milford with land purchased from the Native Americans and additional land purchases in 1655-61 established most of the City's current boundaries. Guilford was created in much the same way in 1639 led by Henry Whitfield. The State's oldest house is still the Henry Whitfield State Museum (also known as the Old Stone House) built in Guilford in 1639 to house Whitfield and his growing family which eventually included 10 children. Branford, known originally as Totoket, was purchased in 1640 and settled 4 years later by a group of farmers from Wethersfield (one of the original settlements in the Connecticut River Valley). The Totoket settlement was named Branford in 1653.

Although functionally independent, the outlying colonies banded together as part of the larger New Haven Colony by 1644 to provide overall governance and a shared court system. Although early settlements experienced threats from small factions of hostile Native American populations or from Dutch and French settlers, this does not appear to have been a problem for settlers of the New Haven Colony. The Region's Historic Development patterns can be also be seen where districts or clusters of historic properties are located on the attached Historic Site and Districts map. New Haven's nine squares, which are still in place today, were already laid out and subdivided by 1641 and New Haven, aided by its port, became an important trading

center. Many of the early settlement areas still define the region's population centers around which developed the area's first train lines in the mid 1800s. Today these areas have denser development neighborhoods or villages with a unique sense of place and have the greatest potential for additional in-fill development as described in the Chapter on Transit-Oriented Development and Smart Growth.

Early settlement patterns and population growth in the South Central Region³

	First Settled	Incorp	Pop. in 1850	Pop. in 1950	Pop in 1990	Pop. in 2007
Bethany	Settled in early 1700s as part of the Amity/Woodbridge Parish - 1762	1832	914	1,318	4,608	5,377
Branford	Purchased 1640, settled 1644.	1653	1,423	10,944	27,603	29,864
East Haven	Named in 1707 as part of New Haven settlement	1839	1,670	12,212	26,144	29,418
Guilford	1639	1639	2,653	5,092	19,848	22,327
Hamden	1638 as part of New Haven settlement	1786	2,164	29,715	52,434	59,825
Madison	1641 - Formerly East Guilford.	1826	1,837	3,078	15,485	18,638
Meriden	1664 – Meriden Farms formerly part of Wallingford	1806	3,559	44,088	59,479	59,494
Milford	1639	1639	2,465	26,870	49,938	53,874
New Haven	1638	1638	20,345	164,443	130,474	130,625
North Branford	Settled as part of Branford in 1768	1831	998	2,017	12,996	14,248
North Haven	Settled in early 1700s. Named in 1739, part of New Haven settlement.	1786	1,325	9,444	22,247	23,990
Orange	Settled in late 1640s as part of Milford and New Haven settlements - Formerly North Milford	1822	1,476	3,032	12,830	13,645
Wallingford	Settled in 1667 as East River part of New Haven settlement.	1670	2,595	16,976	40,822	45,779
West Haven	Settled in 1648 as West Farms became the west parish of New Haven in 1719	1921	N/A	32,010	54,021	54,766
Woodbridge	Settled in 1650s as the parish of Amity as part of New Haven settlement	1784	912	2,822	7,924	9,265

One of the most important ways to reinvest in the region's existing corridors is through adaptive reuse and historic preservation. The other important corridor reinvestment strategy - Brownfield reclamation - will be discussed on the Chapter on Economic Development. The State has some tools available to assist historic

³ Information for this table excerpted from information on UConn's CLEAR website <http://clear.uconn.edu/>, from CERC's Town Profile data for each town <http://www.cerc.com/newhaven.html>, from the Bethany Historical Society at <http://www.bethany-ct.com/historicalSociety/bhs-facts.htm>, and town websites.

preservation efforts and since the passage of Public Act 05-228: An Act Concerning Farmland Preservation, Land Protection, Affordable Housing, and Historic Preservation the State also now has some reliable funding to work with. PA 05-288 enacted an additional recordation fee for public documents, a portion of which is placed within a separate account within the general fund for land protection, affordable housing and historic preservation purposes. These funds can be used to assist historic preservation efforts including the State Grant-in-aid program. The current state historic preservation programs include:

- ***State grants-in-aid for restoration of historic structures and landmarks. Sec. 10-411. (Formerly Sec. 10-320d).*** The Grant-in-aid program is available to a municipality or private organization to acquire, relocate, restore, preserve and maintain historic structures and landmarks in an amount not to exceed fifty per cent of the nonfederal share of the total cost of such acquisition, relocation, historic preservation and restoration. The grants are intended to be combined with federal grants and private investment. Projects must have a comprehensive historic preservation plan with specific work plans and specifications, bonding, a historic preservation covenant on the property, a preservation management plan including available times the site will be made open to the public free of charge as approved by the State Historic Preservation Commission. For a historic structure or landmark within the boundaries of any historic district, the proposed acquisition, relocation, preservation and restoration must also be approved by the local historic district commission.
- ***Restoration of Supportive Improvements for Historic Assets in Connecticut Fund (Sec. 32-6a.)*** The Commissioner of Economic and Community Development may provide grants or loans for projects of historic preservation and restoration with the proceeds of Special Obligation bonds issued pursuant to Special Act 77-47. It should be noted that the amount of these bonds vary and are not guaranteed to be issued annually. These grants and loans allowed in this program allow for the installation or restoration of supportive improvements which may include, but not be limited to, parking lots, office space, sanitary facilities, utilities necessary to make a building functional, information booths, provisions for the handicapped, improvements necessary to bring such asset into conformance with local ordinances, or any other improvements necessary to return the property to a state of utility provided that any such supportive improvement shall not alter, destroy or detract from the distinctive historical, aesthetic, archaeological, architectural, cultural or stylistic qualities or characteristics of the historic asset or its environment.
- ***Public Act 07-250: State Tax Credits for Mixed Use Structures*** Beginning in June 2009, Section 19 of Public Act 07-250 authorizes up to \$50 million per three-year cycle in business tax credits for rehabilitating a historic property used for residential and commercial purposes with a mixed use building. The total amount available for the first cycle has yet to be identified but will be provided via bond money and may fluctuate. The Connecticut Commission on Culture and Tourism credit reviews applications to certify the

property's existing historic status and the proposed rehabilitation plans to ensure the proposed work is historically appropriate for the structure and any adjacent historic district. The rehabilitated property must meet two criteria: it must be used to house people and operate a business, and the residential portion must comprise at least 33% of its total floor area. The credit equals 25% of the total three-year credit allocation or, if a portion of the units are affordable to low- and moderate- income people, 30%. No single project can receive more than 10% of the three-year allocation. Individuals, limited liability companies, nonprofit and for profit corporations, and other businesses are eligible if they have title to the property and rehabilitate it. The credits are based on the property's historic status and how the property will be used after rehabilitation. The property must be a certified historic commercial or industrial property either individually listed, or located in an historic district that is listed, on the national or state Register of Historic Places.

Current Land Use and Zoning

The attached General Land Use map shows that the region's most intense development patterns of commercial, industrial, and higher density residential are along its major arterials and its shoreline and the region's zoning continues to support reinvestment in these areas. Conversely those areas that tend to be more rural are the outlying areas that are either topographically separated by the region's ridgelines or are part of the Regional Water Authority's land area and serve to supply the region's drinking water supply. It should be noted that most of Wallingford's rural area east of I-91 contains the town's drinking water reservoirs and other lands preserved to maintain the town-owned water supply. The Map utilizes each municipality's zoning map information combined with the state's open space and aquifer protection area layers and combines individual land use categories to its simplest use. The categories are as follows:

South Central Regional Land Uses and Zoning Categories

Use Category	Description	Areas in Region
Aquifer Protection Areas	An overlay area identified as having a Class A Aquifer by the Department of Environmental Protection. The map utilizes a file from the DEP's website. Land areas in this category are crucial regional resources in protecting local drinking water and ground water supply and development alternatives are limited by State Statute.	North Hamden, Southwest Meriden, Northwest Wallingford, Guilford, Madison along Hammonasset River.
Water Supply District	An overlay area that represents Class I and II land areas owned by the Regional Water Authority (RWA). In many circumstances these are pristine open space areas and forest lands. Some of the sites do allow passive recreational access via a permit by the RWA's Recreation Division.	Northeast half of North Branford, Significant areas of North Guilford and North Madison, Lake Saltonstall area of East Haven and Branford, Maltby Lakes area of Orange and West Haven, Eastern half of Bethany, Northeast corner of Woodbridge

South Central Regional Land Uses and Zoning Categories (Cont.)

Use Category	Description	Areas in Region
Single Family – 80,000 SF and Over	Rural Residential – Residential areas with higher likelihood of agricultural use. May also indicate area within water supply areas.	Water supply areas in Bethany, Wallingford, Woodbridge, North Branford, North Guilford, and North Madison. Predominant for Madison and much of Guilford north of I-95.
Single Family – 40,000 SF and Over	Suburban Residential where public utilities may not be available and larger lots sizes are necessary to support private well and/or septic systems. These areas are generally located outside of the main commercial corridors.	The residential density for Orange, Woodbridge, North Branford, the west half of Bethany, Northern Hamden, and the residential corridor east of I-91 and north of Route 80 shared by East Haven, North Haven, and North Branford.
Single Family - Less than 40,000 SF	1 st ring suburban single-family. These are located in relative close proximity to the main commercial corridors. Most with public utilities.	Milford and Branford south of I-95, most of West Haven and Hamden and within the corridor shaped by the Wilbur Cross and I-91.
Single Family – 10,000 SF and less	Small lot detached Single Family more prevalent adjacent to town centers and shoreline communities with public utilities.	Milford south of I-95, much of New Haven and East Haven and in the town centers of Branford, Wallingford, Hamden, and Guilford.
Multi-Family	Represents multi-family of all types which is concentrated along some shoreline areas as well as central city areas.	Meriden, New Haven, and West Haven centers. Shoreline condos in Milford, West Haven, East Haven, and Branford.
Commercial	Commercial areas of all types. May also include areas of mixed-use which are not separately identified. Mainly retail and office corridors and town centers.	Located mainly along state highways such as Routes 1, 5, 10, and 80, and in historic town and rural centers.
Regional Commercial	Includes areas with regionally significant shopping centers and Tweed New Haven Airport.	Westfield Shopping Centers in Milford and Meriden, Ikea in New Haven, Tweed New Haven Airport.
Industrial	Areas that allow industrial uses which are predominantly located adjacent to the region's primary interstates and significant waterways	Significant corridors along I-95, I-91 in North Haven, Wallingford and Meriden, the Housatonic and Quinnipiac Rivers, and the Port of New Haven. Tilcon's gravel production is a sizeable industrial area for North Branford.
Park, Open Space and Municipal	Includes State and Municipal parks, Wildlife preserve areas, and private open space lands such as golf courses.	The largest include West Rock Ridge, Sleeping Giant, and Hammonasset State Park.

The State Locational Guide Map

The Locational Guide Map is a general policies map to guide growth created by the State's Office of Policy and Management as a companion to the State's Plan of Conservation and Development and is attached for reference. The map is another simplified way to look at the region's land use with eight land use categories falling into two sectors - lands intended for development or lands intended for conservation or low-density development such as rural lands. The map also indicates Aquifer Protection areas and State recognized Historic Districts. The Region's land uses are consistent with the Location Guide map and reflective of its policies in most areas. The Chapter on Consistency Finding will go into more detail on Regional variations for specific areas of the map and suggest updates that may be needed for the next version of the Map to be created when the State updates its Plan of Conservation and Development.

It should be noted that the most significant variances between the State's Locational Guide Map and the Region's General Land Use Map tend to be areas that the state shows for Conservation yet are currently in Industrial use. Examples include Tilcon's gravel operations in North Branford, the Bristol Meyers Squibb Campus in Wallingford, the entire Long Wharf area in New Haven, and areas along the region's primary waterways such as the West River, Housatonic River, and Quinnipiac River. Many of the region's waterways have been initial settlement areas and have been important for the industrial and commercial development of the region. In most instances the redevelopment of these waterways introduces an environmental sensitivity not shown by previous generations both by cleaning up brownfields (sites with some environmental contamination) and adhering to today's more rigorous development standards. These tend to be former commercial or industrial sites near city centers and existing transportation, employment, housing, and public utility corridors and their future redevelopment should be an integral part of responsibly reinvesting in the region's existing core. The sensitive redevelopment of industrial sites along these waterways has also provided additional regional recreation opportunities such as the Quinnipiac Linear and Gorge Trails, and future expansion of this trail in North Haven.

University of Connecticut - CLEAR Program

One of the other ways to see changes in land cover over time is through looking at the actual physical properties of the region's land area as seen from above. In 2002, the University of Connecticut's Center for Land Use Education and Research (CLEAR) conducted a study of satellite photographs (aerials) over a 17 year period from 1985 to 2002 to determine changes in land area coverage⁴. The study focused on examining areas where land cover has changed, i.e. new areas of development which can be used as a way to determine which areas of the state are "sprawling" more rapidly than others. The study uses the aerials to determine which areas have been covered from forest cover to turf and grass (i.e. new residential development) and

⁴ For more information about UConn's CLEAR program including current research, imagery, and data available – go to their website at <http://clear.uconn.edu/>

where existing wide expanses of grasses have new construction. As the data is developed using views from above - there are some caveats with the data, particularly for older residential neighborhoods with more mature tree cover or in areas where minimal clearing occurred for new development.

Land Cover Change From 1985 to 2002 – Developed Land

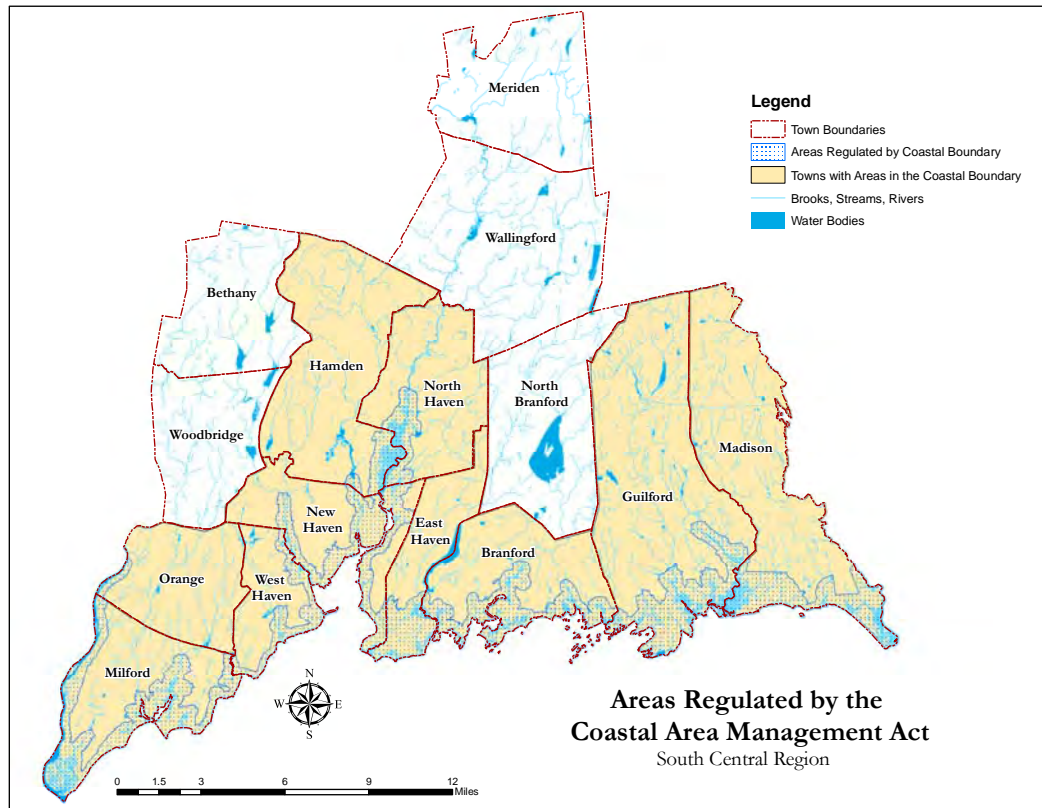
	1985		1990		1995		2002		Change	
	Acres	% of town	Acres	% of town	Acres	% of town	Acres	% of town	Acres	% of town
Bethany	1287	9.5%	1419	10.4%	1450	10.6%	1530	11.2%	243	18.9%
Branford	5040	34.5%	5321	36.5%	5389	36.9%	5485	37.6%	445	8.8%
East Haven	3167	39.2%	3439	42.6%	3488	43.2%	3575	44.3%	408	12.9%
Guilford	4663	15.3%	4894	16.1%	4992	16.4%	5173	17%	510	10.9%
Hamden	6238	29.4%	6623	31.2%	6729	31.7%	6901	32.5%	663	10.6%
Madison	3839	16.3%	4136	17.5%	4270	18.1%	4519	19.1%	680	17.7%
Meriden	6322	41.3%	6700	43.7%	6761	44.1%	6895	45%	573	9.1%
Milford	7115	47.7%	7398	49.5%	7555	50.6%	7740	51.8%	625	8.8%
New Haven	8601	69.2%	8711	70.1%	8768	70.6%	8786	70.7%	185	2.2%
North Branford	2550	14.8%	2781	16.1%	2827	16.4%	2954	17.1%	404	15.8%
North Haven	5508	40.6%	5870	43.3%	5966	44%	6042	44.6%	534	9.7%
Orange	3356	30.2%	3492	31.4%	3588	32.3%	3704	33.3%	348	10.4%
Wallingford	6506	25.2%	7172	27.8%	7316	28.4%	7615	29.5%	1109	17%
West Haven	4479	62.9%	4631	65%	4704	66%	4773	67%	294	6.6%
Woodbridge	2160	17.6%	2267	18.4%	2318	18.9%	2379	19.4%	219	10.1%

The attached map representing UConn's CLEAR study shows land cover patterns that reinforce the Region's General Land Use map in terms of developed area as visible from the aerial photography. The map shows New Haven and south Hamden is the most developed area in our region with distinct development corridors that are more intense along the shoreline and along the I-95 and I-91 corridors. Central Meriden, and Milford, West Haven, East Haven, and Branford south of I-95 are particularly uniformly developed. There are some pristine undeveloped areas shown on the map that tend to signify Regional Water Authority land holdings and Wallingford's municipal watershed areas.

Coastal Area Management Act

As a region with a significant coastline along Long Island Sound, land use in these areas is affected by the state's coastal management policies. In 1980, the state legislature enacted the Connecticut Coastal Management Act (CCMA) CGS Section 22a-90 through 22a-112. The Act recognizes that much of the state's coastline has already been developed and much of it is owned by private property owners. However, new development or redevelopment should be designed to be sensitive to the unique coastal conditions and habitats, protect the public's access to the coast, and also promote water dependent uses and commerce that rely on coastal access. Although much of Connecticut's coastline is privately owned, the coastal tidelands (submerged lands and waters waterward of the mean high water line) are held in trust for the general public. The state's CCMA policies and their Coastal Management Program continues to work to safeguard the public's rights to the coastal area. The

online Connecticut Coastal access guide prepared by the state's Department of Environmental Protection <http://www.lisrc.uconn.edu/coastalaccess> is a fantastic resource that provides information about public boat launches, beaches, state parks, public fishing docks, and other public access points along the state's shoreline.



From a land use perspective, the act is significant as development in the designated coastal boundary areas require an additional level of review in 10 of the region's 15 towns. The Coastal Boundary area is defined as the "interior contour elevation of the one hundred year frequency coastal flood zone ... or a one thousand foot linear setback measured from the mean high water mark in coastal waters, or a one thousand foot linear setback measured from the inland boundary of tidal wetlands mapped under section 22a-20, whichever is farthest inland."⁵ The state's Coastal Management Program also regulates work in tidal, coastal and navigable waters and tidal wetlands under the CCMA.

The region's primary land use goal in the Plan of Conservation and Development is to reinforce existing land use policies that focus development in the region's existing developed corridors that have transportation, employment and utility infrastructure while conserving the region's land areas that are integral for maintaining the region's agricultural heritage, drinking water supply, and unique natural resources including lands adjacent to Long Island Sound.

⁵ Connecticut General Statute 22a-94(b).

This goal should be instituted with the following policies:

- Support investment, incentives, and additional zoning strategies that promote infill development and adaptive reuse in the region's strong central corridors that provide existing transportation, employment, and utility infrastructure.
- Continue to limit development and increased densities outside of regional corridors with the exception of existing historic town centers and villages, particularly where public utilities, transportation, and employment infrastructure is not available or of an unsuitable capacity to support such development.
- Respect slope, soil and wetland restraints.
- Review historic town centers, villages, and other commercial corridors to determine whether infill or mixed use opportunities are available.
- Discourage regional sized facilities beyond existing transportation, employment, and public utility corridors.
- Support Historic Preservation, historic town centers, and possibilities for adaptive reuse. Identify potential funding sources & resources for historic preservation.

The above listed goals and strategies echo most of the policy recommendations outlined in The American Planning Association's "Policy Guide on Planning & Climate Change", dated April 9, 2008. With respect to Land Use, the Guide further advocates:

- "Implement new policies and regulations that promote mixed use development, transit-oriented design, and greater development intensity to create communities with land use patterns with reduced energy consumption, fewer vehicle miles traveled (VMT) and reduced greenhouse gases."
- "Create developer incentives, including tax credits and regulatory reforms, to encourage development that reduces energy consumption and lowers greenhouse gas emissions."
- "Establish incentives to encourage installation of renewable energy systems by homeowners and small businesses."
- "Improve the ability to identify areas prone to greater risk from climate change and restrict development in those areas."

Housing

The South Central Region, like many areas in the state has a pronounced need for more diverse housing choices, in particular multi-family and affordable housing. Most of the region's housing stock is detached single-family properties located in close proximity to the corridors formed by its major interstates (I-95 and I-91) and major state routes (Route 1, 5 and 10 among others). Coastal areas are particularly highly populated.

Since the 1980s, the South Central region's housing market has experienced highs and lows in terms of median home sales prices, but has in the last few years has had a relatively "hot" real estate housing market in many of its municipalities with rapidly increasing single-family home sales prices.

Single Family Home Sales Prices (1986-2006)

Town	1986	1988	1990	1997	1998	2000	2004	2006
Bethany	155,000	231,250	212,000	172,000	205,000	222,500	320,000	412,500
Branford	105,000	140,000	130,500	117,000	138,000	184,400	212,000	346,000
East Haven	81,900	131,000	127,000	102,375	107,000	127,100	175,000	235,000
Guilford	140,000	206,850	196,000	200,750	223,862	230,000	335,500	400,000
Hamden	99,900	154,000	141,000	110,000	118,000	139,700	207,000	259,900
Madison	166,000	245,000	219,500	225,000	241,000	259,600	422,500	502,200
Meriden	84,900	131,000	127,000	85,000	87,000	119,000	149,900	201,000
Milford	125,000	157,900	150,000	140,000	147,500	168,900	280,000	332,900
New Haven	80,150	125,000	119,500	78,000	81,000	109,200	150,000	217,500
North Branford	100,501	149,750	160,000	145,000	159,000	179,000	259,450	313,500
North Haven	125,500	179,900	168,300	145,000	155,000	178,700	260,000	307,000
Orange	190,250	252,000	221,000	214,500	209,900	254,900	370,000	410,000
Wallingford	105,000	149,000	137,900	135,000	135,000	161,900	214,900	277,000
West Haven	88,000	125,000	127,500	108,250	107,950	118,600	182,000	234,000
Woodbridge	215,000	307,500	310,000	275,000	277,500	319,700	390,000	477,500
SCRCOG	100,000	145,000	138,000	150,325	159,650	184,880	261,883	346,000

In 2000, the existing Plan of Conservation and Development identified a need for additional affordable housing consistent with the scale of existing neighborhoods and regional land-use and transportation goals and suggested a regional housing partnership to create a collaborative that could "draw on good national experience, set meaningful multi-year low-income housing unit production goals, fully employ available state/federal subsidies and encourage a diversity of housing types in diverse

locations.”¹ The Regional Housing Market Assessment in 2004 further analyzed the region’s housing needs and promoted a similar regional strategy.

Regional Housing Market Assessment

The Regional Housing Market Assessment² identified the region’s housing need as a crisis affecting not only those in need of housing, but also the regional economy and the natural environment as population has shifted from cities to suburbs.

Compounding the problem, incomes for the region have not grown as quickly as home prices and jobs have shifted from higher paying manufacturing to the lower paying trade (retail) and health service sectors. Regional housing need is determined through a formula by the US Department of Housing and Urban Development (HUD) by counting households that earn less than 50% of the area median income (AMI) and spend 30% or more of their income on housing costs. The study determined that housing should be placed near job centers to limit additional congestion on roadways to shorten potential commute times. A Housing Affordability Quotient (HAQ) was developed that represents a percentage of housing needed based on workforce needs.

CT State Statute 8-30g

In 1990, in response to a recognized need for more affordable housing development, the state legislature passed the Affordable Housing Land Use Appeals act. This legislation applies to towns that do not have a minimum of at least 10% of their housing stock as either assisted units and/or deed restricted for affordable populations. The towns that meet the 10% minimum are considered exempt, while all other towns are non-exempt. Towns have argued that the legislation does not include existing market rate housing within each town that is in fact for sale at an affordable rate due to house or lot size, age of housing stock, etc without a deed restriction or assisted living restriction in place which may increase these percentages.

In non-exempt towns, the statute allows developments that provide at least 30% of its units as deed-restricted affordable for a period ranging from 20 to 40 years (depending in the legislation in place at the time of the project’s approval) to be placed in any residential or commercial zone as long as there are no impacts to public, health, safety, and welfare. If a municipality denies this type of affordable housing application, the developer can appeal a decision and it is the burden of proof of local land use commissions to establish any negative impacts relative to public safety. On the whole – most affordable housing developers win these appeals and the developments proposed under these regulations have been constructed. While these “8-30g” developments have provided more market rate and affordable units in the region, some of these developments are perceived as not environmentally sensitive or in scale with existing neighborhoods, and may not be located in areas that provide good access to transportation alternatives or job centers.

¹ Vision for the Future: Regional Plan of Conservation and Development, South Central Regional Council of Governments, November 15, 2000. (p.5)

² Regional Housing Market Assessment prepared by Harrall-Michalowshi Associates in Association with AMS Advisory Services, LLC, Scillia, Dowling & Ntarelli, June 23, 2004. Executive Summary.

Existing Affordable Units per CT Statute Requirements³

Town	Total Housing Units (2000)	Existing Affordable Units (2004)	% of Housing Stock (2004)	Existing Affordable Units (2007)	% of Housing Stock (2007)
Bethany	1,792	3	0.17 %	3	0.17%
Branford	13,342	531	3.98 %	423	3.17%
East Haven	11,698	1,146	9.80 %	793	6.78%
Guilford	8,724	146	1.67 %	169	1.94%
Hamden	23,464	2,074	8.84 %	1,892	8.08%
Madison	7,386	132	1.79 %	117	1.58%
<i>Meriden</i>	<i>24,631</i>	<i>4,703</i>	<i>19.09 %</i>	<i>3,595</i>	<i>14.60%</i>
Milford	21,962	1,301	5.92 %	1,406	6.40%
<i>New Haven</i>	<i>52,941</i>	<i>16,437</i>	<i>31.05 %</i>	<i>15,811</i>	<i>29.87%</i>
North Branford	5,246	124	2.36 %	118	2.25%
North Haven	8,773	311	3.54 %	426	4.86%
Orange	4,870	55	1.13 %	54	1.11%
Wallingford	17,306	1,272	7.35 %	974	5.63%
<i>West Haven</i>	<i>22,336</i>	<i>3,144</i>	<i>14.08 %</i>	<i>2,727</i>	<i>12.21%</i>
Woodbridge	3,189	16	0.50 %	40	1.25%
Region	227,660	31,395	13.79%	28,548	12.53%

It is clear that some amount of housing that is affordable to workforce populations needs to be available in all the towns in our region. However, the Region's Housing Market Assessment⁴ argues that the region as a whole has more than 10% of its units as affordable. Only the housing stock in New Haven, West Haven and Meriden contain more than 10% of its housing stock as affordable and are exempt from the requirements of CT State Statute 8-30g. The majority of affordable units (approximately 90%) are located in six communities – New Haven, Meriden, West Haven, East Haven, Hamden, and Wallingford. The State Department of Community and Economic Development (DECD) also tracks the percentage of affordable housing by municipality and the adjusted numbers for 2007 show decreases in restricted affordable units for most municipalities including those that are exempt. The only municipalities to show an increase in affordable units from 2004 to 2007 are Guilford, Milford, North Haven, and Woodbridge. Overall the region's percentage also decreases from 13.79% to 12.53 %.

³ Figures for number of affordable units for 2004 are from the Regional Housing Market Assessment while 2007 figures are from the State's Department of Community and Economic Development. <http://www.ct.gov/ecd/cwp/view.asp?a=1098&Q=249724&ecdNav=1> All percentages are calculated from the Census 2000 count of total housing units per municipality. When the 2010 Census is complete – the percentages may decrease significantly.

⁴ Regional Housing Market Assessment prepared by Harrall-Michalowshi Associates in Association with AMS Advisory Services, LLC, Scillia, Dowling & Ntarelli, June 23, 2004. (Executive Summary, p ES-3)

HOMEConnecticut Affordability Analysis and Legislative Initiatives

In the fall of 2005, the Melville Trust⁵ invited representatives of builders, non-profit housing developers and lenders, banks, local and regional government, and business leaders to discuss the issue of affordable housing. The discussions led to the formation of HOMEConnecticut, an advisory committee that SCRCOG has participated in. The organization currently provides a statewide analysis of the affordability of homes, marketing the need for affordable housing as necessary for the state's economic development, and proposing a housing agenda for the legislature that provides incentives for the state's towns to adopt regulations that promote the creation of additional affordable housing that also meets smart growth principles.

Housing Affordability Analysis (2005 & 2006)

	2005 Median Home Sales Price	Monthly Payment w/ 10% Down	Qualifying Income	2005 Median Income	2005 Gap	2006 Median Home Sales Price	Monthly Payment w/ 10% Down	Qualifying Income	2006 Median Income	2006 Gap
Bethany⁶	372,500	2,628	112,621	83,448.	-29,173	412,500	2,904	124,439	85,995	-38,444
Branford	320,500	2,269	97,259	63,198	-34,061	346,000	2,445	104,792	65,385	-39,407
East Haven	223,250	1,599	68,527	52,525	-16,002	235,000	1,680	71,999	54,637	-17,362
Guilford	425,000	2,990	128,132	85,663	-42,469	400,000	2,817	120,746	88,628	-32,118
Hamden	249,350	1,779	76,238	57,865	-18,373	259,900	1,852	79,355	60,108	-19,247
Madison	468,000	3,286	140,835	100,283	-40,552	502,200	3,524	151,028	103,822	-47,206
Meriden	179,000	1,294	55,454	47,602	-7,852	201,000	1,446	61,954	49,644	-12,310
Milford	320,000	2,266	97,111	67,804	-29,307	332,900	2,355	100,922	70,003	-30,919
New Haven	189,900	1,369	58,675	32,574	-26,101	217,500	1,559	66,829	33,525	-33,304
North Branford	318,500	2,256	96,668	69,948	-26,720	313,500	2,221	95,191	72,088	-23,103
North Haven	296,500	2,104	90,168	72,181	-17,987	307,000	2,176	93,270	74,175	-19,095
Orange	385,000	2,714	116,314	86,515	-29,799	410,000	2,886	123,700	89,729	-33,971
Wallingford	254,900	1,817	77,878	63,973	-13,905	277,000	1,970	84,407	66,225	-18,182
West Haven	224,000	1,604	68,749	46,411	-22,338	234,000	1,673	71,703	48,257	-23,446
Woodbridge	459,500	3,228	138,324	112,096	-26,228	477,500	3,352	143,642	115,721	-27,921
Region	312,393	2,214	94,864	69,472	-25,391	328,400	2,324	99,598	71,863	-27,736

⁵ The Melville Charitable Trust is a non-profit entity located in Hartford that was started in 1990 to address issues of homelessness and housing in Connecticut. The Melville Family's fortunes were established with retail business investments including Thom McAn shoe stores, Marshalls clothing stores, and CVS drug stores. Their motto is, "finding and fighting the causes of homelessness." www.melvilletrust.org

⁶ Note: The shading in the table is provided for ease of reading the table and for no other significance. All figures have been rounded to the nearest dollar. The median values above indicate the middle of a distribution and is less sensitive to the extremes in the high and low ranges of home sales prices and incomes. All data was provided by the Connecticut Economic Resource Center (www.cerc.org) with the exception of median home price which are collected from the Commercial Record.

HOMEConnecticut's affordability analysis⁷ is based on a calculation of the gap between median home sales price and a town's median income. The "gap" is based on a comparison of the qualifying income needed to purchase a home with the median value and the actual median income figures for the community. Based on this analysis, in 2005 as home values increased statewide, 157 out of CT's 169 communities were unaffordable to those residents with median incomes and below.

In 2006, the number has decreased slightly to 154 out of 169. As shown by the table above - in 2005 and 2006 all of SCRCOG's 15 municipalities are considered unaffordable by this analysis. Even with a slightly cooling housing market, median home sales prices continued to increase in all towns except for Guilford and North Branford. Madison had the highest median home sales prices in both 2005 and 2006 and the second highest and highest affordability gaps in 2005 and 2006 respectively. Meriden's affordability gap, while growing, continue to be the lowest in the region with the lowest median home sales prices for both years.

Connecticut Housing Program for Economic Growth

In 2007, HOMEConnecticut led the effort for the passage of state legislation (PA 07-4) the Connecticut Housing Program for Economic Growth. The lack of affordable housing and affordable starter homes in the state has led to a decrease in working age population as young families have relocated to more affordable regions of the country or young professionals leave and do not have the ability to return. A lack of workforce population limits the ability for continued economic growth in the region and statewide. The bill seeks to improve the diversity and supply of affordable and other market rate housing by providing a per unit cash incentive for 1) developing overlay regulations that increase the net # of housing units in TOD, downtown, village, or other development corridors and 2) providing an additional payment when the net new units are constructed. The state also offers grants coordinated by both the by Office of Policy and Management (OPM) and Department of Economic and Community Development (DECD) to provide technical assistance for development of these regulations. The bill also benefits towns by allowing them the ability to develop their own context-sensitive regulations and standards that are targeted in areas of their communities that already have access to jobs, transportation, or town centers where there is usually the added benefit of existing utility infrastructure in place.

There is currently \$4 million allocated for first year of this project for the technical assistance component of the program to create the "Incentive Housing Zones." As discussed in the chapter on TOD and Smart Growth, the Town of Wallingford intends to apply for these funds to create overlay zoning adjacent to their train station that they hope will also invigorate this area of town by spurring new redevelopment.

South Central Regional Housing Task Force

In keeping with the goals outlined in the Housing Market Assessment, the Council of Governments has created a Housing Task Force team comprised of non-profit

affordable housing lenders, a non-profit housing developer, and a faith-based non-profit housing advocate to assist in its efforts to initiate an affordable housing pilot project. The region's CEOs agreed on a regional model that seeks to find existing town-owned or publicly held properties not currently on the tax rolls that could be developed into context-sensitive affordable or workforce housing developments in keeping with local character of existing residential neighborhoods – preferably as single-family residential developments either attached or detached. This past year, the Task Force coordinated by SCRCOG staff has begun the initial stage of design and review work for a senior affordable housing project at a town-owned site in Bethany as its first pilot project. Building on the process established by this project, SCRCOG will continue to convene the Housing Task Force to provide support to municipalities for other sites in the region on an as-needed basis.

The National Sub-prime Mortgage Crisis

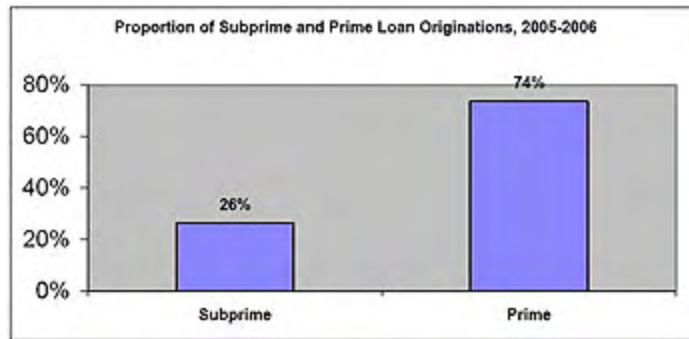
In the past several years as home prices have increased and interest rates have remained low, mortgage lenders have developed several ways for homeowners to qualify and purchase homes with low or no money down towards the purchase price. Lenders have mostly provided loan packages that split mortgage costs into a 1st loan worth 80% of the home price and a 2nd loan which covers up to 20% of the home price depending on how much or how little a homeowner can put towards the purchase price. The 1st loan is usually a fixed interest loan while the 2nd loan is traditionally packaged as a Home Equity Line of Credit commonly known as a HELOC. A HELOC is usually a loan with a fixed interest rate tied to the prime interest rate much like a credit card where the interest charged adjusts when the prime interest rate increases or decreases. In the last few years, the prime rate has increased and subsequently, mortgage costs have increased. Alternatively the mortgage may also be either a singular or combined loan package with low interest rates that re-adjust to a higher rate after a fixed amount of time (3, 5, 7, or 10 years, etc.) that may or may not be tied to the prime rate. The shock of this increase has also led to homeowner's inability to continue to pay mortgage costs.⁸

House Representative Rosa DeLauro's office⁹ estimates that 26% of loans originating in CT's 3rd District are sub-prime and therefore more sensitive to changes in interest rates and potential foreclosure. One of the ancillary concerns of the sub-prime mortgage crisis is that these have been granted for second or rental income properties. The South Central Region and particularly towns with a large rental inventory such as New Haven or West Haven are impacted as once these homes are foreclosed and renters are displaced there many not be affordable or available housing replacements for those tenants resulting in issues of homelessness. Meanwhile, the foreclosed

⁸ *Governor Rell's Sub-Prime Mortgage Task Force Final Report*, November 9, 2007. Submitted by: Howard F. Pitkin, Commissioner - Department of Banking and Gary E. King, President –Executive Director - Connecticut Housing Finance Authority

⁹ ENewsletter from Representative DeLauro's Office - November 29, 2007. She represents the state's 3rd District which includes most of the South Central region (as well as other towns) with the exception of Meriden and Madison.

homes may sit vacant and invite vandalism and/or criminal activity and at the very least may otherwise alter the stability of the immediate neighborhood.



26% of loans originated in the 3rd District during 2005-2006 are subprime.

Based on a recent report by the Governor's Sub Prime Mortgage Task Force¹⁰, the following towns in the South Central region have some of the highest rates of sub-prime mortgages. This does not indicate any rate of potential foreclosure or inability to pay.

Sub-prime Mortgages in South Central CT Towns

Municipality	Number of Sub-prime Loans	Amount of Loans (x \$1m)	State Rank in 2007
New Haven	3,998	\$633,688	2
West Haven	1,946	\$324,611	6
Meriden	1,757	\$240,158	9
Hamden	1,064	\$187,164	15
Milford	972	\$227,776	17
Wallingford	668	\$122,773	28
<i>TOTAL</i>	10,405	\$1,736,170	N/A

The House of Representatives passed the Mortgage Reform and Anti-Predatory Lending Act in hopes of regulating mortgage brokers, setting minimum standards for qualifying borrowers and establishing mortgage limits based on ability to pay, and provide protections for renters of foreclosed properties. Many housing advocates have argued that borrowers were not sufficiently counseled to understand the potential for their mortgages to increase and the bill also establishes an Office of Housing Counseling within the Department of Housing and Urban Development (HUD). In the South Central towns where these loans are particularly high, the region

Goal: Continue to promote affordable housing and diverse housing choice for all incomes and age groups in the South Central region with context sensitive

¹⁰ Governor Rell's Sub-Prime Mortgage Task Force Final Report, November 9, 2007. Submitted by: Howard F. Pitkin, Commissioner - Department of Banking and Gary E. King, President -Executive Director - Connecticut Housing Finance Authority

developments. Higher density development should only be permitted in areas with existing water and sewer infrastructure and preferably adjacent to job centers and transportation nodes and corridors.

Strategies:

- SCRCOG staff and the Housing Task Force to provide ongoing support to municipalities in identifying and developing affordable housing project sites.
- Encourage affordable housing consistent with local housing strategies and land use goals.
- Encourage clustering in Moderate to Low Density Areas.
- Encourage context sensitive, in-fill development in urban areas and town centers to shift population growth to these areas and provide more diversity in housing choice. Assist municipalities as needed to develop standards and design guidelines for these efforts.
- Provide additional housing opportunities for aging and workforce population.
- Conduct ongoing market assessments to “know what is happening,”
- Expand regional low-cost housing supply including rehabilitation of historic structures.
- Bring housing and transit supply goals together.

Transportation

The Region's transportation network is the lifeline of our economy, linking our communities to the places where we live, work, learn, and play. The South Central area is well served by a variety of transportation alternatives and can be accessed by rail, car, air, boat, and transit. Soon with the completion of the Farmington Canal, the future Shoreline Greenway, and connections to the East Coast Greenway – you may even be able to get around the region via bicycle. The Region's travel backbone is the east-west and north-south interstate corridor mirrored by corresponding rail and transit service. At the intersection of these routes, New Haven's Union Station, the Port of New Haven, and the Tweed New Haven Airport provide connections to areas beyond our regional borders with the potential for greater access to the changing global economy. Reviewing our regional transportation infrastructure reinforces two important goals: providing ample and diverse transportation alternatives for residents in the region get to where they need to go in the most efficient manner and making transportation connections into the larger world around us (the state, the county, the world) that ensure the region's continued economic vitality and growth. As a regional council of governments, the SCRCOG achieves these goals by performing transportation planning studies, prioritizing projects, and coordinating their completion.

Long Range Transportation Plan (LRTP)

Newly adopted in May 2007, the Long Range Transportation Plan (LRTP) summarizes the region's multi-modal efforts in moving goods and people along the region's railways, highways, streets, airports, harbor, and trails. The Plan also sets the agenda for obligated or financially committed construction and planning projects for a 28-year period. The Major Goals for the Plan include:

- **Travel Options** – The Region has the basics in place for a functional, multi-modal, and first class transportation system including highways, rail, bus, water, and air modes. Enhancement and interconnection of these modes to provide more and better travel and movement of freight and goods will be necessary to insure the continued quality of life in the Region. The Plan identifies existing and anticipated needs for additional transportation services which would improve travel options.
- **Transportation Funding** – Funding levels continue to be substantially below documented needs for implementation of identified transportation solutions. Priorities must be established to meet fiscal constraints while identifying needs which will require significant investment beyond the fiscally constrained portion of the Plan. Many transportation enhancements and initiatives which have been identified are without funding. The goals of the

Plan can only be implemented by the provision of additional transportation funding. The Region looks to state and federal agencies to address these funding needs.

- **Policy Guidance** – The adoption of this Plan reaffirms and expands the major policy guidance as outlined in subsequent chapters. All transportation issues must be framed and reviewed within the context of the Plan to insure meeting of the goals noted. Previous study efforts by the SCRCOG have produced effective guidelines for the implementation of transportation strategies and solutions.
- **Regional Solutions** – It is clear that transportation issues and opportunities can only be addressed by regional solutions. The SCRCOG, supported by its Transportation Committee and Transportation Technical Committee, considers, reviews, and prioritizes proposed projects to insure regional benefits. Monthly meetings and updates provide information from the Region to its member municipalities and state and federal agencies, stressing the importance of interagency communication and cooperation.
- **Linking Land Use with Transportation** – Local land use regulations and decisions have an inseparable link with the regional transportation system and its needs. Land use decisions can dramatically change the impacts on segments of the Region's transportation system. Consultation and cooperation with the local land use agencies will be required to reduce sprawl and increase travel options by working to locate development in those portions of the Region where the transportation infrastructure will, or can be enhanced to, support the additional demand.
- **Aging Infrastructure** – Many portions of the Region's infrastructure were constructed many years ago. Improvements have been made to portions of the infrastructure but urgent needs for modernization and enhancements remain. The Region must insure that its infrastructure is maintained, upgraded, and enhanced as appropriate. The minimum standard must be a state of good repair for all portions of the infrastructure. Local and state governments are responsible for these maintenance activities. The federal government provides substantial funding. Numerous regional needs exist for improvement of infrastructure for all modes of transportation. The Plan identifies these needs.
- **Economic Vitality** – The Region's economic health depends upon the efficiency and extent of the Region's transportation system. The SCRCOG is committed to policies and solutions that improve the Region's economic outlook. Investment in the policies and improvements outlined in the Plan will be crucial to the Region during the timeline of the Plan and beyond. The Safe, Affordable, Flexible, Efficient, Transportation Equity Act: a Legacy for Users (SAFETEA-LU) expanded the definition of economic vitality to include the promoting of consistency between transportation improvements and local, regional or state planned growth and economic development. Regional coordinated efforts will be critical to maintain continued economic vitality.
- **Congestion Management Process** – SAFETEA-LU requires that a congestion management process be a key element of the Plan. Highway congestion throughout the Region has increased since the last Plan, due to increased

dependency on the automobile and the continued increase in car registrations statewide. Increased highway capacity within the fiscal constraints of the Plan can address only some of the Region's congestion locations. Transportation mode shifts and increased utilization and efficiency of existing regional transportation resources will be necessary as part of the process to address congestion issues. The SCRCOG must utilize a congestion management process in framing transportation decisions which may include both transportation demand management (TDM) and transportation supply management (TSM) initiatives. Managing congestion is a key factor in maintaining regional economic vitality and the attractiveness of the Region to residents and businesses while improving overall environmental quality.

- **Preservation of Existing Transportation Resources** – The Region has many options and transportation modes to meet transportation needs. Each of these modes plays an important role in the overall transportation system. Fiscally constrained planning requires a component which maintains all current transportation resources, recognizing the importance of each current mode and service option. The Region can ill afford to lose any service and move backwards. The preservation of the various resources will allow opportunities for the future as regional needs evolve. Transportation needs have increased since the preparation of the last Plan update and the importance of maintaining existing transportation resources cannot be understated. The fiscal constraint imposed by the Plan limits the opportunities to preserve the existing transportation resources. Additional funding will be needed to guarantee full preservation and continued operation of the current transportation operations and infrastructure.

For a list of the region's fiscally constrained projects for the next 28 year cycle, please refer to the appendix of the Long Range Transportation Plan on the SCRCOG's website at www.scrkog.org.

While the plan recognizes that most travel in the region will continue to be by auto, alternatives to driving alone, such as transit, walking and bicycling, are also recognized as important. The LRTP provides a vision for new ways to get around, such as commuter rail and vanpools, and includes telecommuting, ridesharing and other programs designed to reduce demand on the transportation system. The policies focus on ensuring that all layers of the region's transportation system work together in the most effective way possible. In addition, the policies recognize the importance of the movement of goods and services to our regional economy.

Annual Unified Planning Work Program (UPWP)

The UPWP outlines the objectives identified in the region's planning program which describes all transportation issues and needs and transportation-related air quality planning activities anticipated within the region during the next year, in sufficient detail to indicate who will perform the work, the schedule for completing the work and the products that will be produced. Resources made available to the Council by the U.S. Federal Highway Administration (FHWA), the U.S. Federal Transportation

Administration (FTA), the Connecticut DOT and municipalities help meet these objectives. Such support helps the Council focus on relevant regional issues against a background of state and national goals. Planning studies can be local or more regional in nature and for the past few years have included the following:

2006-2007 Work Program	2007-2008 Work Program	Proposed 2008-2009 Studies
Route 34 Corridor Traffic Management Study (New Haven)	Regional Transit Study Implementation Plan and Options	Wilbur Cross Interchange Needs Study
New Haven Truck Route Study	Town of Guilford - Town Center South Transportation Study	Regional Build Out Analysis
Sawmill Road Access Management Study (Route 162) (West Haven, Orange)	Regional Traffic Calming Study	City of New Haven Intermodal Access/Information Management Plan
Regional Bicycle Pedestrian Transportation Plan	Route 10 Corridor Study for Hamden and New Haven	City of New Haven Hill Neighborhood Corridor Study (Davenport/Howard/Congress/Columbus)
I-95 Operations and Coordination Plan	City of Meriden I-691 Interchange Study	City of New Haven Downtown Bicycle and Pedestrian Gap Analysis
Yale Avenue/Wilbur Cross Parkway Interchange Study (Wallingford)	City of New Haven Southeast downtown circulation study	City of West Haven East Brown Street Traffic Calming Study
	Town of Branford Route 1 (North Main Street) Access Management Study	City of Meriden Transportation Improvements Study
	Town of Branford Route 146 Scenic Highway Gateway Plan	Congestion Management Process Study

Transit Study 2005 and Ongoing Implementation Efforts

Wilbur Smith studied the region's transit infrastructure in 2005¹. The study's goal was to evaluate existing transit routes to determine efficiency and to conduct outreach to discover whether new routes should be instituted. One of the primary lessons from the study was that the region's transit network could use adjustment – transit service in the urbanized areas performed well, but population needs have changed as retail centers have further developed in suburban corridors along Route 1, Route 5, and Route 10. The public's strongest complaint was a need for routes to no longer be directed through New Haven. The Transit study outlined the following goals with a brief summary of implementation efforts and partners in the process.

¹ *Regional Transit Development Strategies Study*. By Wilbur Smith Associates, July 27, 2005.

Goal	Status	Coordinating Agencies
Hub & Spoke system necessary	Part of Comprehensive analysis under way. De-facto bus hubs in existence. Route re-design will focus on alternative direct routes between Hubs that may not go through New Haven.	CT Transit, DOT, CT Transit, GNHTD
Route Simplification	Short-term, high priority implementation via re-organization of bus route, Involves redesign of naming structure for routes and limiting route deviations. Comprehensive analysis under way.	CT Transit, DOT
Consolidation of New Haven Shuttles	Short-term, high priority implementation via re-organization of bus route. Comprehensive analysis under way.	CT Transit, DOT
Better Bus Coordination at Union Station and State Street Stations	Short-term, high priority implementation via re-organization of bus route. Comprehensive analysis under way.	CT Transit, DOT
Rapid Bus Corridors	Whalley Avenue discussed, but infrastructure such as advanced signalization system required for implementation	CT Transit, DOT
Stop Consolidation	Adjustment to the C Route in 2007. Comprehensive analysis currently under way with implementation to follow.	CT Transit, DOT
New Rider – Request Service	New Flex Route Service for Branford, North Branford, and Branford.	SCRCOG, GNH Transit
Improved Bus Shelters & Other Amenities	Transit Enhancement projects approved for Amity Road in Woodbridge (sidewalks), Guilford Green Pedestrian Green Improvements, Branford Railroad Station Access, North Haven Montowese Improvements for Bus Shelter and Sidewalks.	GNH Transit and local municipalities.
Park & Ride Facilities and Amenities	No projects pending	DOT
Expansion of Joint Fare Arrangements	No projects pending	CT Transit, DOT, GNH Transit

Existing transit routes all appear to travel into New Haven before traveling back out to other stops – causing longer trips. There is also a strong need for direct routes from Hamden to East Haven, from Hamden to North Haven to Branford. The transit study also identified the need for rider-request service which offers more flexible bus service. In response to these concerns, SCRCOG with the Towns of Branford, North Branford, North Haven and with the Greater New Haven Transit District has recently established an “R-Link” which is a new service that connects Branford to North Branford, and North Haven. The project is funded through the CT DOT. The R-link operates as a Flex-Route service where the buses follow a regular route with scheduled stops, but they can also make off-route stops on request. This means that residents who can’t get to a bus stop may call and have the bus come to them. The bus can travel off its normal route up to $\frac{3}{4}$ of a mile in either direction to pick

passengers up from their homes by reservation only. The buses travel primarily along Routes 22 and 139; Monday through Friday from 6:00 AM to 7:00 PM with regular stops made at the supermarkets and shopping plazas in North Haven, North Branford, and Branford. Flex-route service also allows passengers to flag down and board buses anywhere along the route. It is anticipated that more flex-service routes may be developed and be available in the future once specific route needs and service populations are identified.

Regional Airport Facilities

The South Central Region is approximately an hour commute from the State's largest airport, Bradley International in Windsor Locks, CT which provides national and international service. The region is also fortunate to have local airport service available with two operating airports and one defunct airport in the South Central Region. Griswold Airport, adjacent to Hammonasset State Park in Madison, was a small grass field used solely for private plane traffic that ceased operation in December 2005 and is now proposed for residential development. The area's other two operating airports are Tweed-New Haven in the City of New Haven and the Town of East Haven and Meriden Markham Municipal Airport in the City of Meriden and the Town of Wallingford. Just outside the region is Stratford's Sikorsky Memorial Airport which also provides daily helicopter service to Lower Manhattan. However, only Tweed provides daily commercial airport service.

Tweed New Haven Airport

Tweed New Haven Airport was initially created by the City of New Haven and has been in operation since 1931. The airport is now operated by the Tweed-New Haven Airport Authority and governed by a 14 member Board of Directors appointed by the Mayors of City of New Haven and Town of East Haven and SCRCOG. Daily operations are managed by AMPORT, of Teterboro, NJ, a professional airport management firm. The airport has two runways - a 5,600 feet north-south runway and a crosswind 3,200 feet runway. The airport's only large carrier is USAirways Express which provides daily connection service through Philadelphia. The Airport has two on-site rental car firms - Avis and Hertz and is also connected to regional towns via Metro Taxi service and CT Transit. The airport's other commercial activity includes a coffee shop and food service for early morning commuters.² The majority of the airport's current service is charters, recreational tourist flights, and privately-owned airplane traffic.

A recent study of Airport Service in New England found that New Haven's Tweed-New Haven Airport has the largest underserved passenger base³ of the 10 regional airports operating in New England. Tweed is constrained in meeting travel demands by existing runway and runway safety areas that do not meet Federal Aviation

² Information from Tweed New Haven's website, www.flytweed.com

³ The New England Regional Airport System Study (NERASP), Fall 2006, p. 29. The NERASP is a study sponsored by a coalition of the region's major airports, the six New England state aviation agencies, and the Federal Aviation Administration. The study includes review of both Tweed-New Haven Airport and Bradley International Airport in CT.

Administration (FAA) standards. Based on the site constraints, Tweed's immediate goals are to build full-size turf runway safety areas at each end of the primary runway and to also extend some taxiway areas. This scope of work requires relocation of Dodge Avenue and the Tuttle Creek/Morris Brook and disturbance of 15 acres of wetlands. Mitigation measures require the restoration of approximately 60 acres of wetland replacement areas on the site. The FAA and the Department of Environmental Protection (DEP) have already issued permits that allow the runway safety area work and federal transportation and state match dollars have been allocated for the improvements. Additional commuter service flights and carriers for the airport has been cited as a critical element to successful regional economic development and the majority of SCRCOG elected officials support the current runway safety improvements that would facilitate this growth. Should the current scope of work increase commuter air traffic to Tweed-New Haven this could result in a need for increased transportation connections into New Haven and other area towns such as specialty shuttles or additional CT Transit service during peak flight periods.

Meriden Markham Airport

The South Central Region's second operating airport is Meriden Markham Municipal Airport (MMK). Meriden Airport, owned by the City of Meriden, is a full-service non-controlled airport with a 3,100 foot runway. In 2005, improvements were completed and the airport now has a lighted runway, lighted taxiway, and a rotating beacon light allowing nighttime use of the airport facilities. The Airport offers a wide range of services including aircraft rental, flight instruction, ground schools, an on-site maintenance shop, chartered flights, pilot shop supplies, hangar and tie down rental, and laptop hookup for weather mapping⁴.

Port of New Haven

The Port of New Haven is one of Connecticut's three deep water ports (the two others are Bridgeport and New London). No port in the state currently has container barge service but all three ports have freight ships. Truck traffic is a significant contributor to congestion on the Region's highways – in particular on I-95 and I-91. One of the strategies to reduce the amount of truck traffic is to fully utilize the capacity of the Port of New Haven and implement a feeder barge service. The Region is coordinating with the City of New Haven, the Port Authority, and Freight carriers, and the DOT to work towards accomplishing this goal. It should be noted that the Port of New Haven is already a significant port for tankers for home heating oil and is home to two of the four home heating oil reserve sites in New England. The region encourages any opportunities that would reduce congestion on our highways by facilitating an alternative mode for freight transportation.

Bike Pedestrian Plan

A relatively new movement since the adoption of SAFETEA-LU is the promotion of "complete streets" that provide a place for all types of travelers when developing roadway including shoulders or bike-lanes for cyclists and sidewalks for pedestrians, particularly in urban areas or adjacent to transit-opportunities. The South Central

⁴ For more information, view the Meriden Markham airport's website at www.meridenaviation.com.

Region, utilizing a consultant, conducted outreach and adopted a Regional Bike Pedestrian Plan in July 2007⁵ to provide a conceptual framework for increasing the desirability and effectiveness of bicycle and pedestrian transportation on a region-wide basis. The focus of the plan highlights the use of bicycle and pedestrian facilities as a viable mode of transportation rather than just a means of recreational activity. The Plan seeks to identify areas where a region-wide bicycle and pedestrian network can be developed. This plan incorporates public involvement from stakeholders and government officials regarding their desires for effective bicycle and pedestrian facilities to ensure the best possible solutions to address the needs in the region. The Plan states the primary bicycle and pedestrian goals and objectives as follows:

Goal 1: Provide safe routes for walking and bicycling trips and reduce the number of crashes involving pedestrians and cyclists.

- Objective 1: Support additional safety signage and lighting on statewide bicycle routes, especially on narrow roads that are poorly lit with limited sight distances.
- Objective 2: Encourage preferred maintenance on statewide bicycle routes as potholes and rough pavement can endanger bicyclists.
- Objective 3: Support traffic calming and other safety measures in high crash incidence areas involving bicyclists and pedestrians.
- Objective 4: Support additional education for both bicyclists and drivers about the rules of the road and “Share the Road” guidelines including an update to the CT Driver Manual to add this information.
- Objective 5: Support the development and maintenance of secured bicycle and pedestrian networks through the provision of emergency call boxes, proper lighting, and police patrol.
- Objective 6: Support the development of securing and preventing vandalism of signs, bike racks, and other amenities located on the pedestrian and bicycle networks.

Goal 2: Create a balanced transportation system that offers a variety of practical and pleasant transportation options and allows residents to make walking and bicycling part of their everyday lives.

- Objective 1: Fill in gaps in the sidewalk network to make this a more desirable activity for area residents.
- Objective 2: Fill in gaps in bicycle network to make this a more desirable activity for area residents.
- Objective 3: Review the DOT designated bicycle routes in the South Central Region to determine the most practical and pleasant bicycle travel routes that have safe traffic speeds and sight distances for inclusion in their next map update.

⁵ *South Central Regional Bicycle and Pedestrian Plan*, Prepared by Fitzgerald & Halliday, Inc. in Association with Clough Harbor & Associates, LLC, June 2007.

Goal 3: Increase inter-modal connectivity (walking, trains, bicycling, private automobile, transit) between neighborhoods, commercial areas, schools, parks, and other major community-serving destinations.

- Objective 1: Fill in gaps in the sidewalk network near rail stations, bus terminals, bus stops, commercial areas, schools, employment areas, and other destinations.
- Objective 2: Fill in gaps in the bicycle network near rail stations, bus terminals, bus stops, commercial areas, schools, employment areas, and other destinations.
- Objective 3: Consider multi-jurisdictional regional routes (i.e. Farmington Canal, East Coast Greenway) as destinations in the regional transportation network. In addition to commercial areas, employment areas, schools, parks, and transit areas should also receive high priority for connections.
- Objective 4: Support the installation of bicycle racks and lockers at rail stations, bus terminals, bus stops, commercial areas, schools, employment areas, etc.
- Objective 5: Support bike inter-modal access on buses, including school buses, and trains with racks and other storage areas which may include advocating for a more user-friendly policy on trains.
- Objective 6: Encourage future development to consider existing and possible future pedestrian and bicycle connections to employment areas, schools, parks, transit areas, and other commercial areas.

Goal 4: Provide access to community facilities, businesses, and neighborhoods for all; regardless of age, physical capacity, or income (car ownership).

- Objective 1: Support non-motorized improvements that are not only ADA accessible, but also convenient for all users regardless of age or physical capacity.
- Objective 2: Consider areas that have a large percentage of low-income, minority, and elderly residents and workers when targeting bicycle and pedestrian improvements. Support fair distribution of resources to all users.
- Objective 3: Encourage the DOT, specifically the State Traffic Commission, to enhance the major traffic generator permit process required for large developments to strongly recommend or require bicycle / pedestrian access and storage.

Goal 5: Reduce traffic congestion, noise, air pollution, and unnecessary energy consumption by decreasing reliance on private automobiles.

- Objective 1: Improve the non-motorized transportation network thereby increasing access and opportunity.
- Objective 2: Work with Rideworks, employers, and other groups to encourage commuters to travel by means other than a single occupant motor vehicle. Encourage incentive programs whereby a commuter earns points or has an opportunity to win something if one commits to traveling by a mode other than a vehicle for a certain number of days (e.g. NuRide, Bike-to-Work Day, or an ozone season campaign).
- Objective 3: Support planning for walking and bicycling facilities in existing and new developments.

- Objective 4: Encourage the inclusion of bicycle and pedestrian improvements in local planning; especially development and transportation project planning.
- Objective 5: Understand that every facility does not have to be used by every type of user. Keep transportation corridors out of conservation land. Many such corridors, including paved bicycle paths, are not environmentally friendly in natural habitats.

Goal 6: Contribute to public health improvement by providing safe and attractive opportunities for exercise and outdoor recreation.

- Objective: Support programs and policies that allow residents to make walking and bicycling part of their everyday lives.

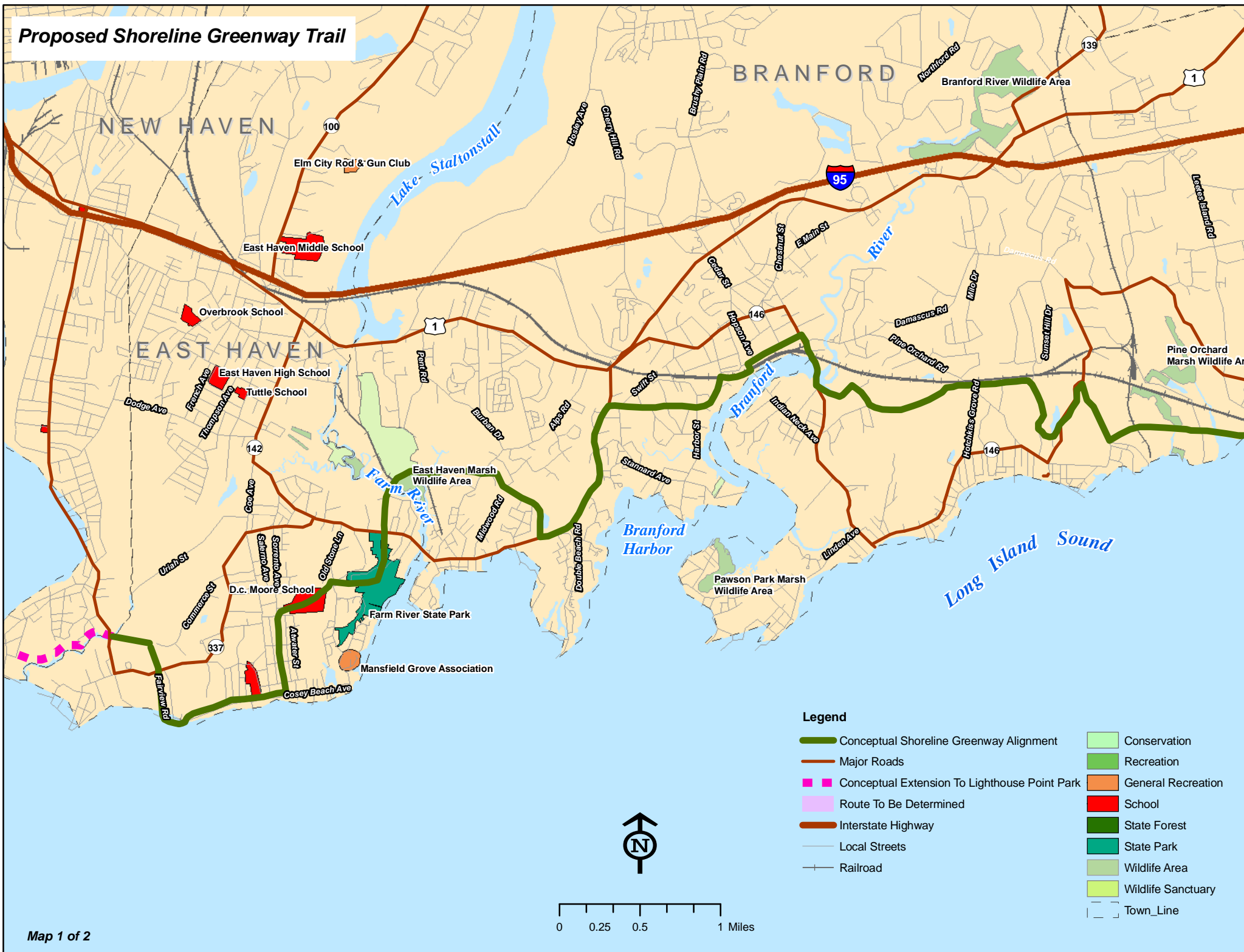
Regional Trails and Greenways

The South Central Region is fortunate to have several significant multi-use trails that can be used for biking, walking or for other non-motorized alternative modes of transportation in addition to recreational purposes. These segregated trails provide a safe alternative to on-road biking and walking routes are targeted for funding with a combination of federal, state, and local dollars. The trails currently include:

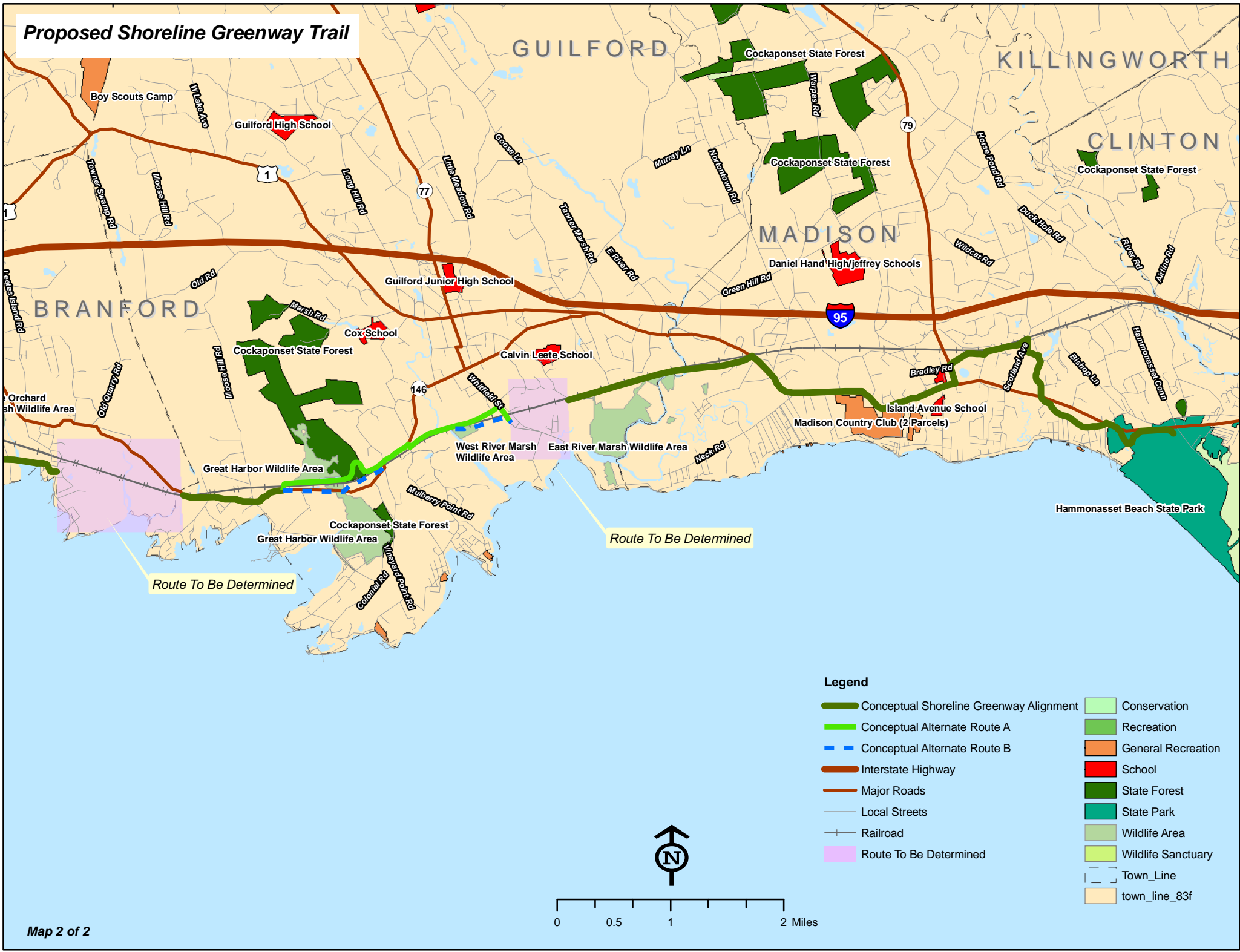
Multi-Use Trails – South Central Region

Trail	Location	Status
Farmington Canal	New Haven to Hamden continuing on to Northampton, MA.	Pending construction completion in Hamden. Design pending for portions in New Haven. Portions complete in both New Haven and Hamden.
West Haven Shoreline Trail	West Haven	3.2 miles of completed multi-use trail along the coast. No additional planned, but trail could be connected to other trails in progress
Shoreline Greenway Trail	East Haven, Branford, Guilford, and Madison	Off-road routes still under consideration. Federal funding available for design phase.
Quinnipiac River Linear Trail	North Haven, Wallingford, and Meriden	Portions complete in Wallingford and Meriden. Planning starting for segments to be developed in North Haven. Potential to connect segments together for larger regional trail
East Coast Greenway	Along entire eastern seaboard from Florida to Maine. Starts in our region in Milford either connecting into Farmington Canal and/or along the coast through West Haven, New Haven, and the Shoreline Greenway Trail	Shared road route available now. Off-road routes currently under consideration.

Proposed Shoreline Greenway Trail



Proposed Shoreline Greenway Trail



Establishing additional multi-use trails may be difficult as finding additional right-of-way areas in the region's densely developed neighborhoods may not be feasible. However if additional efforts and locations are identified, these should be supported as a viable transportation alternative.

Regional Traffic Calming Workshops and Pilot Program

The Region's Traffic calming study facilitated by consultants⁶ develops a systematic approach to traffic calming, identifies key locations throughout the Region, engages the community in the design process, develops cost effective solutions, and develops a preliminary design for a pilot project location. Traffic Calming is simply a physical roadway improvement, signage, or other infrastructure design that lowers the speed on an existing roadway. The pilot project allows a member municipality to submit a proposal for a traffic calming design consultation for an area within their town. Installation of the traffic calming infrastructure is not covered by the program.

Goals:

- Move beyond highway-oriented goals. Find new ways to make transit and pedestrian travel more appealing.
- Use I-95 widening to build an attractive transit system.
- Continue to support the use of New Haven Harbor for freight service to alleviate truck traffic on the area's highways.
- Support the region's transit studies and assist in identified implementation strategies.
- Continue to support the expansion of the area's rail service including the transit parking areas for Milford and Union Station and station expansion along Metro-North, Shoreline East and the New Haven/Hartford/Springfield line.
- Build regional scale paratransit service.
- Continue to support the expansion of regional bicycle and pedestrian trail systems that can provide an alternative transportation mode. Identify gaps in this network and where connections can be established that connect people to the places they work, live, and play.
- Continued support of Tweed as a viable regional commercial airport and a key transportation resource.
- Balance transportation need with protection of the region's Scenic Highways (Route 77, Route 146, and Route 69) views.
- Continue to support and facilitate the completion of the region's prioritized transportation projects as identified in the most current Long Range Transportation Plan.
- Encourage DOT to help facilitate more Transit Oriented Development study (i.e. NJ's Transit Village program) and identify funding for implementation.

⁶ Fitzgerald & Halliday LLC in conjunction with Clough Harbor Associates. Workshops held at SCRCOG in February 2008.

Transit-Oriented Development and Smart Growth

In 2005, the State legislature passed amendments to the requirements for the Regional Plan of Conservation and Development that added a focus on Transit-Oriented Development (TOD) and Smart Growth. The statute requires that, “the regional plan shall identify areas where it is feasible and prudent (1) to have compact, transit accessible, pedestrian-oriented mixed use development patterns and land reuse, and (2) to promote such development patterns and land reuse...”¹ Specifically the State Plan of Conservation and Development’s chapter on Transit Supportive Land Use states that, “communities that currently have stations along the New Haven Line and its branches and the Shoreline East commuter rail line have the greatest potential for transit supportive land use.”²

Transit-oriented Development

Transit-oriented development is defined as, “the creation of compact, walkable communities centered around high quality train systems. This makes it possible to live a higher quality life without complete dependence on a car for mobility and survival.”³ The South Central region is fortunate to have strong existing rail infrastructure particularly along its coastal corridor that is targeted for further expansion. For the most part, residential and commercial areas are in close proximity to many of the existing train stations with additional potential for creating more TOD friendly zoning regulations that would allow more mixed use development of slightly higher - town center compatible- densities.

Of the existing train stations, Milford and New Haven have both promoted transit-oriented development areas with regulations that encourage density and a mixture of uses in these core areas. The diagram below shows the Milford Center Design District (MCDD). The City has had great success in the last decade with the development of high quality multi-family and mixed use development in the Milford Center area surrounding the train station (shown by the purple symbol) by creating land use regulations that have allowed for the development of more multi-family development in the City’s center. This has spurred reinvestment by local restaurants and retail establishments that complements the pre-existing business uses in the area. The blue ring indicates a ½ mile perimeter around the train station with general uses labeled within this proximity. Within this 1 mile area are civic, religious, recreational, medical, residential (both single family and multi-family), education,

¹ CT General Statute, Public Act 07-239, An Act Concerning Responsible Growth, Section 6a.

² Conservation and Development Policies Plan for Connecticut (2004-2009), p. 44.

³ Definition from www.transitorienteddevelopment.org

retail, office, and restaurant uses. Milford's train station – like other stations in the region - is located in close proximity to its historic town center which contributes to the inherent variety of uses to be found and the added opportunity for Transit-Oriented Development. It should be noted that the single-family residential development directly outside this area is also moderately dense with lots sizes ranging from 5,000 to 12,500 square feet.



Additional South Central rail TOD opportunities are as follows:

Metro-North. The Metro-North rail line that originates in New York City and culminates in New Haven has stations in Milford and in New Haven (Union Station and State Street) and has stations proposed for construction in Orange and West Haven.

- Milford's TOD is a great regional example for Best Practices, but the area has experienced significant development and may be approaching full build-out. Some context-sensitive infill may still be possible at the borders of the ½ mile radius.
- New Haven's two stations are in close proximity to the City's Center. There is a mixture of commercial, retail and some residential uses close to the State Street Station. Union Station's mixed-use development has been pending construction of the parking garage which will spur additional development in

this area. The frontage road/Route 34 area is slated for conversion to an urban boulevard and will also provide needed infill mixed-use development and pedestrian infrastructure that reconnects adjacent existing neighborhoods and New Haven's major employers (Yale, Yale-New Haven Hospital and affiliated medical community, St. Raphael's) to Union Station. Gateway Community College and the Long Wharf Theater are scheduled to be relocated from Long Wharf to new sites more accessible to either train station which could potentially capture transit ridership for both these destination locations.

- West Haven has already approved zoning regulations for a Transit-Oriented Development district around the proposed train station area that would allow for a mixture of uses and increased residential density that would promote infill in this already developed neighborhood. This station is currently in the design phase and the CT DOT has begun the process of acquiring properties needed for the Station construction⁴. The City's historic town center is in relatively close proximity to this site and City staff has been working with the State's Connecticut Main Street Center to initiate economic revitalization of the downtown area.⁵

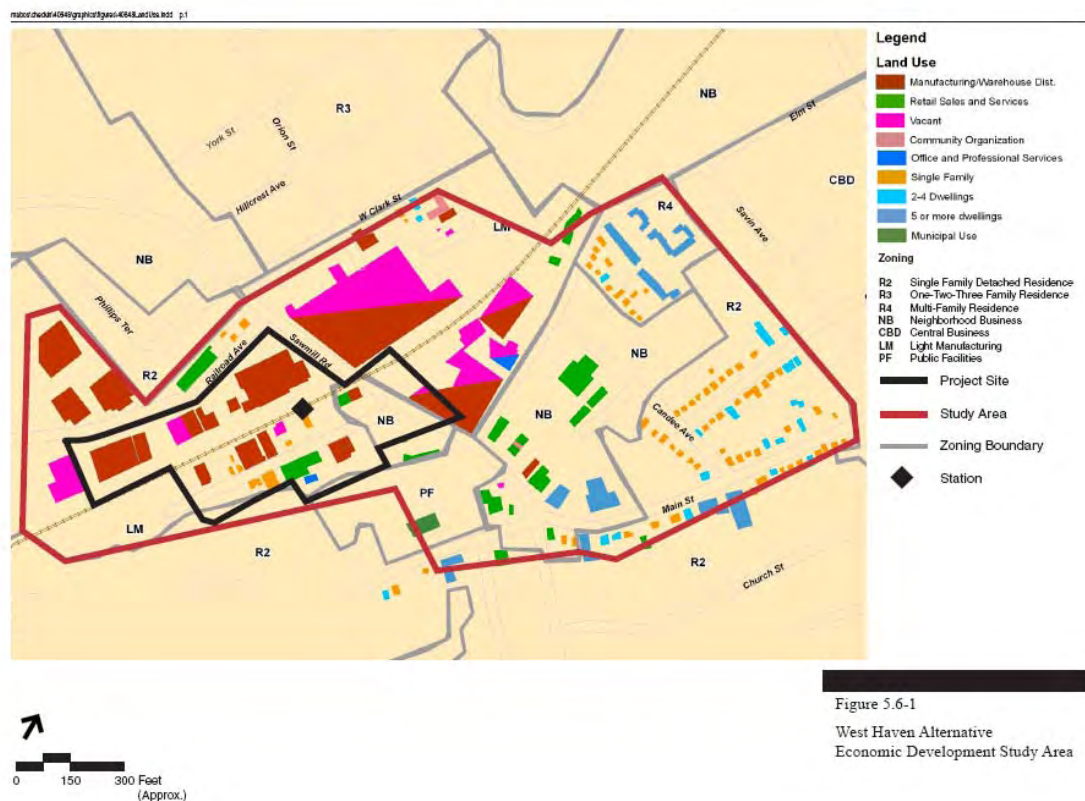


Figure 5.6-1
West Haven Alternative
Economic Development Study Area

⁴ West Haven diagram from the DOT's *Final State Environmental Impact Evaluation for the New Railroad Station at City of West Haven or Town of Orange* dated June 2007 which can be found at their website at <http://www.ct.gov/dot/site/default.asp> under the tab for plans and studies.

⁵ More information about the CT Main Street Center and their programs can be found at www.ctmainstreet.org

- Orange's proposed train station is adjacent to the former Bayer site which has been purchased by Yale University for medical research and education purposes. There are some industrially zoned site areas adjacent to the proposed station that may be developed with transit-oriented development uses, but no zoning regulations have been proposed as of yet. There are densely developed single family residential neighborhoods in the adjacent municipalities of West Haven and Milford located less than 1/2 mile from the station. A pedestrian tunnel is currently shown in the DOT's Final Environmental Impact Evaluation proposed as part of the scope of the station design that provides access to these neighborhoods, but additional pedestrian infrastructure outside of the immediate vicinity of the station may be needed to facilitate crossing the Oyster River.



New Haven/Hartford/Springfield. An existing Amtrack line originating in New Haven is proposed for service expansion to create a more viable New Haven-Hartford-Springfield line with stations within in the region in New Haven, Wallingford, Meriden and North Haven⁶. New Haven's stations have been discussed as part of the Metro-North system, but other opportunities exist for the stations north along the line.

⁶ See DOT's *New Haven - Hartford - Springfield Commuter Rail Implementation Plan, Final Report* dated June 2005 at <http://www.ct.gov/dot/site/default.asp> under the tab for plans and studies.

- The Town of North Haven anticipates two future stations. The Town has approved Special Development District (SDD) zone regulations for the former Pratt & Whitney site that would create a walkable mixed-use community with retail, residential, and medical office components in a ½ mile proximity to where a commuter rail station (known as the Wharton Brook station) is proposed. A second station located adjacent to the Route 40/Mt Carmel Connector allows residents of both Hamden and North Haven easy auto access to the train station. There is an existing mixture of development adjacent to the proposed station area and potential for additional development – although no regulations have yet been approved for this site.
- Meriden's HUB area is directly adjacent to the City's rail station, City Center, and a new branch of Middlesex Community College. The town is conducting a public outreach process to review plans for the HUB. The plans will include public green space that mitigates recurring flood hazard issues in this area while allowing for the construction of office space, retail, and more permanent civic infrastructure such as an outdoor amphitheater that would invigorate this future TOD area⁷.



- Wallingford is currently revising its zoning regulations for a special downtown zone in the area adjacent to the train station. The regulations allow for higher-density housing and retail development that will result in new development opportunities and a reinvigorated TOD area. The

⁷ Site plan shown by the City's consultant - Milone and MacBroom.

regulations require that 20% of all proposed units be provided as affordable in conjunction with the State's recently adopted Connecticut Housing Program for Economic Development⁸. The town receives \$2,000 for each net new unit that can be constructed in the zone (compared with existing zoning) and will be paid \$2,000 for each net new unit actually constructed.

Shoreline East. The Shoreline East Rail Line provides service from the State's eastern shoreline towns into New Haven (with service currently originating in Old Saybrook or New London) with connections to Metro-North service to job centers in Fairfield County and New York City. Rail service is proposed for expansion in the future to provide reverse commuter service and more weekend service. The Town of East Haven has expressed a desire for an additional Shoreline East station in their community. No funds have been allocated to study this location yet.

- Guilford has adopted a Town Center South Plan that seeks to enhance the area located to the southeast of their existing historic Village Center by infilling with pedestrian-oriented mixed-use development. The town's new Shore Line East station was completed in 2005. The Plan also involves relocation of the existing Public Works facility with additional parking for the station. The proposed development will be modestly scaled and serviced by septic systems as no sewers are available in this area of Guilford. Development will need to be context-sensitive of the town's modest density and nearby coastal resources.
- Branford – The CT DOT completed Shore Line East station improvements in 2005. The station is located ½ mile southwest of the Town Center and ¼ mile south of Route 146 (Main Street) adjacent to residentially developed areas and some industrial properties just north of the Branford River. Like other stations along Shore Line East, future Phase II station improvements include up and over and additional parking capacity. Parking land acquisition is currently underway for this Phase. The Town is currently conducting outreach for their Plan of Conservation and Development and is discussing the possibility of additional Transit-Oriented Development with the local community as part of this process.
- Madison – The Phase I train station is currently under construction with new platform improvements that are scheduled to be completed sometime in 2008. Like Guilford, Madison's TOD opportunities are tempered by the limitations of septic system requirements in the area. However, they have designated the area adjacent to their historic town center and the train station with a Village Design District designation and their POCD recommends adding more residential uses to the current predominant uses of office and retail through upper level apartments and condominiums. Phase II work for the train station includes additional tiered parking and up & over access over the train tracks.

⁸ Sections 33 and 38-49 of Public Act 07-4.

Functionally, it should be noted that the region's rail infrastructure, in particular Metro-North, largely transports the region's workforce to places outside of our region (Fairfield County, NYC, Hartford, Old Saybrook). Shoreline East's ridership tends to have more regionally based workforce with a New Haven destination disembarkment rate of approximately 81% for southbound a.m. peak commuters in 2007.⁹

Transit-Oriented Development along other Modal Hubs

In addition to rail infrastructure, the region has an extensive bus transit network emanating from New Haven with about 9 primary bus hubs which provide important links from residential neighborhoods to the commercial corridors located along the Region's primary arterials. As discussed in the Transportation Chapter, the region is also adding new service (such as the R-link debuting in February 2008) which should provide additional transit links. These are largely trips that originate and end within our region. These corridors contain most of the area's retail, office, and higher education destinations and should not be ignored as potential Transit-oriented development areas where additional residential components could be added to this mixture of uses. TODs that include residential apartments along the region's transit lines with direct routes to the region's higher education facilities might capture what has been a largely untapped transit demographic in the commuter student population and assist in reducing roadway congestion exacerbated when schools are in session. The introduction of higher density residential developments along these corridors could also link workforce type housing to the jobs along these corridors. Many of these commercial corridors (i.e., Route 1 in Orange, Milford, and West Haven) lack pedestrian infrastructure and pedestrian orientation with many of the developments auto-oriented with significant setbacks and parking lots adjacent to the roadway. It might be possible and preferable to create transit village development that provides pedestrian oriented and more self-contained communities.

Smart Growth

In addition to promoting transit and transit node development, the State Plan of Conservation also requires that the region adhere to growth management principles that include, "Redevelopment and revitalization of regional centers and areas of mixed land uses with existing or planned physical infrastructure." South Central Region's former POCD - *Vision for the Future* was a regional smart growth policy document adopted in 2000 that, consistent with the State POCD, placed strong emphasis on the need to reinforce the Region's strong central corridors, while limiting development in other areas without existing infrastructure (sewer, water, roadway infrastructure and capacity). The State has begun to allocate the resources and develop strategies that equally focus on both aspects of smart growth – reinvestment in existing centers and corridors and protecting undeveloped rural and forest lands. In fact, the a recent report by the Governor's Responsible Growth Task Force¹⁰ finds that more inter-agency and regional coordination is needed in order to more successfully address issues of smart growth and that this includes more regional

⁹ The region's commuter marketing and coordination agency, Rideworks, conducts an annual on-board survey. More information about their services can be obtained at www.rideworks.com.

¹⁰ *Report of the Responsible Growth Task Force to Governor M. Jodi Rell*, February 4, 2008.

review of Projects of Regional Significance. The report, consistent with the regional plan focuses on redevelopment of the regional corridor first, expanding housing opportunities, concentrating development for better pedestrian orientation, provide transportation alternatives, conserve natural resources, and increase economic development and job opportunities where housing, utility and transportation connections are available. In addition, the report lays the foundation for a discussion of tax sharing for regionally significant projects.

Smart Growth in the South Central region and the State of Connecticut is also about preserving a sense of place – ensuring that the components of our environments, New Haven’s downtown, Bethany’s forests, and Guilford and North Branford’s farms continue to exist in reality as well as in our memories. The Smart Growth or responsible growth movement also begins to address the changes in the global economy that require that our region, like other places in the world, deal with diminishing fuel resources by embracing more compact land use patterns that allow for a Regional food supply, more transit-oriented development and self-sufficient villages. These strategies are also primary components of the American Planning Association’s Policy Guide on Planning & Climate Change.¹¹ The region’s primary Smart Growth strategy is the focus on corridor reinvestment which includes strategic infill and brownfields redevelopment coupled with strong transit initiatives that reinforce job and employee connections. The proposed plan builds on those goals and outlines strategies in this chapter on TODs coupled with the Housing Chapter’s focus on putting housing in employment and transportation corridors reflects the region’s commitment to growing the region smarter. The sections on Agriculture and Open Space place focus on the areas that the region is striving to protect, but more tools are needed that allow the more rural communities the resources to protect their farms and forests.

As stated then and as is still evident now, in an area with pre-existing strong central corridors, brownfield redevelopment is the key to revitalizing the region’s city and town centers. However, spending levels by the state and the federal government has not kept up with smart growth rhetoric. Without additional public investment in cleaning sites and making them development ready, new sites outside city centers are still cheaper and, more importantly, quicker to develop. Brownfields reclamation needs to occur where brownfields exist now - not only when a commercial developer is present. Towns and the region can continue to proactively review the brownfields sites in their area to determine the best uses for them given existing infrastructure, adjacent developments, and compatible industries. Towns need state and federal support to start the clean up process now so that they are “project ready.” Delaying clean-up until specific projects materialize wastes valuable time and money for interested development partners while these parcels will continue to lie vacant and dirty. Current federal and state programs for brownfields redevelopment are discussed in the Chapter on Economic Development

¹¹ APA Policy Guide on Planning and Climate Change available at www.planning.org.

The South Central region has tremendous potential for TODs and is committed to Smart Growth. The Plan of Conservation and Development goals and strategies for these efforts are as follows.

Goals: Guide density to areas with adequate infrastructure; protect environmentally sensitive land, and encourage clustering in moderate-to-low density areas.

Strategies:

- Support TOD developments adjacent to the region's rail station and bus hubs.
- Review bus transit corridors to determine areas where pedestrian-oriented transit villages (perhaps near higher educational facilities like near University of New Haven in West Haven or the Spring Glen neighborhood in Hamden) and context-sensitive infill can be located.
- Review town centers to determine whether additional mixed-uses can be introduced, perhaps applying for assistance funds via the HomeConnecticut bill like the Town of Wallingford.
- Assist the RGP and individual towns in facilitating brownfields redevelopment.
- Coordinate urban design workshops and planner's lunches to facilitate form-based design best practices for infill in historic town centers and other TOD or smart growth related topics.

Economic Development

Economic Development efforts in the South Central Region are primarily coordinated by the Regional Growth Partnership – a public/private partnership funded equally by participating towns and the regional business community. However, economic development must be mentioned as part of any Plan of Conservation and Development (POCD) as land use, conservation, and transportation policy directly affect successful regional economic development efforts and provide the infrastructure necessary to allow businesses to grow and flourish. In addition, the high quality of life that a POCD seeks to establish and protect is necessary to attract and retain the workforce necessary to support a regional economy. The SCRCOG is the region's primary transportation and land use coordination agency and will collaborate with the RGP to achieving the strategies outlined in their plan as in many instances it reiterates goals identified by our own Transportation and Regional Planning Commissions.

A recent article¹ by Sandy K. Baruah, Assistant Secretary of Commerce for the Federal Department of Economic Development states that there are five new realities to economic development in the 21st Century. These realities are:

- The economy will continue to be global
- The pace of change will continue to accelerate
- The components of competitiveness cannot be pursued separately – meaning interconnected challenges such as workforce training, education, and economic development and separate individual political geographies need to work collaboratively to be effective.
- Public-private partnerships are even more critical.
- Innovation is the only sustainable competitive advantage.

These realities reinforce the need to coordinate a regional economic development effort in order to compete in the existing and future economic marketplace.

The Regional Growth Partnership

The South Central region has a regional economic development authority (as defined by the Federal Government) – through the Regional Growth Partnership (RGP). The RGP's primary mission is to encourage cohesiveness between the public and private sectors in the development of policies and programs designed to make the South Central Connecticut region more competitive in the global economy.² The RGP

¹ The Five New Realities of Economic Development in the 20th Century, Economic Development America – Summer 2007, pp 4-5.

² Mission Statement from the RGP's website at www.rgp-ct.org.

focuses on its efforts through facilitating the work of several subcommittees: the Strategic Planning Committee, the Regional Economic Development Forum (REDFO) and the Brownfields Committee.

In order to qualify for Federal grant monies available for economic development – the RGP is required to prepare a Comprehensive Economic Development Strategy or (CEDS). Developing the CEDS is the responsibility of the Strategic Planning Committee although all subcommittees provide content, projects, and priorities for the document. The existing CEDS adopted in 2000³ focused on several goals:

- Support the region's industry cluster growth such as Bioscience, Creative, Manufacturing, and Distribution.
- Support the expansion of regional infrastructure necessary for business such as the Airport, Port, and Rail Service
- Encourage Workforce Development, Incumbent Worker Training, and Retention of Graduates
- Support regional capital projects by securing EDA Funding and support Municipal Projects
- Encourage Smart Growth, Transit-Oriented Development, and additional Affordable Housing

The Federal government requires that CEDS be updated every five years and the RGP anticipates completion of the plan in early 2008. Extensive outreach has been conducted with RGP member municipalities and with other Cluster stakeholder groups (Higher Education, Agriculture, Tourism, Bio-tech) to develop the goals, strategies, and an implementation plan for economic development in the region. The proposed CEDS builds on the goals of the existing plan, but adds more specifics to measure implementation success.

The proposed Regional Economic Development Action Agenda for the updated CEDS is as follows:

Goal 1: Regional Marketing and Communications – Enhance the region's image as a desirable location in which to start, locate and operate a business through an aggressive, cooperative external and internal marketing program and creation of a credible regional economic development team.

- Objective 1: Regional Marketing - Develop a Marketing and Communications Strategy during 2008 and ensure its ongoing implementation beginning in 2008/9.
- Objective 2: Economic Team-Building - Create an Economic Development Education and Team-Building Program during 2008 and operate it on a continuing basis.

Goal 2: Transportation - Develop, maintain and effectively utilize an excellent, integrated, multi-modal transportation system that facilitates the convenient movement of people and goods intra-regionally and internationally.

³ Comprehensive Economic Development Strategy, Adopted 2000.

- Objective 1: Tweed New Haven Airport - Expand private and commercial air services at Tweed New Haven Regional Airport to handle 100,000 enplanements by 2010 with service to three+ hub cities.
- Objective 2: Feeder Barge Service - Initiate a feeder barge service at the Port of New Haven which handles a start-up volume of 5,000 TEUs in 2009; 10,000 TEUs in 2010 and then reaching a long-term volume of approximately 20,000 TEUs in 2013.
- Objective 3: New Haven-Springfield Commuter Rail - Increase commuter rail use in the region by creating a New Haven-Hartford-Springfield commuter line.
- Objective 4: Shoreline East/Metro-North - Increase ridership on Shoreline East & Metro-North by increasing the quality and frequency of service and investing in necessary facilities and infrastructure.
- Objective 5: Bus Service - Increase effectiveness and ridership of the region's bus service.

Goal 3: Business Development – On a continuing basis, identify and assist in the development of world class business clusters that capitalize on the region's diverse strengths and emerging opportunities.

- Objective 1: Regional Business Assistance Program - Develop an effective business assistance strategy and implementation program by 2009 to help existing businesses grow or remain in the region.
- Objective 2: Entrepreneurs & Start-Ups - On a continuing basis, identify and assist prospective companies and entrepreneurs in emerging business sectors to start and grow new business ventures in the region.

Goal 4: Workforce and Housing - Identify, stimulate and, where necessary, coordinate programs, services and initiatives assuring that the region's residents have affordable access to the high quality training, education and housing opportunities they desire in order to be a productive member of the region's workforce.

- Objective 1: Incumbent Worker Training - Increase annual funding for Incumbent Worker Training in the region to \$1,000,000 per year (\$1.82/capita in region) by 2010.
- Objective 2: Community Colleges - Meet emerging workforce needs by supporting innovative workforce development efforts at Gateway Community College and Middlesex Community College.
- Objective 3: Workforce Housing - Improve the amount and diversity of workforce housing by creating and operating an educational and policy development program for the region's communities clearly demonstrating the importance of adequate housing to the region's economy.

Goal 5: Land Use Planning, Policies and Regulations - Assist the region's communities in having locally acceptable and regionally reasonable and rational land uses that provide adequate and desirable locations for businesses.

- Objective 1: Brownfields & Predevelopment Fund - Continue the RGP Brownfields Program and expand into a Predevelopment Fund for challenged properties resulting in 32 new properties receiving financial assistance by 2011.

- Objective 2: Transit-Oriented Development & Smart Growth - Assist the region's communities in developing and implementing land-use policies that employ transit-oriented development and Smart Growth principles to meet local challenges and needs.

Goal 6: Funding - Secure adequate funding to implement the objectives proposed by this CEDS.

- Objective 1: Implementation Funding - Establish a multi-year funding commitment to support implementation of the Goals and Objectives of this Strategic Plan.

Regional Performance Incentive (RPI) Grant

As part of the Responsible Growth legislation passed in 2007⁴, the legislature included a provision for the Office of Policy and Management to initiate a grant program to facilitate regional cooperation efforts for joint services as a cost savings measure for member towns of Regional Planning Agencies or Regional Council of Governments. At the end 2007, the SCRCOG applied for a grant for a Regional Economic Development Website Portal that would facilitate regional marketing efforts. The grant for this proposal has been approved. As soon as monies are provided, the SCRCOG in collaboration with the RGP will meet with municipal economic development professionals, chamber representatives, and members of the private sector to develop the scope for the website portal and create an RFP to solicit the services of 1) a web developer, and 2) a staff person to coordinate the regional marketing and economic development data management requirements for the region. SCRCOG anticipates reviewing existing the services provided by both the State's Economic Development Data & Information (EDDI) website and the Greater New Haven region's DataHaven site to determine areas of collaboration that can be utilized to facilitate cost saving as part of the proposal.

Top Regional Employers and Grand List Payers

The South Central Region's top employers and top tax payers are diverse and vary throughout the region and by town to town. The table below summarizes the top five by town for each category. In some circumstances the lists by town are similar. It should be noted that significant private property holders may also be listed in the Top 5 Grand List column.

Town	2006 Top 5 Employers*	2004 Top 5 Grand List
Bethany	Laticrete International, Inc. Sorensen Transportation Mason, Inc. Uniroyal Chemical Keystone Kennels	Connecticut Water Company Laticrete International, Inc. Connecticut Light & Power Co. Robert H. & Janet L. Brinton MWP Limited Liability Co.
Branford	Dana Engine Systems Seton Name Place CT Hospice Institute Lester Telemarketing Turbine Components	Connecticut Light & Power Co. Svenningsen Christine Kiop Branford LLC Neurogen CSC Montoya Limited

⁴ CT General Statute, Public Act 07-239, An Act Concerning Responsible Growth, Section 8.

Town	2006 Top 5 Employers*	2004 Top 5 Grand List
East Haven	Super Stop & Shop Thermatool Corp. Village at Mariners Point Laurel Woods Talmadge Park Health Care	David Shaffer et al Stoney Brook Village LLC Antonio Rosano Fox Haven Plaza LLC East Shore Development Inc.
Guilford	Oce Imaging Supplies Moroso Performance Products Yale Shoreline Medical Center Algonquin Industries BIO Med Devices	Guilford Retirement Res LP Connecticut Light & Power Goose Ln Medical George A Goss III et al Guilford Plaza Associates
Hamden	Hamden Town & Schools Quinnipiac College Harborside Health – Madison House Shaws Supermarket ACES	Avalon Properties Alecta PO Co. Hamden Developers Home Properties of NY Seramonte Associates
Madison	Madison Town & Schools Stop & Shop Harborside Health – Madison House McDonald's Restaurant Garrity Industries, Inc.	Connecticut Light & Power The Hearth at Tuxis Pond LLC Mary Lee Stiegler Robert F. Schumann Vigliotti Construction Co.
Meriden	SBC/SNET MidState Medical Center TI Automotive Hunters Ambulance Cuno, Inc.	Meriden Square #3 LLC et al Connecticut Light & Power Meriden Square Partnership Radio Freq. Systems, Inc. Yankee Gas
Milford	Milford Board of Education New England Home Care, Inc. Milford Hospital Bic Corporation Schick	Milford Power Company LLC Connecticut Post Mall Bic Pen Corporation Devon Power LLC Smith Craft Real Estate, Etals
New Haven	Yale University Yale-New Haven Hospital The Hospital of St. Raphael SBC/SNET Southern CT State University	Yale University United Illuminating SBC/SNET PSEG Power Connecticut Fusco
North Branford	Fire Lite Alarms D & G Signal and Label Evergreen Woods Tilcon Connecticut, Inc. Advanced Composite Products	South Central Regional Water Auth Shoreline Lifecare LLC Fire-Lite Alarms Inc. Tilcon Connecticut, Inc. Totoket Woods
North Haven	TYCO/U.S. Surgical Corp. Anthem Health Plans, Inc. Town of North Haven Quebecor World/NE Graphics Marlin Firearms, Inc.	TYCO/U.S. Surgical Corp. Anthem Health Plans, Inc. Stop & Shop/Montowese Ind. Park Quebecor World/NE Graphics Price REIT, Inc.
Orange	Sears Roebuck Co. Southern CT Gas Company Light Source, Inc. Shaw's Supermarket Dichello Distributers	Bayer Pharmaceuticals Corp. Baker Properties Home Depot Plaza Orange Plaza LLC Lowe's Home Center Inc.

Town	2006 Top 5 Employers*	2004 Top 5 Grand List
Wallingford	Town of Wallingford Bristol-Myers Squibb Company U.S. Postal Service Verizon Wireless Quest Diagnostics, Inc.	Bristol-Myers Squibb Company PPL Wallingford Leasing Cellco Partnership/Verizon Cytec Industries Inc. WalMart Stores/Infinity Rt. 5 LTD
West Haven	Bayer Pharmaceuticals Corp. Veterans Admin./Health Care City of West Haven University of New Haven United Technology	Bayer Pharmaceuticals Corp. United Illuminating Maffeo-Mary Ann Southern CT Gas Co. Acorn Tech Bergami
Woodbridge	Town of Woodbridge/Board of Ed. Amity Regional School System Harborside Health-Madison House Brighton Gardens of Woodbridge Crest Lincoln Mercury/Dodge	Woodbridge Care LLC Willows Realty inc. Oak Lane County Club, Inc. Woodbridge County Club KFP Family LLC

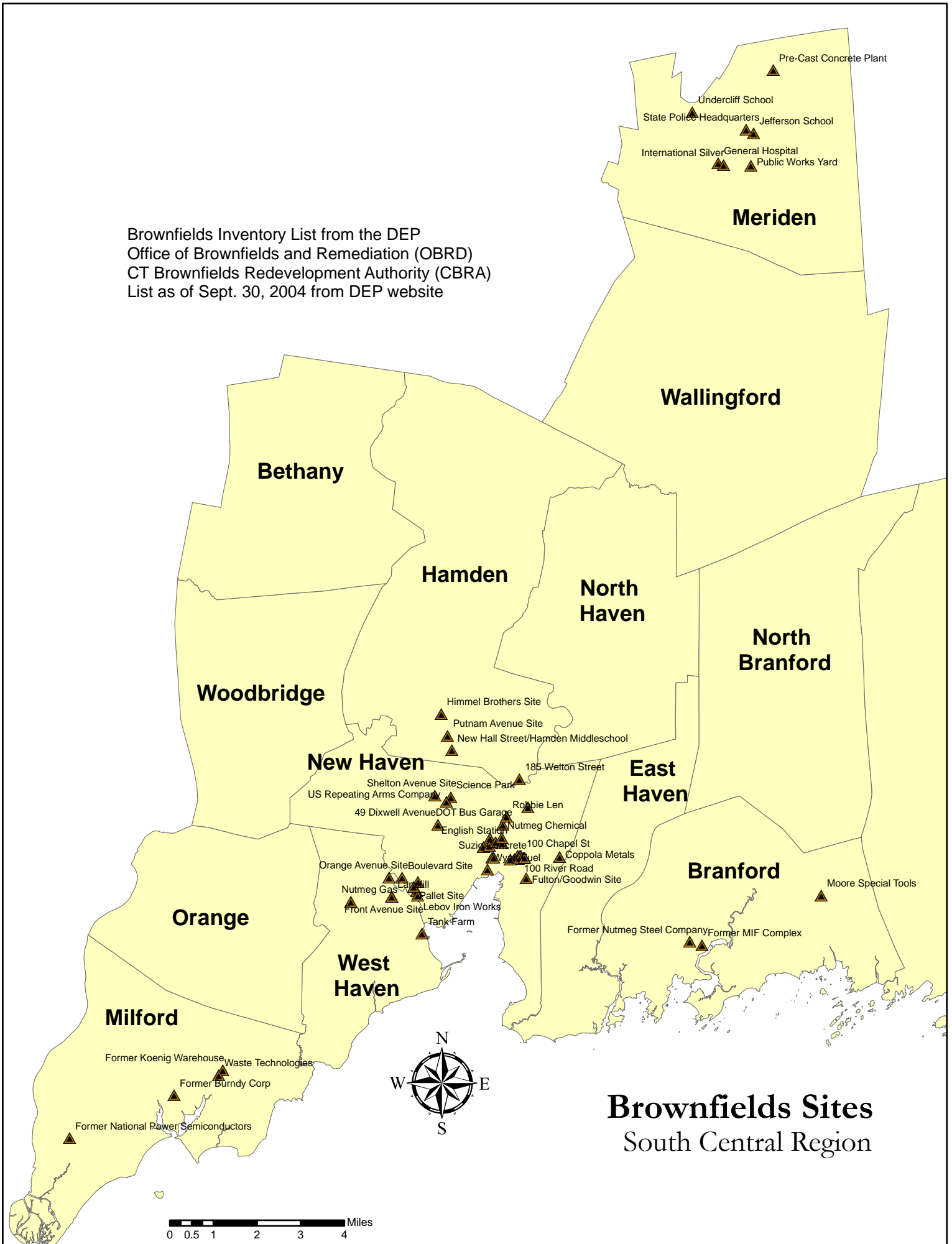
* The data for both Employers and Grand List are from the CERC 2008 Town Profiles which can be found at www.cerc.com.

The region's commercial and industrial corridors primarily follow the region's main highways (I-95 and I-91) and Routes 1 and 5. Portions of industrial and commercial areas are also located along parts of the Wilbur Cross Parkway, some transit lines, waterways, and are located in town centers or along some State Routes in area suburbs and rural areas such as Route 17, 22, 63, 67 and 80. Industrial quarry areas tend to follow the Metacomet ridge line in Branford, North Branford, and Wallingford.

Brownfields Redevelopment

Brownfields are sites that have some level of contamination that usually must be cleaned up before a site can be made available for a different use. Brownfield sites are usually located in the region's primary commercial corridors and the clean up and re-use of these sites is crucial to meeting growth management and smart growth goals. If these sites which usually have preexisting utilities and infrastructure are remediated and ready to develop, other parcels in outlying communities or areas may not have to be developed. As mentioned, the RGP in conjunction with the member municipalities coordinates brownfield remediation efforts throughout the region. The RGP has a revolving loan fund which member municipalities can use for brownfield assessment and remediation activities. The RGP can also apply for additional Federal Brownfield funding for these assessment and clean-up activities on behalf of the region. In 2007, the State Legislature passed a new law (HB 7369) that changes the state's policies and programs for cleaning up and redeveloping brownfields. Among other things, it creates a new program providing different types of financing for these purposes. It allows the state's development finance agency to guarantee bank loans for redeveloping brownfields and issue bonds on towns' behalf for remediating and reusing these sites for homes, apartments, stores, and other mixed uses. It also gives property owners more options to voluntarily clean up polluted properties, allows licensed environmental professionals to play a larger role in overseeing the remediation process, and specifies how they must document and verify the results.

Brownfields Inventory List from the DEP
Office of Brownfields and Remediation (OBRD)
CT Brownfields Redevelopment Authority (CBRA)
List as of Sept. 30, 2004 from DEP website



Brownfields Sites

South Central Region

The act also broadens the conditions under which the state can pledge not to sue property owners who agree to voluntarily clean up their property according to state standards. Lastly, it makes it easier for state agencies to clean up and redevelop brownfields in floodplain areas.

State Department of Economic and Community Development

In a recent report issued in November 2007⁵, the Connecticut Economic Resource Center (CERC) concluded that the state of Connecticut, although small, does not operate as one economic entity. CERC instead determined that the state's economy is divided into interconnected regions with multiple connections between a region's urban centers and surrounding communities. Based on the economic realities of these organizational structures - there should be a regional approach to dealing with economic issues that is cross-disciplinary and flexible to efficiently analyze demographics, promote regional assets, provide infrastructure, and compete with other economic regions in the country. They recommended on a state level to:

- Build on Governor Rell's Responsible Growth initiatives,
- Ensure interagency and interdisciplinary cooperation,
- Cooperative, inter-agency state project funding,
- Establish an Urban Growth Strategy Board,
- Create a Results-Based Accountability for Economic investments.

State agency is the Department of Economic and Community Development. Recent State legislation⁶ has required that the state release its first ever Economic Development Plan for the State for which the DECD has been conducting outreach meetings in each of the 15 Regional Planning Agencies.

The State DECD lists the following State Loan Assistance Programs that can assist with brownfield remediation efforts.

- **Special Contaminated Property Remediation and Insurance Fund (SCPRIF):** This is a loan program managed by OBRD that provides assistance to municipalities, developers or owners for Phase II and III investigations, Remedial Action Plans (RAP), demolition of structures and remedial action activities.
- **Urban Sites Remedial Action Program (USRAP):** The State's flagship, and the oldest Brownfield specific redevelopment program. Jointly managed by OBRD and DEP for projects that are significant to the Connecticut's economy and quality of life. Site must be located in a distressed municipality. This program provides seed capital to facilitate the transfer, reuse and redevelopment of the property.
- **Dry Cleaning Establishment Remediation Fund:** This program is funded through taxes collected from CT dry cleaners. It provides grants of up to \$300k for the landowner or business operator for assessment and site clean up.

⁵ Communities , Connecting to Compete. Connecticut Economic Resource Center (CERC). Executive Summary. November 2007. Full report available at www.cerc.com.

⁶ CT General Statute, Public Act 07-239, An Act Concerning Responsible Growth, Section 6a.

- Connecticut Brownfield Revolving Loan Fund: EPA funds for the remediation of environmental contamination located in any CT municipality.
- Tax Increment Financing (TIF): Connecticut Brownfields Redevelopment Authority's (CBRA) program which provides funds to developers/owners for brownfield projects in CT. TIF funding is repaid to CBRA by municipalities based on the increased property valuation. Grant for environmental site assessment may be included.
- Environmental Insurance Program: Funded through the Manufacturing Assistance Act, this program provides loans and grants to subsidize the cost of Environmental Insurance Premiums. OBRD staff also provides technical assistance to help clients choose the proper coverage for their project.

The South Central's primary economic development goal is to work collaboratively with the RGP, member municipalities, and the private sector to increase regional economic development opportunities and to ensure the high quality of life necessary to retain and attract employers and strong regional workforce.

Strategies include:

- Efforts coordinated through RGP to frame direction and pursue new initiatives.
- Assist the RGP, the member municipalities and apply for funding where available to apply an integrated regional marketing approach.
- Monitor various demographics that provide insight as to employment trends and workforce demographics, and household type.
- Continue to monitor journey to work information.
- Support existing manufacturing and industrial sectors.
- Incubate small business.
- Support the redevelopment of the region's remaining brownfields.
- Support the infill of the region's existing commercial corridors.
- As outlined in the Agriculture Chapter, support the regional agricultural community.
- Given the region's unique location on Long Island Sound and significant waterways - support water-dependent industries, recreation, and economic development consistent with the goals of Connecticut Coastal Management Act.

Open Space and Recreation

The South Central region is fortunate to have access to a wide range of recreation and open space activities. The region is defined as much by its forests, fields, streams, and shoreline as it is by its developed corridors, New Haven or its other central business districts. Maintaining a balance between preserved areas and development necessary for economic development can be challenging, but each of the South Central member municipalities in their local Plan of Conservation and Development express a strong interest in the preservation of open spaces through local and state parks, passive recreation areas, and coastal resources as necessary for maintaining a high quality of life. Similarly, the State Plan requires that each region promote growth management principles that would promote the “conservation and restoration of the natural environment” and “protection of environmental assets critical to public health and safety.” In the South Central Region, its natural environmental assets are diverse and include ridgelines, woodlands, fields, salt meadows, and coastal areas among others. Many of these natural environments extend beyond municipal boundaries and help shape a regional network of park systems and trails. The Trust for Public Land, a well-known non-profit open space advocacy organization provides six reasons¹ why the creation and preservation of parks and open space make good economic sense including: 1) increases value of nearby properties benefiting the owner and the town’s property tax revenue; 2) creates high quality of life that draws business and workforce; 3) attracts tourists and recreation spending; 4) supports exercise and recreation leading to health benefits and decreased obesity; 5) contributes more tax benefit than costs to provide services for working lands such as farms and forests; and 6) protects water supply, cleans the air and prevents flooding.

State Department of Environmental Protection

The open space conservation effort is led at the State level by the Department of Environmental Protection (DEP) and directed by State’s Green Plan which outlines their open space policies and guides their strategies for land acquisition. The DEP’s newest Green Plan issued in September 2007, indicates that sprawl has further intensified the need for open space preservation hand in hand with preservation of the state’s last remaining agricultural sites. The state’s mission to protect open space is driven by a need to protect Connecticut’s diverse landscape, passive recreation areas, water supply quality, ecological habitats, local sustainable forestry resources, and provide flood control – all necessary for maintaining the high quality of life residents of the State and region expect.

¹ List excerpted from *Land & People*, published by the Trust for Public Land, Volume 19, Number 2, Fall 2007.

The State has a measureable goal to preserve 21% of its lands in permanent open space or 673,210 acres of the total 3,205,760 acres of land in the state by 2023.² Included as part of these lands are State and local parks and forests, private non-profit land trusts, and Class I and Class II water authority properties. The State statute requires the lands to be preserved by percentage as follows with the current preserved lands towards these goals indicated where known. Due to the complexity of compiling the open space lands of municipalities, the state's many land trusts, and coordinating the land holdings of water companies – the exact percentage or current acreage of “partner” lands towards the 11% is at this time unknown. However, the DEP intends to direct future resources towards determining these numbers in order to more accurately estimate future funding necessary to achieve its goals.

Statewide Open Space Land Goals

Ownership	Percentage Goal	Acreage	Acreage to Date*	Percentage To Date
State of Connecticut	10%	320,576	251,001	7.8%
Other Open Space Land Holders (municipalities, trusts, water authorities)	11%	352,634	Not yet known.	Not yet known.
Total	21%	673,210	N/A	N/A

*Land preserved as of January 1, 2007.

An approximate regional analysis of open space lands is possible using the mapping files shown for the attached Open Space Lands map. The South Central Region contains approximately 367 square miles of land area or 234,880 acres, of which, approximately 23% of its land area or 54,306 acres are currently preserved as permanent or semi-permanent open space. The ownership of these lands varies with the Regional Water Authority (RWA) at approximately 35.4% the largest individual open space property owner in the South Central region.

South Central Region Open Space Lands

Ownership	Acreage	Percentage	Percent of State Goal
DEP Properties	10,866	20%	3.4% of 320,576
Municipal & Private*	24,209	44.6%	6.9% of 352,634
RWA Class I & II Lands	19,231	35.4%	5.5% of 352,634
Total	54,306	100.00%	8% of 673,210

*Includes former RWA Class III Land pending municipal purchase such as the Racebrook tract within this total.

It should be noted that the “Municipal & Private” land holdings includes some non-permanent recreational properties such as private golf courses which could be subject to future development or quasi open space land uses such as cemeteries which are customarily included in these calculations, but depending on the individual management of these properties, may not actually provide passive recreational opportunities. Conversely, active agricultural properties within the region are not included in the Open Space map (nor will they be used for the State's open space goal

² Connecticut General Statute (CGS) Section 23-8(b).

tabulations) although these may be actively used for passive recreation, i.e. hiking or walking and certainly provide seasonal and year-round habitat for diminishing populations of migratory song birds and other animals. The State utilizes the Recreation and Natural Heritage Trust Program to purchase additional lands for state parks, forests, and preserves. The State encourages its non-State partners to permanently protect open space lands by offering an annual Open Space and Watershed Land Acquisition Grant program which can be granted to land trusts, municipalities, and water authorities for the purchase of Class I & II lands. In 2007, the legislature increased the State's match for acquisition funds for up to 65% for municipalities, non-profit land conservation organizations, and water companies and up to 75% for Distressed Communities or Target Investment Communities.³ In the South Central region Distressed Communities include New Haven, Meriden, and West Haven and Targeted Investment Communities include Hamden, Meriden, and New Haven. Regionally, this Grant program has enabled the purchase of former RWA lands, former agricultural sites, and residential properties that connect regional trail and open space areas (such as the Etzel property in Guilford) and local park space lands. The municipalities and land trusts in the region have also been able to partner with non-profits such as the Trust for Public Land for the immediate purchase of threatened open space properties.

The State's Green Plan also places a renewed focus on protecting lands necessary for habitat. In the South Central Region, many of these lands are located along water bodies and ridge lines such as Housatonic and Quinnipiac River corridors as well as shoreline wetland areas that provide important bird and other habitat. The attached map of Natural Diversity Database Sites shows where approximate areas of endangered, threatened and special concern species are located in the region. The map assists in identifying and prioritizing sites that are not already protected by the state, a local municipality, the Regional Water Authority or other permanent protection ownership status. However it should be noted that along immediate shoreline areas the lands shown as Natural Diversity Database Sites are generally already residentially or commercially developed. Opportunities for purchasing additional open space properties along the coast is not likely unless natural disaster threatens and/or repeatedly damages large segments of the housing or development already in place and the cost of replacement deters redevelopment.

State Designated Greenways

In 1995, the State legislature passed Public Act 95-335 which defines a greenway as a "corridor of open space" that: 1) may protect natural resources, preserve scenic landscapes and historical resources or offer opportunities for recreation or non-motorized transportation; 2) may connect existing protected areas and provide access to the outdoors; 3) may be located along a defining natural feature, such as a waterway, along a man-made corridor, including an unused right of way, traditional trail routes or historic barge canals; or 4) may be a green space along a highway or

³ Per Connecticut General Statute (CGS) 32-9. This status is also used to prioritize Economic Development and Housing Grants.

around a village. Greenways are intended to provide connectivity to greater recreational and open space systems such as ridgelines or waterways.

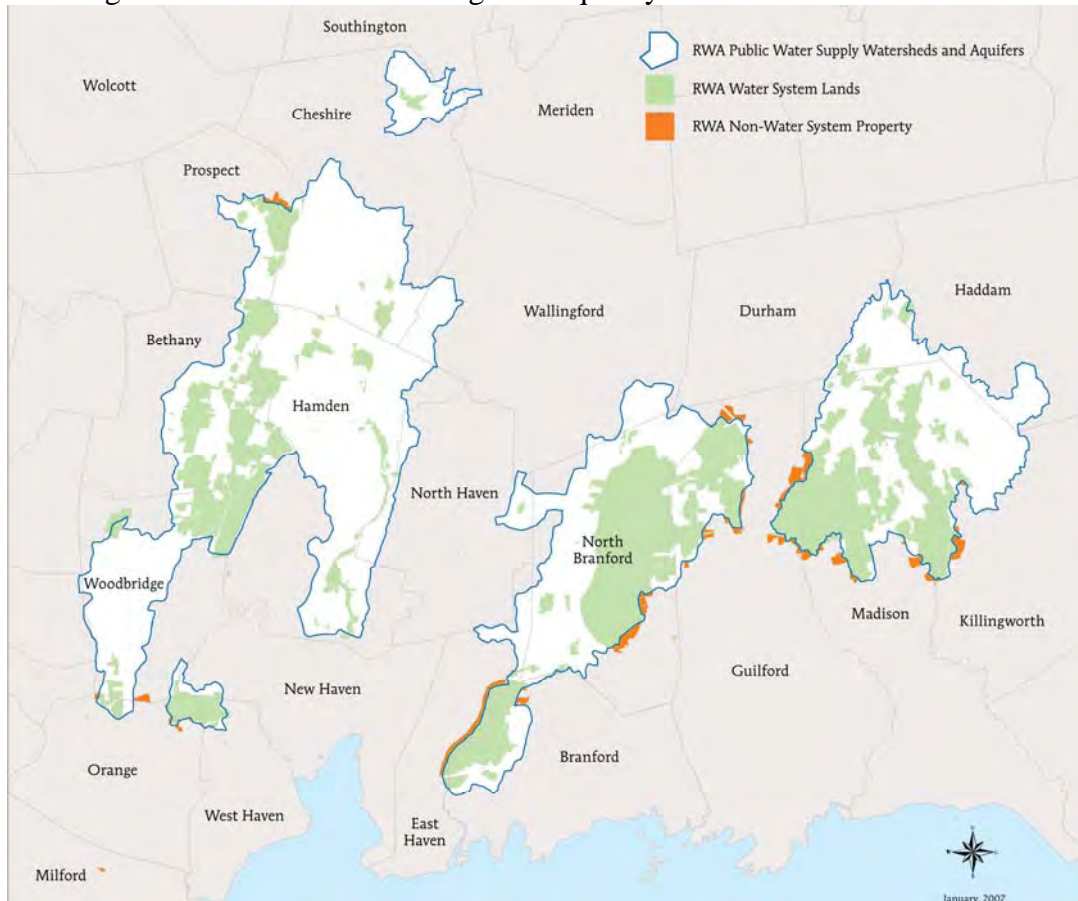
State Designated Greenways in the South Central Region

Greenway	Location	Description	Year
Housatonic Riverbelt Greenway	This corridor extends from the northwestern corner of the state to the Housatonic River's mouth in Stratford.	Envisioned primarily as a measure to protect the river and its surrounding open spaces and scenic vistas, the greenway also provides opportunities for a variety of recreational activities.	2001
Farmington Canal Heritage Greenway	Running the length of the state from New Haven to Suffield., this trail follows the path of the 19th century Farmington Canal	Converted to rail use until 1982, the corridor was saved for public use by a coalition of citizens and converted to a multi-use recreation path.	2001
Metacomet Ridge System	A "spine" of traprock ridges that runs from Suffield south to East Haven and Guilford.	The Metacomet Ridge is one of the state's most familiar geologic features. Traprock ridges provide habitats for many types of plants and animals, but they are not immune from development pressures. Seventeen of the towns through which the ridge passes have signed a compact to work towards protection of this system.	2001
Blue Blazed Trail System	Working with public and private landowners, the Connecticut Forest and Parks Association has put together over 700 miles of hiking trails over the past 70 years.	Today, however, many of these trails are endangered by development. The CFPA is striving to assure that new connections can be found when trail sections are interrupted. (This includes some of the Triple M trail and areas within West Rock Ridge State Park)	2001
Woodbridge Greenway Trails	A central link in a regional greenway system which includes New Haven, Hamden, Bethany, Seymour, Ansonia, and Derby	The Woodbridge Greenway Trail is a 12-mile corridor that provides passive recreation, protection of natural habitats, and preservation of community character as it connects open spaces.	2002
Milford Greenway System	Milford has nominated four corridors that protect the significant waterways running north/south through the city.	These include the Wepawaug River corridor, the Beaverbrook and Housatonic River corridor, the Indian River-Stubby Plain Brook corridor, and the Farley Brook/Crystal River corridor.	2003
Quinnipiac River Greenway	The towns of New Haven, North Haven, Hamden, Wallingford, Cheshire, Meriden, Southington and Plainville	An inter-municipal compact which will provide public recreation, environmental education, and protection of natural resources in the Quinnipiac River watershed.	2003
Neck River Corridor Protection Project	The Madison Land Trust has developed a plan to protect the corridor of the Neck River, the only river the runs its entire course in the town.	The goal includes the purchase of the Neck River Uplands, 115 acres of land that drain a significant portion of the river's upper watershed. The corridor, currently 160 acres, connects to other land trust holdings and to properties protected by the South Central Regional Water Authority, the Nature Conservancy, and other municipal and state lands	2004

Designated greenways are included in the State Plan of Conservation and Development, and into any DEP Greenway plans. There are several designated Greenways in the South Central Region which have the potential to be expanded further and which meet the DEP's intention of "connect(ing) the places we live with the places we love."

The South Central Regional Water Authority

As previously stated, the Regional Water Authority's (RWA) dedication to water quality has led to the purchase of many watershed and important aquifer protection area sites in addition to reservoir areas that make up almost 20,000 acres in the South Central region. As shown on the map below, the RWA is committed to increasing their land holdings to include other watershed and aquifer areas – specifically areas in Hamden, Bethany, Woodbridge, Orange, North Branford, and North Madison that could further aid in the ensuring the region's water quality by allowing natural groundwater filtration processes that eliminate the need for more expensive technological solutions to maintaining water quality.⁴



⁴ More information about the RWA's acquisition or recreation program can be found on their website at <http://www.rwater.com/>.

The RWA will also be selling some of its non-water system properties (as shown on the map above) that are outside of watershed and aquifer areas and these may be purchased to add to local or state open space resources with right of first refusal granted to the municipality and then to DEP. If these sites are not suitable for open space, they may be purchased for other regionally important uses.

The RWA is also an important regional recreation area partner. The public can access designated water authority lands for passive recreation including hiking, some biking and fishing via a permit system. Their recreation sites include the Hammonasset Recreation Area in Madison & Killingworth, the Genesee Recreation Area in Madison & Guilford, Sugarloaf Hills Recreation Area in Guilford, Big Gulph Recreation Area in North Branford, the Lake Saltonstall Recreation Area in East Haven & Branford, the Maltby Lakes Recreation Area in West Haven & Orange, Lake Chamberlain Recreation Area in Bethany & Woodbridge, and the Lake Bethany Recreation Area in Bethany. The RWA also recently added the Pine Hills Trails that were formerly part of Birmingham Utilities. The RWA's recreation area permit program allows access to pristine forest lands, reservoirs, and, in the case of the Genesee site, even a colonial settlement site. These lands provide a unique opportunity to experience the region's diverse natural environments and to view local species in their native habitat.

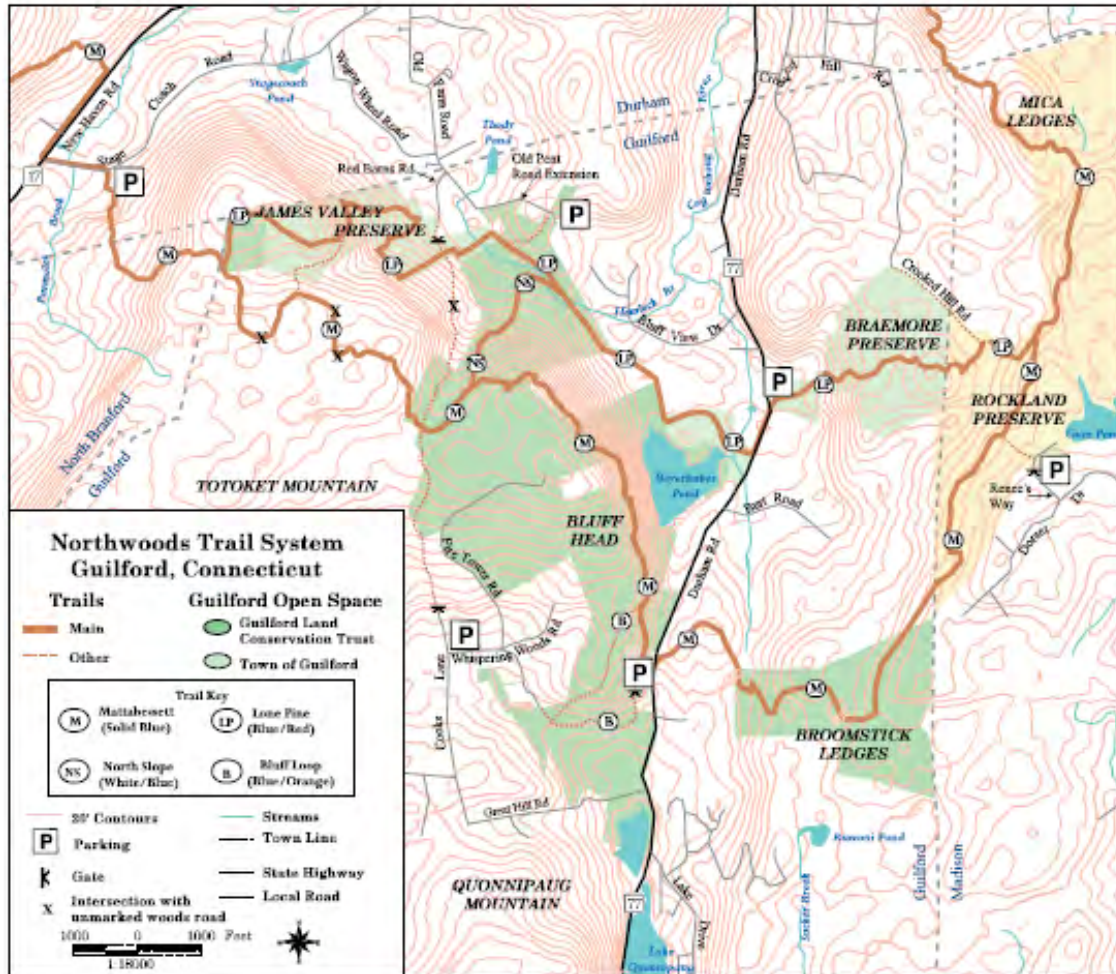
Ridgelines

Rising from 300 to 700 feet above the ground, Connecticut's Traprock Ridges run north from Long Island Sound to the New Hampshire border. The ridges, which were formed by a volcanic lava flow, have dramatic west-facing cliffs with soft gradual slopes to the east. These relatively pristine ridges provide an essential corridor for birds, animals and insects. Vernal pools on the eastern slopes, like those on the eastern side of Lake Saltonstall in Branford, provide breeding grounds for some rare and endangered salamanders.⁵ Portions of trails in the region's ridgeline trail systems offer some of the best views north to Hartford and south to Long Island Sound. These systems also contain portions of Blue Blazed Trail areas which are maintained by the Connecticut Forest and Parks Association.⁶

The region's Metacomet Ridge line has been largely preserved through the creation of local and state parks. The Ridge (as shown on the Open Space Lands Map) runs through the northerly Hubbard and Guifrida Parks of Meriden - and then travels along the border of Wallingford through part of the TriMountain State Park and down to northern Guilford. In Guilford, a combination of Guilford Land Trust, Town-owned, and Regional Water Authority properties has preserved access to the ridge through public hiking trails known as the Northwoods Trail System. An additional 141 acre site (known as the Etzel Property) located between Broomstick Ledges and the Braemore Preserve will also be purchased in the near future and was recently awarded a \$500,000 Open Space Acquisition Grant from the DEP.

⁵ From the Sierra Club's website at http://www.sierraclub.org/specialplace/ourplaces/ct_traprock.asp.

⁶ The CT Forest and Parks Association publishes a walk book of this trail and others throughout the state that is available from its website at www.ctwoodlands.org.



The Metacomet Ridge also forms part of what has been called the Triple M Trail which stands for the Metacomet Monadnock Mattabesett Trail which roughly follows this ridge from Connecticut to New Hampshire. The 220 mile trail also known as the New England Scenic Trail is pending designation as part of the National Trails System. This designation promotes the trail which can create more opportunity to purchase private properties along its route and ensure permanent preservation. However acquisition of trail sites is still subject to the willingness of the property owner.

The South Central Region is also home to the State's West Rock Ridge State Park which extends along the borders of Hamden, Woodbridge, and Bethany and culminates in the northeast corner of New Haven. The steep topography of the Park extends eastward to Sleeping Giant State Park, but there are no permanently preserved linkages between the two significant regional park resources. A West Rock Ridge Conservation Area has been designated for privately owned lands surrounding the park that is governed by State legislation.⁷ An Advisory Board comprised of representatives of the four municipalities reviews adjacent parcels within this area

⁷ Connecticut General Statute (CGS) Sec. 23-9b. West Rock Ridge conservation area and supplement.

that are available for sale to recommend to the DEP whether purchasing such sites should be pursued. It should be noted that there is no standing reserve available to purchase such sites. The last POCD suggested that the SCRCOG should play a more active role in identifying critical West Rock Ridge Conservation area sites for preservation as development pressures have intensified, in particular, in the adjacent areas in Hamden. Although review of individual sites available for purchase has been conducted by SCRCOG staff, no regional study to preserve remaining undeveloped West Rock Ridge Conservation area lands has yet been completed. Other important traprock ridge areas include East Rock Park in New Haven and Lake Saltonstall owned by the Regional Water Authority.

Long Island Sound and Coastal Open Space Access

One of the South Central region's greatest assets is its proximity to Long Island Sound – an estuary of National Significance. Eight of the fifteen member municipalities have direct access to Long Island Sound and there are two State Parks – Silver Sands in Milford and Hammonasset in Madison that provide public access in addition to a variety of local municipal beaches. The region's municipalities have showcased their shorelines and there is significant regional support to connect West Haven's 3+ miles of multi-use shoreline trail to New Haven's Harbor and Long Wharf area that could then connect to the Shoreline Greenway in East Haven, Branford, Guilford, and Madison. Although much of the coastline is intensely development, some natural coastal and wetland habitats have been maintained. Where ever possible, the region should support town initiated efforts to purchase remaining coastal open space parcels for environmental protection in its natural state or for public access – whichever priority is deemed most significant. It should be noted that the State DEP has an excellent resource that identifies coastal access points throughout the state via its website at <http://www.lisrc.uconn.edu/coastalaccess/>.

Regional Recreational Trails

In the late spring of 2006, the COG completed a Regional Recreational Trails Map which serves as an index to 66 individual trail brochures. The project was funded with a DEP Recreational Trails grant and completed with a matching dollars represented by staff time. Each town is represented by at least one trail and corresponding brochure and the project includes trails in RWA Recreation areas as well as State Parks. Several of the trails are regional in nature and extend across municipal borders such as the Farmington Canal. There are three trails along the Quinnipiac River and the Regional Map provides a context for understanding where gaps need to be filled to make the trail route along the river more complete. Display cases were made for each municipality and the brochures are available within each town and on SCRCOG's website at www.scrkog.org. Future regional trails may include the Shoreline Greenway and portions of the East Coast Greenway when this trail determines an off-road route. The display cases have room for some additional maps and it is anticipated that the Regional Map will be updated as needed when additional regional trails are developed or other changes are necessary.

Future Regional Open Space and Recreational Facility Needs

The South Central region's member municipalities have each identified their open space priorities. These can possibly be added to existing open space areas to show where regionally connected expansions of open space can be created, greenways expanded, or regional recreational resources can be enhanced. Pending regionally important open space and greenway projects include the design of the Shoreline Greenway Trail and the potential expansion of the Quinnipiac Linear Trail through North Haven. The Region's Open Space Subcommittee may be able to review a complete open space priority list and map and update it as needed to prioritize funding opportunities as grant opportunities become available.

As a Regional Council of Governments, SCRCOG's role in the preservation of the region's Open Space and Recreation areas has limitations. Unlike the State, individual municipalities, or non-profit land trusts, the SCRCOG is not and will likely never be an open space or recreation area property owner or manager. However, the region acts more in the role of a facilitator through its Open Space Committee and staff resources by providing important review, assessment and advisement services in regards to the region's open spaces, natural habitats, and recreation areas and with some primary goals in mind:

- 1) A full diversity of publically accessible open space and recreation assets should be available to all citizens throughout the region. For example, public coastal access for inland residents and public wooded hiking trail facilities for coastal residents.
- 2) Connections should be established where possible between open spaces, trails, and other recreation facilities to create truly regional recreation facilities.
- 3) The region's natural environments, environmentally sensitive lands, and special features such as ridgelines and waterways often extend beyond municipal boundaries. Regional perspectives of these environments assist in preventing avoidable gap development and maintaining comprehensive sustainable local habitats and ecosystems.

The region can not only have a role in assessing regional open space and recommending sites for future acquisition, but can participate in marketing publicly assessable open spaces to citizens of the region and, if directed, to larger audiences such as the State or even potential tourists. The South Central Region's Regional Trail Brochure project is a fine example of a successful collaborative marketing project and will be described in more detail later in the chapter. In the creation or maintenance of regional recreation facilities such as trails, the SCRCOG has also acted as a primary contract liaison for funding agencies when multiple-municipalities, stakeholders and land owners are involved. Understanding the State's goals also directs the region's open space preservation priorities and identifies possible future funding or partnership opportunities.

The South Central Region should institute the following strategies to ensure that its open space preservation and recreation area goals are accomplished.

Strategies:

- Continue to utilize GIS to map and maintain shape files of all types of regional open space to provide the visual aid necessary to be successful with the region's goals and to be able to recognize when future developments may threaten regional connections or compromise the integrity of existing open space assets.
- Through coordination with the municipalities and the Open Space Committee provide some prioritization for funding.
- Complete analysis of West Rock Ridge Conservation Area.
- Update the Regional Trails Project as needed to add new regional trail resources and make changes to existing trails when necessary.
- Support the continued development of Regional trails.
- Utilize SCRCOG staff when needed to continue to identify grant sources for open space acquisitions and provide assistance when needed.

Agriculture

Although most of the region's residents live in centrally located areas along major transportation corridors – the areas of fastest population growth and development in the last ten years are in rural or the semi-rural suburbs translating in the loss of regional farmland in areas like North Branford, Guilford, Orange, and North Madison. The area's agriculture lands are an important regional resource both in terms of tourism dollars and the New England quality of life defined by apple picking in the fall, Christmas tree farms in the winter, spring's abundance of nurseries and green houses and summer's bounty of local fresh fruit and produce. The region has lost most of its dairy and livestock farms, but is still represented by local orchards, tree farms, and small neighborhood farms in most of its communities. The region's presence along Long Island Sound also contributes to a healthy aquaculture economy which will be discussed in more detail in the Chapter on Long Island Sound. With the increase in residential development – the area's most significant agricultural activity is its nurseries and greenhouses. Regional farms not only contribute to the area's quality of life, but also provide 1) fresh, healthy food to our stores, tables, schools, and restaurants, 2) essential habitat for migratory birds and songbirds, and 3) a local or regional passive recreation resource.

The Federal Farm Bill

Nationwide, Federal efforts to preserve and promote farming has traditionally been directed through the Federal Farm Bill towards subsidies for large farms producing singular commodity crops (rice, wheat, corn, soybeans) instead of small farms that actually produce a variety of foods, fruits, and vegetables that are consumed in the regions in which they are grown. The Federal Farm Bill is legislation passed every five years that also provides funding for food stamps and other nutrition programs and farmland conservation efforts. The Farm Bill also aids farmers across the county and in CT by providing crop insurance programs should inclement weather damage crops and limit production and by providing grants for land conservation, farmland education and acquisition. This year the proposed crop subsidies also support crops raised to produce ethanol.

As the nation faces a looming health care crisis with increasing percentages of population considered obese, health and farming advocates, such as the American Farmland Trust, have been lobbying for the Farm Bill discussion to also include talk about the food that the nation eats, what is healthiest for consumers, and mention of a timeline for eliminating sodas, other sugary drinks, and high-fat snack foods from school vending machines. Proponents argue that the nation's substantial subsidy of corn which is used to produce high fructose corn syrup used to sweeten soft drinks and other preserved food products has contributed to the cheap cost and ample availability of these products. Connecticut, which has had an obesity rate for its

population of 15-19% since 1999, has already passed legislation that eliminates or reduces sugary drinks for sale in public schools.¹

As of February 2008, a new Farm Bill has not yet been passed, but the proposed bill by the U.S. House of Representatives and a parallel bill passed by the Senate² includes approximately \$13 billion in new money that would fund the following national priorities:

- Conservation and Environmental Programs – \$4.6 Billion
- Food Stamps and other Nutrition Programs – \$4 Billion
- Renewable Energy Programs – \$2.5 Billion
- Fruit and Vegetable Programs – \$1.6 Billion

The South Central Region's Congresswoman, Rosa DeLauro, is currently the chairwoman of the U.S. House of Representatives' crucial Agriculture Subcommittee on Appropriations and has introduced a "marker" bill that stresses access to healthy food as a legislative priority. The marker adds new focus on agriculture's regional food supply markets which would benefit Connecticut farmers.

State Resources for Agriculture

The State has recognized that once farmland is lost – it is lost in perpetuity. Governor Rell noted that the goal of the state's Farmland Preservation Program is to preserve 130,000 acres of which 85,000 acres must be prime or important cropland soils, but Connecticut is still about 100,000 acres short of that goal.³ This Program goal would ensure that Connecticut can continue to produce at least 50% of its fluid milk needs and 70% of its in-season fresh fruits and vegetables – stabilizing the cost for such goods, eliminating the need to transport these goods from other states, and protecting the agricultural employment sector. (An analysis of the region's acreage in farmland would be helpful to understanding the region's ability to provide for its food needs. Information has been requested and an approximate figure of this land area is anticipated to be provided for the final draft of this document.) A report by the University of Connecticut's College of Agriculture and Natural Resources⁴ indicates that CT's main crops include Pears, Apples, Tobacco, nursery and greenhouse sales, Sweet Corn, and Christmas trees in addition to its Aquaculture industry which is more fully explained in the Chapter on Air Quality and Long Island Sound.

The State Plan of Conservation and Development has listed as one of its growth principles the need for "Conservation and restoration of the natural environment, cultural and historical resources and rural lands."⁵ In order to ensure that existing farms are maintained and passed on to future generations of farmers the State's

¹ Statistics from the Center for Disease Control – <http://www.cdc.gov/nccdphp/dnpa/obesity/trend/maps/>.

² Reproduced from the American Farmland Trust (AFT) website. www.farmland.org

³ Governor's Press Release dated November 25, 2007. Also CGS 22-26cc.

⁴ Agriculture in Connecticut 2005, by Dr. W.A. Cowan, Published by the University of Connecticut's College of Agriculture and Natural Resources, August 2006.

⁵ CT State Statute PA 07-239, An Act Concerning Responsible Growth, Section 6(a).

Department of Agriculture (DOA) has also worked on the creation of several educational and financial assistance programs. The State's recent efforts are expansive and include:

- An Act Concerning the Face of Connecticut (Public Act 07-131) increases grant amounts for the DEP's current Open Space and Watershed Acquisition Grant Program. This program is usually used to purchase passive recreation and water shed lands, but it should be noted that acquisition properties currently used for agriculture can also continue to be farmed. The legislation also adds a new loan program to help municipalities purchase agricultural land. Communities are required to provide funds that cover 20% of the loan purchase price for the property. The law became effective in July 2007 so no loans have been issued yet, but the program will be administered by the DOA with terms that allow a no interest loan for a period of five years. The act also establishes the "municipal purchasing of agricultural land account" as a separate, non-lapsing account within the General Fund. As of February 2008, the DOA has not yet released information about the application criteria for the agricultural land acquisition loans and any other terms governing the loans.
- The Farmland Preservation Advisory Board was created by CT legislation in July 2007 and consists of 12 members that assist and advise the Department of Agriculture Commissioner on the state's purchase of development rights program to increase participation and to plan for future acquisitions. Orange's current First Selectman James Zeoli, who is also an active farmer, serves on this board.
- In 1995, the DOA started an Agricultural Viability Grant Program⁶ that provide up to \$50,000 in matching funds with an application deadline usually in the fall of each calendar year. There was \$1 million available in each of the 2006 and 2007 budget cycles. Regional applicants have received several grants over the (2) years that the program has been offered including City Seed in New Haven for farmer's market marketing efforts and the Town of Madison for developing a plan to re-establish the town's oyster beds.

Agricultural Viability Grants can be used in two ways:

- 1) The Farm Viability Grant (FVG) can only be used by municipalities and regional planning agencies and may be used for capital projects, marketing or for planning projects such as researching and developing agricultural friendly land use regulations. The 50% match can be in in-kind services or funding from other sources.
- 2) The Farm Transition Grant (FTG) is specifically to strengthen the economic viability of Connecticut farmers, agricultural not for profit organizations and agricultural cooperatives. A producer and a cooperative match must be at least 50% and may not include in-kind services, while a not for profit match must be at least 40% and may include in-kind services.

⁶ Via Public Act No. 05-228, An Act Concerning Farm Land Preservation, Land Protection, Affordable Housing, and Historic Preservation. Enacted July 1, 2005.

- The State has a program that allows for private property owners of agricultural land to sell their Development Rights to the State (CGS. Sec. 22-26cc). The development rights purchase price is determined as the difference between the market rate value of the land and the value of the land as agriculture. The State pays this difference and deed restricts future use of the land, but does not own the property. The land can continue to be sold to future property owners for active agricultural use only.
- Since 1963, CT, like other states also offers tax relief for owners of agricultural, open space, and forest lands (Public Act 490, CGS 12-107a through 107-f). PA 490 allows land with these uses to be assessed at its use value rather than its fair market or highest and best use value for local property taxation. This designation is intended for long term classification and a conveyance tax penalty is applied if the classification is changed within 10 years or the initial classification date. The 490 status is discontinued if the land use changes or land ownership changes, but can be reinstituted once a local assessor makes a determination of continued agricultural use. The state law sets no minimum lot size requirement for the program for farmland, but some towns do have certain acreage requirements for open space. Forest land is usually required to be 25 acres or more with a forest land designation by the Forestry Division of the DEP.
- The newly established CT Farmlink is a legislatively mandated program and website (www.farmlink.uconn.edu) hosted by the CT DOA and the University of Connecticut that is dedicated to linking new or experienced farmers looking for land and farm owners looking to lease and/or sell their existing agricultural lands. The website provides a directory of both parties and also provides links to resources to assist new farmers in starting out and other agricultural resources.

Local Agricultural Efforts and Programs

Agriculture has a rich history in the South Central Region with many special and visible agricultural assets in particular Bishops Orchards in Guilford, Hine's Field View Dairy Farm in Orange, Blue Hills Orchard in Wallingford and Rose's Farm in North Branford. Started in 1639, the Hines Farm in Orange is one of the oldest family operated farms in the county. The region's agricultural uses, based on inventories kept by the DOA, is shown attached but is likely not inclusive of all regional farmlands – particularly part-time farm operations. Farms are not only important to a New England quality of life, but studies done across the nation, and closer to home by the American Farmland Trust, have conclusively proven that property tax revenues generated by farm, forest, or open space land, are far greater than the town's expenditures to service that land as compared with the residential developments that often replace them. Because commercial and industrial development require services and attract more residents, these sectors may also result in increased tax burdens. Thus, maintaining a portion of a town's land base in farm, forest, and open space can actually help stabilize tax rates in a time when increasing municipal budgets are a primary concern.

Locally, no South Central municipality has done more than the Town of Guilford in its recent efforts to preserve its agricultural heritage and to protect its working farms. In 2006, approximately 2,700 acres of Guilford's land area was categorized as farmland under PA 490 - which is about 9% of the Town's land area and an increase over the 2,300 acres under this designation in 2001.⁷ The Town has started the State's first Agricultural Commission whose mission is to support its town's agriculture through education, communication, conflict resolution, regulatory guidance, and promoting the economic viability of farming. Its Commission is comprised of 5 full-time members and 3 alternates –all who are currently full or part-time farmers. The Town also currently has an Agricultural Viability Grant to review the local farming rules and regulations to ensure consistent and accurate definitions and standards for agriculture. Their immediate goals also include compiling a full inventory of the Town's farms. In 2007, the Town of North Branford also created an Agricultural Commission by local ordinance and is in the process of establishing its members and mission using Guilford's efforts as model.

Although New Haven is the urban heart of the region it has a strong agricultural heritage based in academic research. The City also has a synergistic relationship to the region's farming communities and supports its agricultural production in the following ways:

- Since 1875, the Connecticut Agricultural Experiment Station (CAES) has been housed in New Haven. Their mission is to “develop, advance, and disseminate scientific knowledge, improve agricultural productivity and environmental quality, protect plants, and enhance human health and well-being through research for the benefit of Connecticut residents and the nation.”
- The CAES also has the 74 acre Lockwood Farm at 890 Evergreen Avenue in Mt. Carmel in Hamden. The Farm's first 19.25 acres were purchased in 1910 because the property was only a 20 minute train ride from the main laboratories and grew to its present size with the purchase of adjacent farmland in 1985. The Farm is located in Hamden's rural north in an area with other landscape nurseries close to Quinnipiac University and the Sleeping Giant State Park.
- New Haven's residents also actively promote local farmer's markets through organizations like City Seed. www.cityseed.org Farmer's markets provide a crucial market place for farmers to sell their product and are extremely popular with urban and suburban residents.
- The thriving New Haven culinary scene provides an outlet for locally grown food through its local food markets and fine-dining restaurants.
- New Haven Ecology Project (NHEP) and its Common Ground High School⁸ is a private, non-profit organization founded in 1990. NHEP provides environmental education programs to the Greater New Haven community at

⁷ New Haven Register, *Suburban Farms Seek New Ways to Stay Fertile*, Rachael Scarborough King, October 28, 2007.

⁸ More information about the New Haven Ecology Project can be found on their website at <http://www.nhep.com/>.

their 20-acre organic farm and forest lands located at the base of West Rock Ridge State Park. Common Ground High School (CGHS) is a regional magnet school also located at the farm where part of the students' curriculum includes activities related to the operation of the farm and larger social and environmental issues.

- The Yale Sustainable Food Project and the Yale Farm has become a national model for sustainable food programs for universities and colleges across the county. The Farm program started in 2003 utilizes undergraduate and graduate students, faculty, and volunteers. The Farm sells its harvests at New Haven's Farmers Markets and to local restaurants and serves as a larger living classroom to local residents and elementary schools. In 2006-2007, Yale redirected over \$1.6 million dollars of the food budget for its colleges into the state's agricultural economy. It also redirected an additional \$800,000 towards purchasing organic products further afield.⁹ The region's other higher education institutions may be able to develop similar programs.

Overall, the region and the state have laid the groundwork for maintaining agricultural lands while balancing the needs of the growth. In the coming years with renewed focus on this mission, the region can also support our towns in this effort through the following goals and strategies.

Goal: Celebrate the region's agricultural heritage and supporting local municipality and state efforts in preserving existing farms through acquisition, transfer of development rights, historic preservation strategies and marketing strategies that promote the region's farms through increased awareness and agri-tourism.

Strategies:

- a) Supporting the Acquisition efforts of the region's municipalities via state and federal Grant opportunities;
- b) Through the Region's Open Space Committee – annually create an updated list of priority agricultural sites for preservation.
- c) Apply for Agriculture Viability Grants when directed for regional agricultural marketing efforts such as a regional agricultural guide that can promote Regional Agricultural Tourism/Local Food Production for Local Consumption and other efforts identified by the region's municipalities.
- d) Identify if passive recreation opportunities exist along the perimeter of farmlands that develop a stronger regional awareness of local farm lands.

⁹ Yale Sustainable Food Project 2006-2006 Annual Summary available at http://www.yale.edu/sustainablefood/YSFP_annual_report_2006-2007_000.pdf.pdf.

Schools and Public Institutions

The South Central region is a highly desirable place to live based on the quality and range of its educational facilities complemented by a diverse selection of museum, art, and cultural facilities. The region continues to have a stake in promoting and supporting these facilities in order to maintain a high quality of life, attract a diverse population, and ensure a high “creativity index”¹ that will promote innovation and economic growth for the region. While the region clearly has a strong identity that is popular with families, a future challenge will be marketing its cultural and creative assets (and providing the housing as discussed in the housing chapter) to retain some of the area’s graduating college students. This younger desirable workforce population will be essential particularly as the region’s current workforce continues to age and the area’s businesses face significant waves of retirement.

Primary and Secondary Education

There are approximately 218 primary through secondary educational facilities in the 15 South Central Region municipalities. Of these, 179 are public schools with approximately 48 specialty magnets available for children located both inside and outside of the region, depending on specialization and location. The regional magnets are mostly located in the City of New Haven. Schools by grade level and town are as follows and are shown on the attached map:

	Elementary	Middle	High	Private/ Religious	Total by Town
Bethany	1	1	0	0	2
Branford	5	1	1	2	9
East Haven	12	2	1	1	16
Guilford	4	2	1	1	8
Hamden	12	1	4	6	23
Madison	4	1	1	4	10
Meriden	8	3	3	4	18
Milford	10	3	4	4	21
New Haven	30	6	13	8	57
North Branford	3	2	1	0	6
North Haven	4	2	1	0	7
Orange	4	1	0	2	7
Wallingford	8	2	2	2	14
West Haven	9	2	2	4	17
Woodbridge	1	0	1	1	3
SCRCOG Total	118	29	35	39	218

¹ Economic Development Theory by Richard Florida, a professor at Carnegie Mellon, who created a Creative Cities index which ranks places based on the creative class share of the workforce, the number of high-tech industries, the number of patents issued for an area, and a diversity index. University cities with large research, historic, and cultural facilities generally attract a diverse population and tend to be fruitful environments for innovation and economic development. More information about his theories can be obtained from his website at www.creativeclass.org

In addition to educational opportunities provided in the public school system, the region has 39 additional parochial and private schools. Most of the religious and private schools provide day facilities, with one residential campus facility for both in-state and out-of-state students at Choate Rosemary Hall in Wallingford.

Higher Education

The South Central region is, of course, home to Yale University, but is also home to 7 other institutions of higher learning mainly located in the West Haven/New Haven to Hamden/North Haven corridor. These facilities provide a wide range of community college, undergraduate, and graduate courses in both public and private institutions. An exciting addition to the higher education community in the South Central region is new Middlesex Community College branch adjacent to Meriden train station. The Connecticut Police Academy is also located in the South Central Region in Meriden.

Recent figures compiled by the CT Board of Governors for Higher Education² indicate student populations for the area's colleges and universities as follows:

	Undergraduate			Graduate			Fall 2007 Enrollment		
	Full	Part	Total	Full	Part	Total	Full	Part	Total
Southern CT State University (SCSU)	7,114	1,401	8,515	910	2,505	3,415	8,024	3,906	11,930
Yale University*	5,289	22	5,311	4,755	140	4,895	18,251	820	11,454
Quinnipiac University**	5,455	310	5,765	558	509	1,067	6,259	957	7,216
Gateway Community College (GCC)	2,187	3,778	5,965				2,187	3,778	5,965
University of New Haven (UNH)	2,585	426	3,011	976	787	1,763	3,561	1,213	4,774
Albertus Magnus College	1,593	93	1,686	250	98	348	1,843	191	2,034
Paier College of Art	168	81	249				168	81	249
Middlesex Community College (MCC)³	86	197	283				226	306	532
Total SCRCOG	24,391	6,111	30,502	2,444	3,801	6,245	40,293	10,946	43,622

* Yale's enrollment total includes 1,248 First-Professional Degree Students not otherwise shown in the undergraduate or graduate columns (JD, Master of Divinity, MArch, and MD programs).

** Quinnipiac's enrollment total includes 384 First-Professional Degree Students not otherwise shown in the undergraduate or graduate columns (LLB and JD programs).

*** MCC's total fall enrollment numbers include students who take at least 1 class at the Meriden Campus. The Undergraduate column represents students that take classes exclusively at the Meriden Campus.

Students comprise a large component of the area's young adult population and it is critical that the region understand how to retain this population post-graduation to fulfill the needs of the region's employers. The concentration of these facilities and a strong community college system provides ample opportunity for a highly educated workforce and re-training capabilities should workforce trends change. In 2007, both Yale University and Quinnipiac University purchased sizeable satellite campus locations to expand their current operations. Yale's purchase of the former Bayer

² Department of Higher Education for the State of Connecticut, Press Release on October 24, 2007.

³ Data provided by MCC's Director of Institutional Research.

Research Campus is intended as a medical research center, while Quinnipiac purchased the former Anthem Health Care Campus to house its graduate programs and eventually the Law School. These facility expansions might affect enrollment numbers in the future. In addition, Yale proposes addition of two more residential colleges adjacent to their existing campus that would increase their undergraduate enrollment, but this proposal has not yet been approved by City officials and no construction has been started.

Cultural Facilities and the Arts

The area's Colleges and Universities also contribute to its museums, libraries and other cultural venues. These include Yale's Peabody Natural History Museum with its well-known Hall of Dinosaurs, and the Yale Center for British Art. The region is home to the Shubert Theatre, well known for debuting Neil Simon's plays before they venture to Broadway, the Long Wharf Theatre, Yale's Repertory Theater, and Woolsey Hall – home to the New Haven Orchestra. In addition, collaborative relationships between the region's higher education facilities and cultural institutions ensure their continue growth and importance in the region. This includes a recent announcement⁴ of Quinnipiac University's 5-year agreement with the Long Wharf Theater that allows their drama students to produce three to four productions at the theater and to use their facilities for prop and set production.

The agency that promotes the region's cultural facilities and the arts is the Greater New Haven Convention and Visitors Bureau (www.visitNewHaven.com). They represent one of the state's five regional tourist districts and its membership more closely represents the geographic boundaries of New Haven County and most of SCRCOG's member municipalities except Meriden. Their website not only provides a calendar of events for the region's cultural and arts events, but also provides visitor information about flight information, hotels and restaurants. A highlight celebration of the region's arts community is the annual International Festival of Arts & Ideas Festival held in New Haven and at different venues throughout the area usually in the month of June. Summer is often the best time to experience arts in the region with free concerts in many of the town's greens and public areas and other open air arts & crafts fairs and festivals.

Goals: The South Central Region has a stake in maintaining an attractive education system and wide assortment of cultural attractions in the area to maintain a high quality of life and to retain and attract a highly educated and creative workforce.

Strategies:

- Continue to support regional marketing efforts for these cultural facilities and programming.
- Coordinate any regional education cost saving analysis or sharing if requested by the member municipalities.

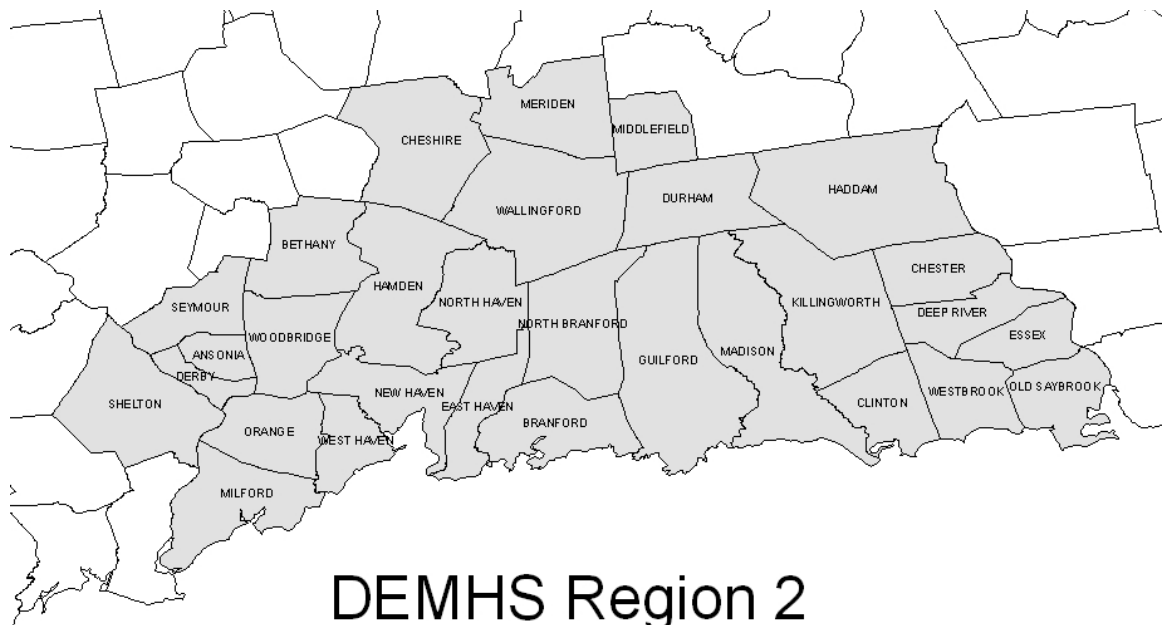
⁴ More information about this collaboration can be found at the Long Wharf Theater's website at www.longwharf.org under news.

Public Safety and Emergency Management

A recent article indicated that Connecticut is one of the safest states to live in the country based on FEMA and insurance applications in response to the limited number of natural disasters that occur in general in the Northeast Region.¹ The state's highest natural disaster risk is due to flood and storms and Public Safety and Emergency Management are still primary concerns in each of our member municipalities. As many large scale emergencies and natural disasters are not limited to a specific municipal boundary, the towns do coordinate public safety and emergency management at a regional level through several ways.

Public Safety Infrastructure

The member municipalities of the South Central region often inter-municipal aid agreements to assist other municipalities in times of emergency. As shown on the attached map of public safety infrastructure, many fire stations in particular respond to emergency calls or accidents as a first responder when the incident is closest in proximity or if the town's own responder is otherwise attending to another incident. (Provide Current strategy in responding to fires, major accidents, etc.)



¹ Article at www.slate.com in 2005.

Regional Emergency Management Efforts

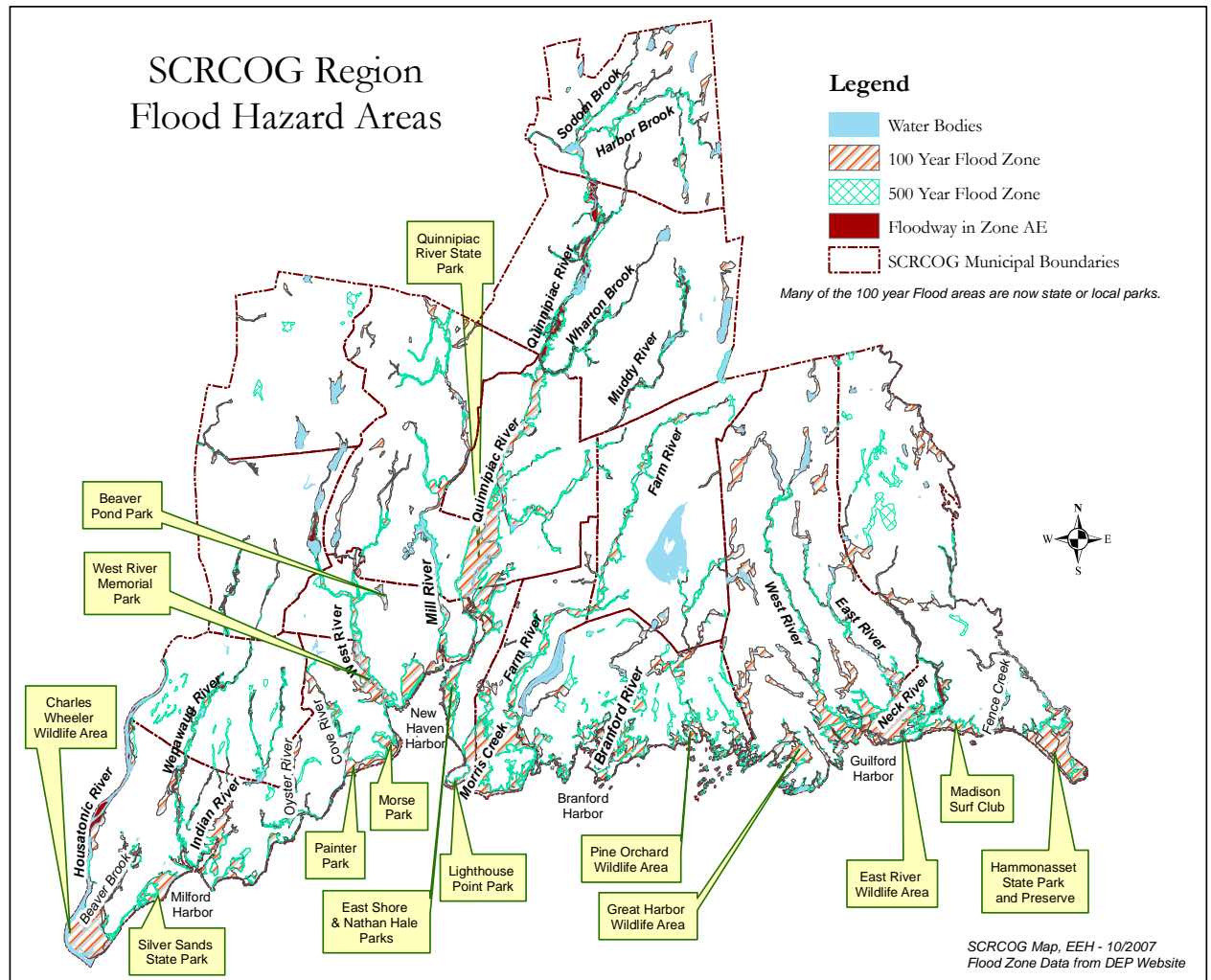
The Federal Government and the State of Connecticut have divided the state's emergency management efforts into 5 geographic areas in the state. South Central Region is part of Connecticut's Department of Emergency Management and Homeland Security (DEMHS) Region 2 area. This 30-town area encompasses all of the South Central Region municipalities, the Valley Council of Governments (Shelton, Derby, Ansonia, and Seymour), and towns in other regional planning agencies including Cheshire, Middlefield, Durham, Haddam, Killingworth, Clinton, Chester, Deep River, Essex, Westbrook, and Old Saybrook. Each DEMHS Region, working with their Regional Emergency Planning Team, made up of representatives from all public safety disciplines and planning organizations, releases its own Emergency Operations Plan and Public Safety documents. Region 2 released a draft Regional Emergency Operations Plan in January 2007, while the release of other documents is still pending.

During emergencies, the DEMHS Region 2 Office serves as the Region 2 Emergency Operations Center (EOC). When activated the Region 2 EOC maintains continuous communications with the municipalities to gather up-to-date emergency situational status in order to coordinate activities within the Region and to coordinate emergency responses between the Region and the State Emergency Operations Center (SEOC).

The CT DEHMS website lists the following hazards as primary concerns for our region:

- Winter Storm
- Tornado
- Highway/Railway Accidents
- Ice Jams
- Severe Thunderstorm/Tornado
- Fixed Nuclear Power Plants (Millstone)
- Fixed Site and In Transit Hazardous Materials Incidents, (Title III - SARA)
- Hurricane/Tropical Storm
- Nor'easter
- River/Coastal Flooding

The South Central Region's border with Long Island Sound, its many rivers, streams, and waterbodies are among its most important assets, but also provide its greatest vulnerability to potential natural hazards. Flooding is CT's most dangerous natural hazard and is the number one cause of damage and fatalities.

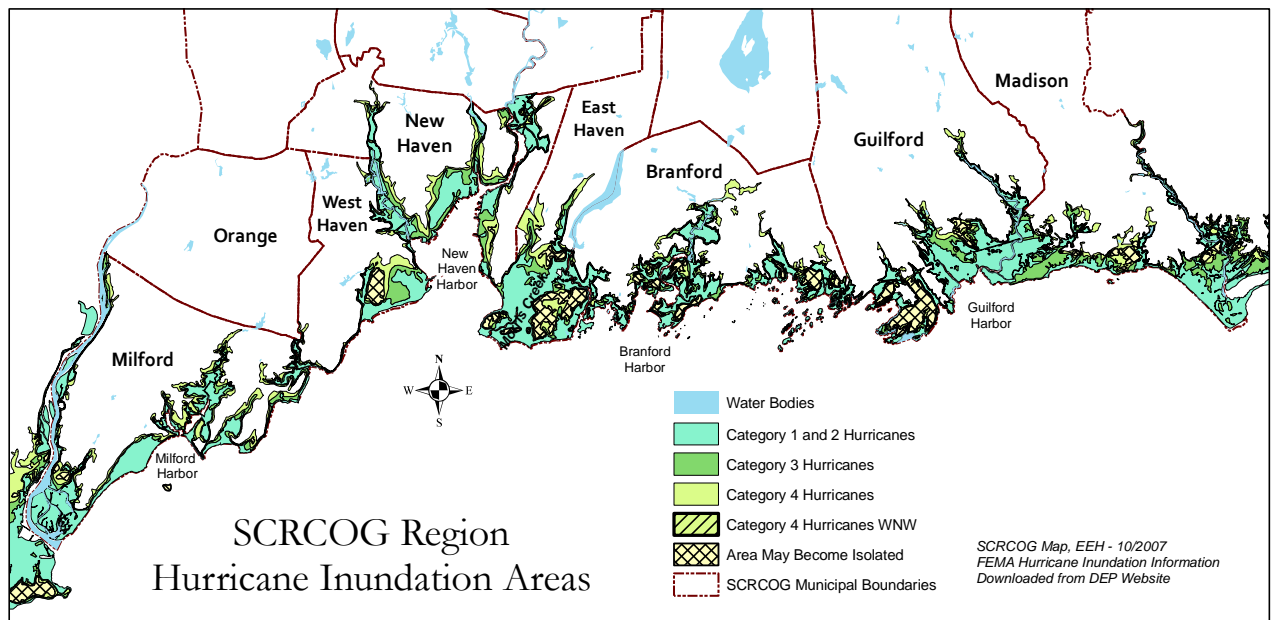


As shown on the attached map, the Federal Emergency Management Agency (FEMA) has designated many areas along the region's primary rivers, streams and wetland within either the 100- or 500-year flood zone. Areas of particular concern include sites along the Quinnipiac River, the West River, the Farm River, the Morris Creek Area, and in the areas surrounding the harbors of Milford, New Haven, Branford, and Guilford. Fortunately over the years, many areas along these flood hazard zones have been purchased for use as either State or local parks or National Wildlife Areas. These have also become some of the region's most important coastal resources. Sea Level Rise studies² for this area have not shown an immediate threat of flooding due to the effects of global warming. The more likely threat is increased potential for cyclical flooding due to increased impervious surface and run-off as a result of development in the region.

Floods are more likely during extended periods of heavy rains, severe thunderstorms, during Hurricanes or Nor-easters, and Winter storms. In August 1955, Connecticut

² See the Environmental Protection Agency's website for recent studies conducted and findings.
<http://epa.gov/climatechange/effects/coastal/slrreports.html>

experienced its worst flooding to date when Hurricanes Connie and Diane passed by Southern New England within a week of one another dropping upwards of 24 inches of rain and causing 77 deaths and an estimated 350 million dollars of property damage. (NOAA archives)



The Map shown above shows the Sea Lake Overland Surge from Hurricanes for the South Central Region Coastal Area. The map includes areas that have the potential to become isolated as a result of flooding experienced as part of a Hurricane. Coastal areas are most vulnerable, particularly those adjacent to the region's harbors (Milford, New Haven, Branford, and Guilford). All communities have Emergency Operations Plans (EOPs) in place that address hazards specific to their community. EOPs in the Coastal Communities specifically address evacuation and sheltering needs based on the SLOSH map data. All EOPs are distributed to the appropriate departments within each community and a copy kept at the local Emergency Operations Center (EOC). Copies are also kept on file at the Region 2 Office and at the State Emergency Operations Center in Hartford.

The Goal for Public and Safety and Emergency Management is to continue to ensure regional collaboration and cooperation through the DEHMS and other regional processes to adequately and efficiently respond to public safety issues and natural hazards.

The following strategies should continue to achieve the region's public safety goal.

- Continue to update and refine emergency plans.
- Support the continuation of funding to ensure proper human, communication, and equipment needs are met to adequately respond in a public safety crisis or a natural disaster.
- Support additional regional GIS functionality if this achieves the region's public safety and emergency response goals.

Public Utilities and Energy Conservation

This chapter provides an overview of the local and regional public utilities supplied or proposed in the South Central Region. Like many regions, more extensive services are provided in highly populated areas with little or no service for some utilities in suburban or rural communities. Utility expansion costs are significant and result in high future maintenance costs and the potential for increased sprawl. The State Plan of Conservation and Development does not recommend public water or sewer expansion where not currently provided except as needed for environmental remediation purposes and the region (through its prior Plan and reiterated in this one) supports this policy. However, this statement should not be confused with not funding service expansions or upgrades in all “Conservation or Preservation” areas as indicated on the State Locational Guide Map as some of these areas such as Long Wharf in New Haven or the former Pratt & Whitney site in North Haven are pre-existing regionally important sites developed with commercial and industrial uses and would be appropriate for utility service enhancements. In some instances these locations are brownfield locations where new investment would also lead to environmental clean-up with more sensitive and site appropriate development and engineering practices. A more comprehensive list of examples is provided in the Chapter on Consistency Findings. As energy costs continue to increase and issues of global warming are at the forefront of public discussion, this chapter also provides a summary of recent energy conservation policies that have been adopted at the state level and alternative energy resources that may be available at the local level.

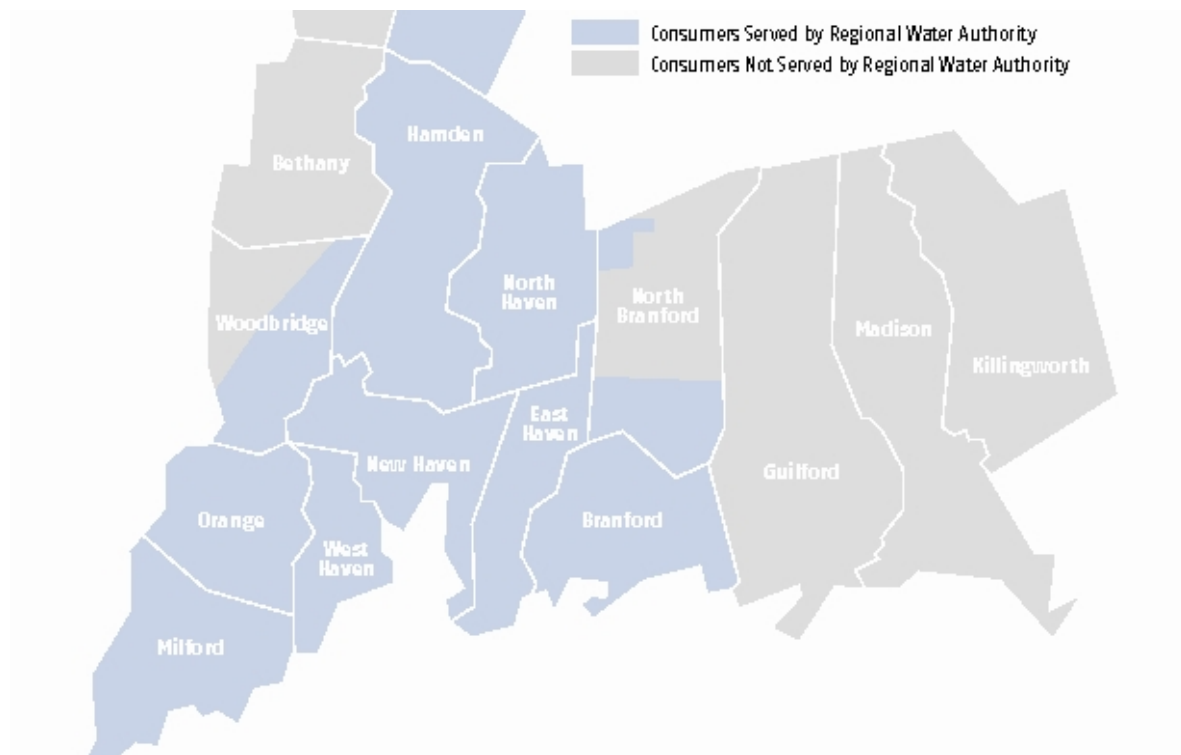
Water Supply

The South Central region is primarily provided public water through the Regional Water Authority (RWA) as shown by the service map below.¹ The RWA also recently purchased the Birmingham Utility Water company that includes the service areas in Ansonia, Derby and Seymour that are located adjacent to and includes lands in Bethany and Woodbridge (the Ansonia Division properties).² The CT Water Company in Clinton, CT provides public water supply service to the southerly areas of Guilford and Madison. Wallingford and Meriden supply water to their own municipalities through their own municipal Water Divisions. Much of the east side of Wallingford contains watershed lands and its primary reservoirs. However the northeast corner adjacent to the intersection of I-91 and Route 68 is developed with industrial campuses and large regional employers including Bristol-Meyers Squibb and the Regional Postal Service facility. It should be noted that many of the northerly

¹ Map provided by the South Central Regional Water Authority.

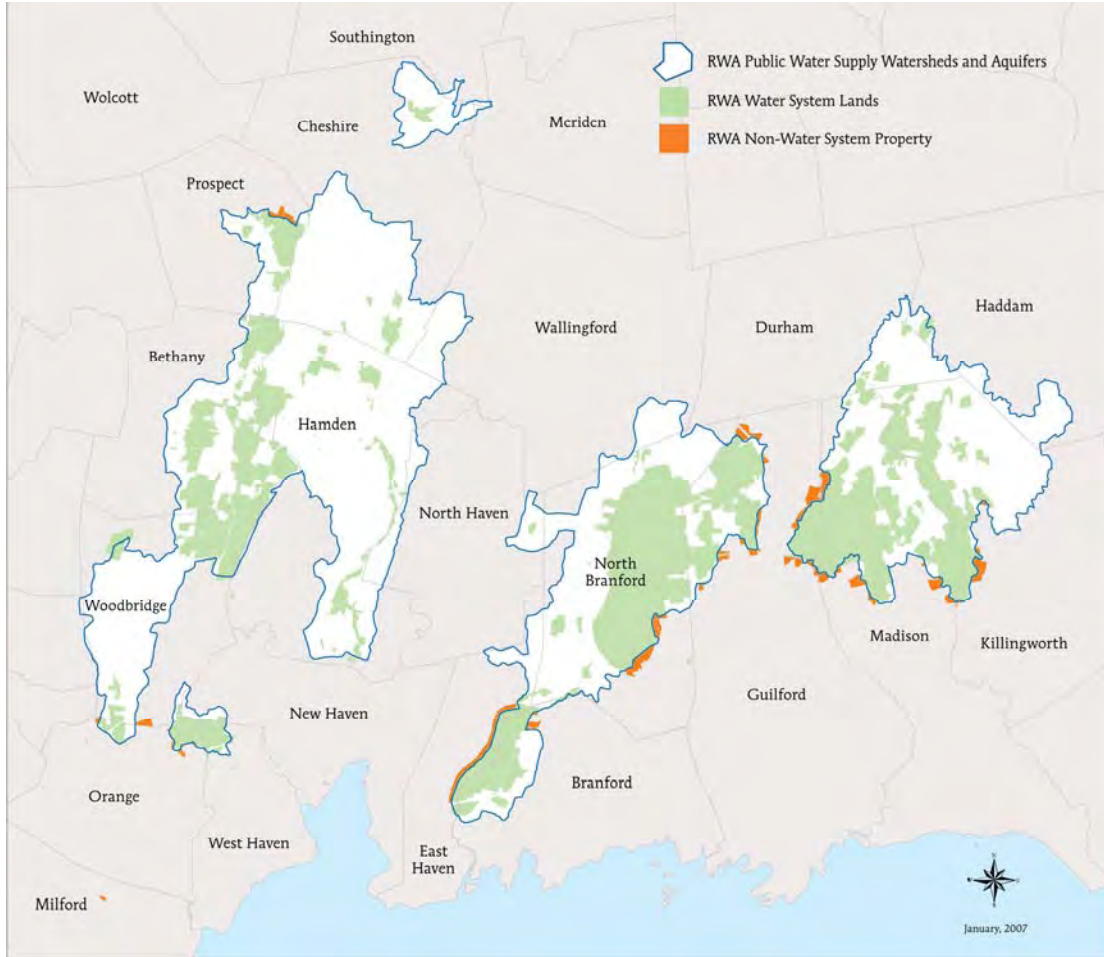
² The Connecticut Department of Public Utility Control (DPUC) approved this sale on November 21, 2007. Other BU properties in the eastern portion of the state were sold to the CT Water Company (CWC) that provides service to Guilford and Madison.

areas of North Branford, Guilford, and Madison still utilize individual wells for water provision.



The RWA is one of the South Central Region's largest property owners and plans to purchase additional properties in watershed areas when available (as shown on the map below) in order to protect both drinking water supply and quality. These sites include areas in Bethany, East Haven, Guilford, Hamden, Madison, North Branford, North Haven, Orange, and Woodbridge. "The Authority budgets \$3 million a year to purchase watershed land in the region. Protecting or minimizing development on a parcel of watershed property is important because it reduces the amount of non-point source pollution reaching Authority reservoirs. Natural areas like forests and wetlands offer protection because they naturally filter or trap sediment flowing into water supplies. This helps to keep treatment costs in check and ensures a reliable supply of high-quality drinking water. Our land holdings total 26,000 acres. ... Cost to acquire the future parcels is offset by selling 900 acres that are not needed for our existing or future operations. Both the towns and the state will have the first opportunity to purchase these parcels before soliciting other buyers."³

³ The Land We Need for the Water We Use. Regional Water Authority Report. March 2007.



Sewer Service (Amended 7/09)

The South Central Region has expansive sewer service in its more densely developed communities with specific sewer avoidance policies to limit development in adjacent suburban and rural communities. Milford, West Haven, New Haven, and East Haven have comprehensive sewer service throughout most of their neighborhoods with partial service in central or more highly populated areas of Meriden, Wallingford, Hamden, North Haven, and Branford. North Branford, Orange and Woodbridge have only limited sewer service primarily in commercial or higher density residential areas and Bethany, Guilford, and Madison currently have no sewer service. The Regional Sewer Service Map, which is on the following page represents both the existing and future sewer service areas. Individual sewer service maps for the municipalities in the South Central Region can be found in the appendix.

In total, the South Central region has 8 Wastewater Treatment facilities with a combined estimated capacity of 93.3 million gallons per day. Collectively, the systems have approximately 1,536 miles of sewer lines and 155 pumping stations throughout the region. Although most service is provided by individual municipal water pollution control authorities, there is one regional agency. The Greater New Haven Water Pollution Control Authority (GNHWPCA) was created by the towns of New Haven, East Haven, Hamden and Woodbridge per State Statute (C.G.S. §§ 22a-500-519) in the summer of 2005.

South Central Waste Water Treatment Facilities

Municipality	Treatment Plants	Facilities	Discharge Waterbodies
Branford Water Pollution Control Facility (Also serving a portion of North Branford)	4.9 MGD Block Island Road Facility.	100 miles of sewer lines and 49 pumping stations.	Branford Harbor
Meriden Water Pollution Control Division	12 MGD Evansville Avenue advanced wastewater treatment plant (BOD method)	180 miles of sewer lines and 3 pumping stations.	Quinnipiac River
Milford Wastewater Division	Two treatment plants: 8.3 MGD Housatonic 3.1 MGD Beaverbrook	260 miles of sewer lines and 39 pumping stations.	Housatonic River
Milford Equitable Corp Campus	.096 MGD	Campus Wastewater Only	Housatonic River
Greater New Haven Wastewater Pollution Control Authority (Serves New Haven, East Haven, Hamden, Woodbridge)	40 MGD East Shore Water Pollution Abatement Facility	555 miles of sewer lines and 30 pumping stations.	New Haven Harbor
North Haven Water Pollution Control Division	4.5 MGD Water Pollution Control Facility operated by Veolia Water	110 miles of sewer lines and 9 pumping stations.	Quinnipiac River
Wallingford Sewer Division	8 MGD Water Pollution Control Facility. 56 RBC (Rotating Biological Contactors) with 8,640,000 sq. ft. aeration basin.	196 miles of sewer lines and 12 pumping stations.	Quinnipiac River
West Haven Water Pollution Control Facility	12.5 MGD facility operated by Operations Management International, Inc.	135 miles of sewer lines and 13 pumping stations.	New Haven Harbor

The table below indicates the number of customers for the GNHWPCA by municipality.⁴

⁴ More information about the Greater New Haven Water Pollution Control Authority can be found at their website. Table 1 is taken directly from this site. <http://gnhwpc.org>

Table 1 Population and Customers of the Constituent Municipalities		
Municipality	2000 Sewered Population ⁽¹⁾	No. of Customers ⁽²⁾
New Haven	123,630	21,988
Hamden	49,510	13,894
East Haven	25,650	7,999
Woodbridge	990	328
TOTAL	199,780	44,209
<p>(1) Estimate based upon 2000 Census Bureau Data and the customers in each community that receive sewer service, as estimated by the municipalities.</p> <p>(2) Based on South Central Connecticut Regional Water Authority (RWA) data of water customers as of February 2004.</p>		

Advanced Waste Water Treatment Facilities

Most existing zoning and land use policies enacted well before Advanced Waste Water Treatment Facilities (ATT) make assumptions that where additional sewer infrastructure is not targeted for expansion - that these land areas have limited development potential. This assumption was dictated by the carrying capacity of the soil and other natural site constraints when using traditional septic systems. The advancements in waste water technologies have radically altered these assumptions and have allowed or can allow for developments of higher density in locations not otherwise thought possible and that tend to be outside of existing employment, housing, and transportation corridors. Even though these systems can be used in lieu of expanding a sewer line – the resulting development still leads to expanding other costly infrastructure (roads, etc.) into what may be sensitive environmental areas, the region's last agricultural lands, and irreplaceable forests. The State Plan of Conservation and Development⁵ also reflects these concerns as follows:

Growth Management Principle #4 (Rural Areas), Page 75 “Recent advances in on-site wastewater treatment technology have the potential to complicate greatly the issue of infrastructure in rural land use, even though their use will continue to be limited by soils and groundwater conditions. Their greater treatment efficiencies may enable substantially larger and more intensive development projects without conventional sewer service. Yet, they may also provide communities more flexibility in applying such techniques as cluster development and community centers.”

The Region's land use policies focus on reinvesting in existing regional corridors and in rural areas in historic town centers or villages in agreement with the State Plan's following statements in their Rural Areas section.

⁵ The State Plan of Conservation and Development, (pp. 75-77, 84 and 21) available at http://www.ct.gov/opm/cwp/view.asp?a=2990&q=383182&opmNav_GID=1807

- Promote development and refinement of design and engineering standards for community infrastructure and facilities that are consistent with historic rural character and natural resource values, while adequately meeting public health and safety concerns;
- Vigorously pursue sewer avoidance programs and limit development to those uses and densities that ensure indefinite functioning of on-lot or small community water supply and waste disposal systems, review zoning regulation and eliminate insufficient lot sizes, assure sufficient oversight of the permitting and maintenance of septic systems to ensure that on-site septic systems function indefinitely...
- Support application of advanced on-site wastewater treatment technologies only when their long term functioning is assured and only where the development they support meshes with and complements existing rural patterns and avoids scattered development; in particular, they may be necessary:
 - To develop affordable housing in conformance with local and regional plans,
 - To support higher density uses and economic development within Rural Community Centers, or
 - To enable cluster development to preserve environmental resources

The State Plan also discusses ATTs in the following two sections:

Growth Management Principle #1 (Revitalize Regional Centers), p 21 that reads, “Balance the fully environmental, social and economic costs and benefits of new development, including infrastructure costs such as transportation, sewers and wastewater treatment, water supply, stormwater quality and quantity control, schools, recreation and open space and project benefits such as job creation, brownfield redevelopment and impact on local tax base.”

Growth Management Principle #5 (Environmental Assets Critical to Public Health and Safety), p. 84, as pertains to water quality/aquifer protection has some language regarding development consistent with the carrying capacity of the land, encourage cluster development to decrease impervious surface, and designing, installing, maintaining septic systems to function indefinitely to avoid the need to install sewers. The section does allow advanced design wastewater treatment systems only after a thorough evaluation of all private and public alternatives determines these systems are the only feasible solution to an existing pollution problem.

Home Heating Oil⁶

Half - 52%- of Connecticut’s households use oil to heat their homes which is still the largest sector of the home heating market. Connecticut’s home heating oil costs fluctuate consistent with national adjustments in pricing, but are still higher than other

⁶ Information for this section summarized from the Energy Information Administration (EIA) – the Official Energy Statistics from the US Government.
http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=CT

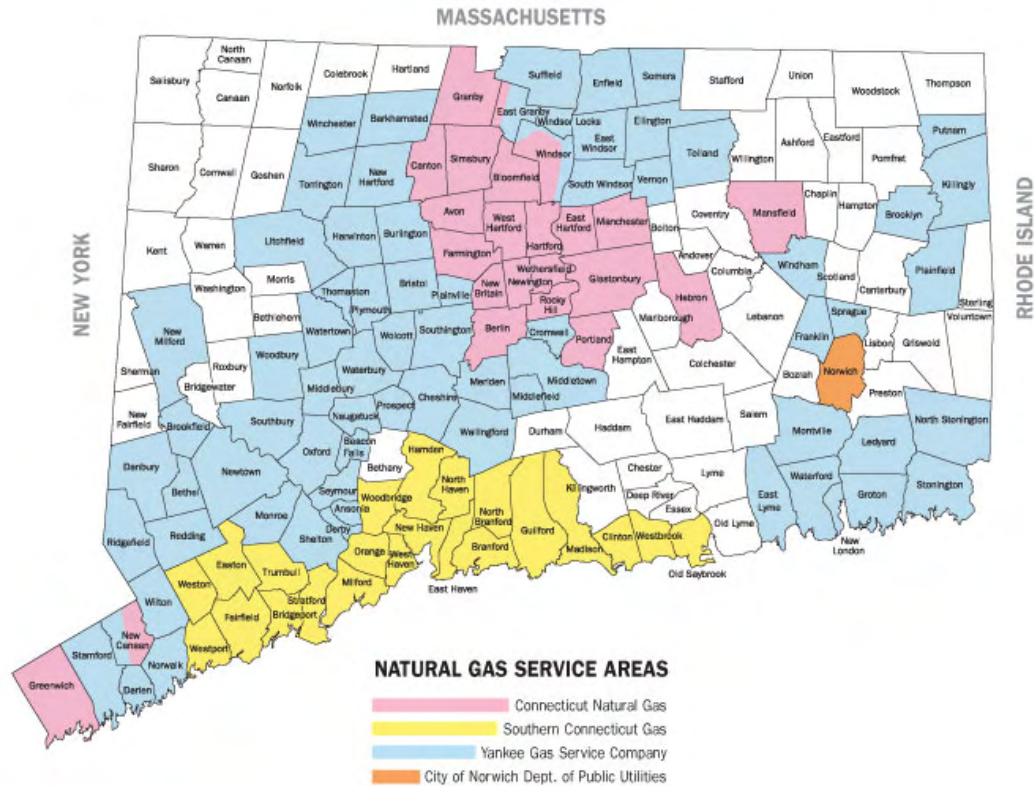
areas in the country due to the lack of refineries in the area and the cost of transportation from refinery areas located a considerable distance away. The New Haven Harbor is, however, a primary destination for oil tankers for home heating oil as well as other petroleum products (automobile gasoline). Two of New England's four Home Heating Oil Reserve Sites are located in the New Haven Harbor which is used to cushion the effects of disruptions in oil supply and provide enough intermediate supply until regular supply avenues can be reestablished. Heating Oil is distributed by independent local suppliers with the largest of these that supply to our region, East Shore Energy along the Shoreline towns, Seaboard Fuel Oil for greater New Haven northward, and Standard Oil for Milford, Orange, and West Haven.

Natural Gas Service and the Broadwater Proposal

The South Central Region is currently served by two Natural Gas Companies⁷ – Southern Connecticut Gas (SCG) and the Yankee Gas Service Company. In CT, natural gas is primarily used for home heating and for some gas-fired electric generating facilities (including Milford's Power Plant which is adjacent to the Iroquois Pipeline). The map shown below indicates service provided in Guilford and Madison. These areas do have limited service primarily along Route 1 (Boston Post Road) with some spurs into residential neighborhoods to the north and south. Statewide – only 29% of all homes use natural gas for home heating, but there is an anticipated annual increase in market share of 1.6% for natural gas users.⁸ New furnace design has made natural gas and home heating oil equally efficient in terms of heat generation, but natural gas is cleaner burning and attractive to users wanting to lessen air quality impacts. Connecticut and New York face high natural gas and oil costs in part because of the significant travel distance from natural gas refineries and supply centers coupled with growing demand. There are no natural gas storage facilities in New England with the closest storage facility in the Appalachian Basin.

⁷ Natural Gas Service Areas map from the Southern Connecticut Gas Company website, www.socomngas.com

⁸ Energy Information Administration (EIA) – the Official Energy Statistics from the US Government. http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=CT



Currently a floating Liquefied Natural Gas (LNG) facility known as Broadwater is proposed to provide additional natural gas service primarily to New York with some additional capacity (20%) to Connecticut⁹ from an off-shore location in the waters of Long Island Sound. The Broadwater Energy project is a joint venture between TransCanada Corporation and Shell. The floating facility proposed approximately 10 miles from New Haven Harbor and 9 miles from the nearest point on Long Island (Riverhead, NY) would be moored in the Sound and connected by new pipeline (approximately 22 new miles of pipe) into the existing Iroquois pipeline that connects into Milford, CT. LNG is natural gas that has been cooled into liquid form that can then be transported via tanker ships. The Floating Facility (approximately 1,200 feet long and 180 feet wide and 75 to 80 feet tall) provides docking and off-loading facilities for LNG tankers into its own holding tanks and then through a warming process converts the liquid natural gas back into gas form and directs it to the pipeline. LNG tankers are expected to make deliveries every two to three days.¹⁰

The Broadwater proposal has not yet been approved, but the Federal Energy Regulatory Commission's (FERC) environmental impact study released in January 2008 determined that the project would have little effect on the Long Island Sound. The State and the Department of Environmental Protection (CT DEP) does not agree with this analysis and is preparing a legal appeal of the document citing significant

⁹ The proposed facility is anticipated to provide most of the additional capacity to New York with only approximately 20% of its capacity intended to serve natural gas customers in CT. CT DEP website.

¹⁰ Broadwater proposal information summarized from the Broadwater Energy website at www.broadwaterenergy.com

impact on aquatic life, benthic habitat and recreational and commercial use of the Sound.¹¹

Regionally, although SCRCOG recognizes the need for increased energy generation and natural gas capacity for the state as well as the region, the region's Elected Officials (in addition to much of its constituents) also do not support the current Broadwater initiative and passed a resolution in 2007 expressing its concerns for impacts to Long Island Sound as a result of the project. The LNG facility is closest to the South Central towns located along Long Island Sound and will be clearly visible on the coastal horizon from New Haven, East Haven, Branford, and Guilford.

Communications Infrastructure

Public Utilities includes communications infrastructure – which at this time is comprised of two different components: 1) the services provided via the region's electric pole infrastructure including phone, internet and cable service and 2) Wireless cell tower infrastructure and other building-mounted wireless equipment.

Communications infrastructure and services are regulated by the State's Department of Public Utility Control (DPUC) which reviews and holds hearings for new infrastructure and also regulates any tariffs and rate regulations. Capacity improvements (i.e. higher capacity fiber optics or cable) are often driven by market forces and not usually driven by public resource investments. Communications services can still be purchased individually, but providers also “bundle” together multiple services for internet connectivity, phone service, and cable television needs which can provide substantial cost savings.

Service Provider	Services Available	Towns Served
AT&T and AT&T UVerse	Digital Video, Digital Voice, High Speed Internet, Wireless Phone Service	Milford, Orange, West Haven, New Haven, East Haven, Branford, Guilford, North Haven, Hamden, Wallingford, and Meriden (as of January 2008)
Cablevision Systems of Southern CT	Digital Cable, Digital Voice, High Speed Internet	Milford, Orange, West Haven, and Woodbridge
Comcast Cablevision of New Haven, Inc.	Digital Cable, Digital Voice, High Speed Internet	Bethany, Branford, East Haven, Hamden, Guilford, Madison, New Haven, North Branford, North Haven, West Haven, and Wallingford
Cox Communications	Digital Cable, Digital Voice, High Speed Internet	Meriden

Wireless facilities are applied for and installed by each cellular company via an application and public hearing process through the DPUC. The COG is notified as are individual municipalities where structures are proposed for each application. COG staff and the RPC have previously reviewed applications of concern to individual municipalities. The concerns are usually related to proximity of other uses and visual impacts near the region's unique natural features, i.e. West Rock Ridge or

¹¹ CT Department of Environmental Protection/Governor Rell Press Release issued January 11, 2008.

other unique vistas. One approved, wireless structures are required to be available for co-location to other service providers to reduce the total number of towers needed.

Waste Management

The 15 towns in the South Central region coordinate their waste management services differently. Some have curbside pick (most with curbside recycling pick-up also), others have transfer stations with available hours for drop-off.

Curbside Pick Up	Transfer Station
Bethany	Guilford
Branford	Orange
East Haven	Madison*
Hamden	North Branford
Milford	Woodbridge
Meriden	
New Haven	
North Haven	
Wallingford**	
West Haven	

*Madison pays Guilford to utilize their Transfer Station.

**Not town provided, but residents contract with private haulers independently for curbside pick-up with most trash going to the waste to energy power plant and recyclables to a private recycling facility in Berlin.

The collected solid waste disposal is then coordinated through the Connecticut Resources Recovery Authority (CRRA) who both operates incinerators or Waste to Energy Plants and has disposal sites at two landfills (Hartford & Eastern CT). Their service areas and contracts are divided into 4 areas. South Central Region towns are members of (3) of these services areas:

Wallingford Project Towns	Bridgeport Project Towns	Mid-Connecticut Project
Hamden	Bethany**	Guilford
Meriden	East Haven	Madison
North Haven	Milford	North Branford
Wallingford	Orange	
	Woodbridge	

** No Recycling Services

Starting in 2008, contracts with the CCRA will start to expire and the cost of solid waste disposal will need to be renegotiated. Compounding the potential increase in cost is the closure of Hartford's landfill which requires solid waste to be sent out of state to other landfill sites. The Council of Governments has applied for and received a grant to study regional waste disposal alternatives to lessen potential future costs to the municipalities in the region and to determine what regional waste disposal strategies might be available. The State's Solid Waste Management Plan¹² completed in 2006 calls for a 58% source reduction/recycling goal by 2024 which would if met

¹² Connecticut's Solid Waste Management Plan is available at www.ct.gov/dep/swmp.

would eliminate the need to transfer waste out of state and the high costs associated with this need. The State's current recycling rate is approximately 30%.

Electricity and Regional Power Generation

Every year, the Connecticut Siting Council, the agency that regulates the state's public utility infrastructure (electricity generation and transmissions systems) issues a report of its analysis of current electricity usage and resources that are available or proposed to fulfill public need for these services. The latest report issued in December 2007, cites that CT's electricity needs have historically increased over the long term and is "largely attributable to the number of new and larger homes, an active economy, the growing use of electric appliances and/or office machines, computers, and especially air conditioning."¹³ As a result, the highest electric loads usually occur in the summer months and this is usually the focus of most analysis in terms of overall system capacity to prevent either brownouts or blackouts. In addition, the Energy Information Administration (EIA) indicates that CT's industrial and commercial economy is not energy intensive and that it is the state's residential sector that leads in energy consumption.¹⁴

There are two regional electric service companies in the South Central region – The Connecticut Light and Power Company (CL&P) and the United Illuminating Company (UI). For the most part – electricity is supplied through a New England regional network of facilities. It should be noted that the Town of Wallingford generates some of its own electricity through its power plant for its residents and some residents in part of North Branford with additional output part of the regional power supply. There are several power plants located within the region; some such as New Haven Harbor and Devon 10 are oil powered, other power plants in Milford and Wallingford are both now powered by natural gas. However both New Haven and Devon 10 are "dual-fuel" and have the capability to be converted to natural gas in the future. A new natural gas power plant is proposed in Meriden, but has not yet been constructed. A major infrastructure expansion visible throughout the region is the upgrade of the transmission wires from Norwalk to Middletown which extends through many towns through the region. This will provide more capacity to South Central towns, but is primarily an effort to address transmission deficiencies in the Southwest region of the state. CL&P and UI both predict continued increases in annual energy consumption in the coming years, but also estimate that generation capacity will keep up with demand in the coming years provided customers continue to move towards additional efficiency and conservation.

Energy Conservation Efforts

As oil prices per barrel increase and are anticipated to increase in the future, local municipalities are hit with increases in energy costs from the gas needed for local school buses and municipal vehicles to the cost of heating public buildings and schools, resulting in increases in local budgets or cuts in services to maintain local

¹³ Connecticut Siting Council 2007 – 2016 Ten Year Forecast, Published December 7, 2007.

¹⁴ Energy Information Administration (EIA) – the Official Energy Statistics from the US Government.
http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=CT

budgets. The State's Energy Plan¹⁵ proposes reducing both CT's Electric Peak and Dependence on Fossil Fuels by 10% by 2010. It should be noted that 15% of the state's population also uses electricity for its home heating.¹⁶

State Efforts

In the late 90s as energy costs increased, the State legislature created an agency - the Energy Conservation and Management Board (ECMB) - that supports energy efficiency and examines alternatives and incentives to traditional power generation methods through the Connecticut Clean Energy Efficiency Fund (CEEF). The utilities also offer extensive conservation and demand management programs for its residential, commercial, and industrial customers. The CEEF gets its funding from an optional customer surcharge through the independent utilities for clean energy generation through alternative energy sources that do not result in carbon dioxide omissions. A side benefit from this program is that as customers within a municipality sign up for the alternative energy program, the municipality is rewarded with solar panels for use on its public buildings. The Town of Bethany, in particular, has one of the highest sign up rates in the State as a percentage of its total population. In turn, the CEEF also provides the following programs:

- Education through Governor Rell's OneThing Marketing Program that suggests that everyone can do "one thing" to reduce their energy consumption demands.
- Connecticut Innovations (CII) Grant(s) are available to establish a municipal renewable energy and efficient energy generation grant program(s). CII must make grants under the program to municipalities to purchase and operate, for municipal buildings, (1) renewable energy sources, including solar energy, geothermal energy, and fuel cells or other energy-efficient hydrogen-fueled energy or (2) energy-efficient generation sources, including cogeneration units that are at least 65% efficient. CII must give priority to grant applications for disaster relief centers and high schools. Each grant must make the cost of purchasing and operating the generation source competitive with the municipality's current electricity expenses.

Local Efforts

Locally, municipalities can support energy conservation in several ways –

- Applying for grants through the states and/or utilities that would convert municipal structures for partial solar power or geo-thermal water heating that could reduce local energy costs and return those cost saving to the tax paying public.
- Introducing regulations that provide standards that allow individual home owners or commercial property owners to install solar panels or other alternative energy generators (wind turbines, etc.)

¹⁵ 2007 Energy Plan for Connecticut by the Connecticut Energy Advisory Board, www.ctenergy.org.

¹⁶ Energy Information Administration (EIA) – the Official Energy Statistics from the US Government. http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=CT

- Educating building departments as to Leadership in Energy and Environmental Design (LEED) certified practices and providing zoning incentives for buildings designed with these features.

The US Green Building Council indicates that LEED-certified buildings:

- Lower operating costs and increased asset value.
- Reduce waste sent to landfills.
- Conserve energy and water.
- Healthier and safer for occupants.
- Reduce harmful greenhouse gas emissions.¹⁷

In addition, many states and even local municipalities throughout the country have developed tax rebates, zoning allowances and other incentives to allow and promote green building types. Good model regulations are available via professional planning, engineering, and architectural organizations.

Goals:

Infrastructure costs related to the sprawl of development outside developed corridors may be too expensive for future South Central residents in terms of future tax responsibilities, permanent loss of open space, and the fracture of its towns and country side.

Strategies to reduce future infrastructure expansion include:

- Supporting land use policies that direct development towards infill, adaptive reuse, and brownfields redevelopment in the central corridor with use of existing infrastructure.
- Limit development in upland area's poor soils and limited infrastructure to low to very-low density of approximately or promote open space acquisition of these areas or protection of agricultural lands as discussed in other chapters.
- Highlight **undeveloped areas** in "green and white" conservation areas of Locational Guide Map as unable to obtain state funds over \$200,000 for infrastructure expansion. Previously developed sites in these areas may be eligible for state funding consistent with the State Plan's policy that allows for reuse and redevelopment for economic development, affordable housing, or public-supported initiative. The Regional Plan supports environmentally sensitive reuse of sites in these areas particularly if they meet responsible growth goals of reinvestment in the region's existing transportation, employment, and housing corridors.
- Support towns in their efforts to reduce their energy consumption needs through increased energy efficiency and alternative energy production that could decrease or stabilize potential tax increases.

¹⁷ The U.S. Green Building Council website, www.usgbc.org

Air Quality and Long Island Sound

The health of our region's population and economy is dependent on the quality of the air that we breathe, the water that we drink, and the continued desirability of Long Island Sound as an economic and recreational resource and a prime tourist destination, particularly in the summer months. Long Island Sound also contributes, in part, to the food on our tables through its commercial shellfish and seafood production. The ability to improve air, water, and Long Island Sound quality is largely dependent on federal and state efforts, but there are important ways that the South Central region can contribute to air quality efforts as a facilitator of transportation improvements that assist with congestion management. The scope of these efforts often limits the ability for individual municipalities to make significant headway on their own – which reinforces a critical need for Regional coordination and cooperation. This chapter discusses water quality in terms of watersheds that drain into Long Island Sound while drinking water quality strategies through land acquisition by the South Central Regional Water Authority (RWA) are addressed in the Chapter on Public Utilities and Energy Conservation.

Air Quality

As part of the Greater New York Metropolitan area, the South Central Region has been designated as a “non-attainment” area for both ozone and particulate matter by the Federal Environmental Protection Agency (EPA). All of CT is considered a non-attainment area for 8-hour ozone with Fairfield, New Haven, and Middlesex Counties also considered non-attainment areas for particulate matter.

EPA's non-attainment designations are based on air-quality monitoring data collected throughout the country between 2001 and 2003. In Connecticut, only one monitor, located in New Haven, recorded fine particle levels above the annual air quality standard. However, this monitor is located in an industrial section of the city, near an on-ramp to Interstate 95, and was determined to be a “hot spot” that does not represent population exposure in the New Haven area. However, even without a violating monitor in either New Haven or Fairfield Counties, other factors, such as emissions and population levels, were sufficiently high to qualify these counties for a non-attainment designation. Fine particles, frequently referred to as PM_{2.5}, are less than 2.5 micrometers in diameter (approximately one-thirtieth the size of a human hair). Fine particles are unhealthy to breathe and have been associated with premature mortality and other serious health effects, particularly heart and lung disease in older adults and children. These particles are derived from a variety of sources, including

factories, power plants, trash incinerators, motor vehicles, construction activity and fires.¹

Due to the multi-county designation, the actions to address the non-attainment status designation are mostly state programs including:

- The Regional Greenhouse Gas Initiative (RGGI)² is the first mandatory U.S. cap-and-trade program for carbon dioxide. It was established in December 2005 by the governors of seven Northeastern and Mid-Atlantic states: Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont and has since expanded to also include Massachusetts, Rhode Island, and Maryland. RGGI sets a cap on emissions of carbon dioxide from power plants, and allows sources to trade emissions allowances. The program will begin by capping emissions at current levels in 2009, and then reducing emissions 10% by 2019.
- The CT DOT's Congestion Mitigation and Air Quality Improvement Program (CMAQ) which outlines the use of CMAQ funding targeted at alleviating the factors that led to the non-attainment designation. CT DOT released the most recent Program in 2007.

The Region is required by the Federal Highways Administration (FHWA) to update their Congestion Management Policies.

Global Warming and Climate Change

In 2005, the State of Connecticut issued a Connecticut Climate Change Action Plan. The Plan's main goals are to develop strategies that would reduce the factors that contribute to Green House Gases with specific targets through a multi-pronged approach including:

- Passing standards to reducing gas emissions from motor vehicles.
- Promote alternative energy vehicles through tax incentives and promote other transportation policies that reduce emissions.
- Promote energy efficiency in appliances, site and building design, and more compact land use patterns that require less Vehicle Miles Traveled (VMTs).
- The State's participation in the Regional Greenhouse Gas Initiative (cap and trade) program as explained above.
- Promoting the Connecticut Farm Fresh program to reduce Vehicle Miles Traveled and the emissions generated in getting foods that could be grown locally to the state.
- Require the state to purchase renewable energy in increasing amounts leading to 100% clean energy by 2050.
- Providing the ongoing education necessary to implement the strategies and make the goals a reality.

¹ Excerpted from the EPA, Boston Regional Office Press Release on December 17, 2004; Release # dd-04-12 - 15

² Regional Greenhouse Gas Initiative website. www.rggi.org

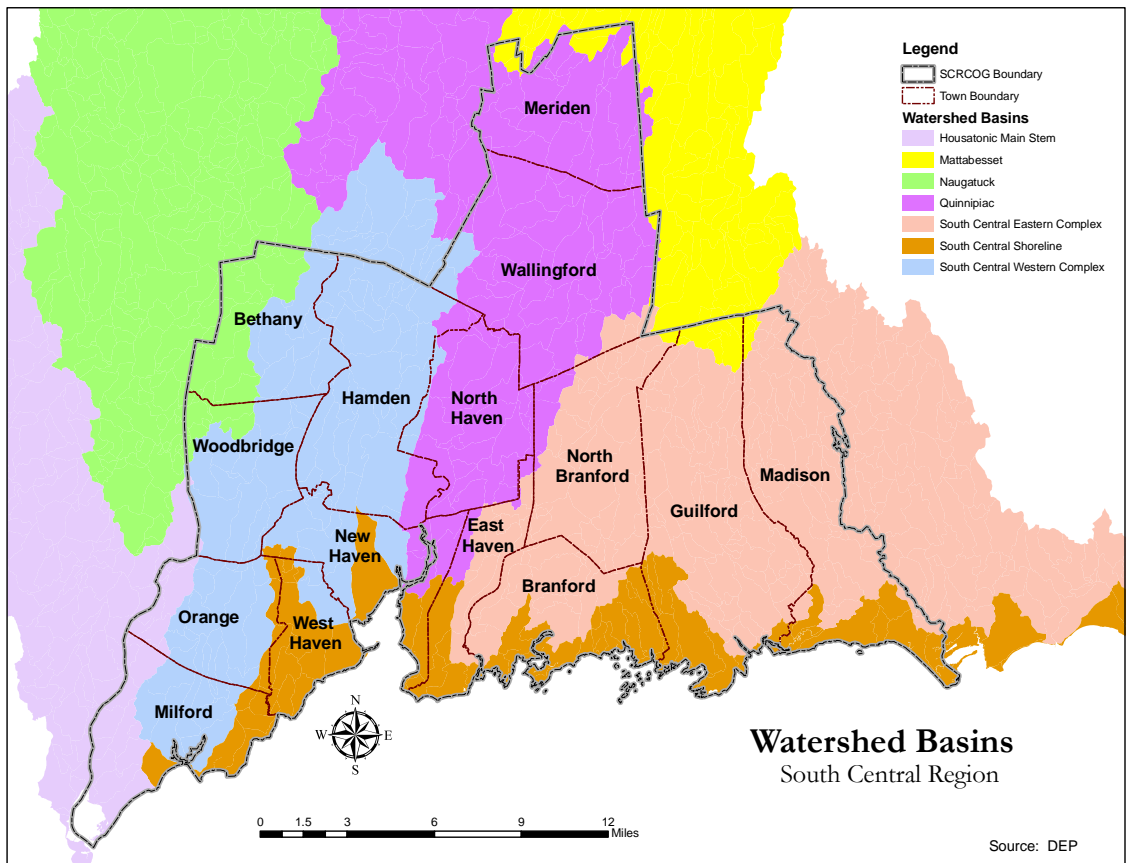
The State gauges its progress through issuance of an annual Climate Change progress report which was last issued in 2007. The report cites a broader acceptance of issues of Climate Change (Noble Prize for Al Gore and the United Nation's Intergovernmental Council on Climate Change for example) and more proactive action by individuals reducing their energy consumption as assisting local and state efforts.

Water Quality and Long Island Sound

As a Council of Governments that is adjacent to Long Island Sound, the South Central Regional Plan of Conservation and Development is required to introduce policies that "reduce Hypoxia, pathogens, toxic contaminants, and floatable debris in Long Island Sound."³ Long Island Sound is one the region's strongest assets with 7 of the region's 15 member municipalities with direct access to it. Long Island Sound is an estuary where the fresh water from the region's rivers and the Atlantic Ocean's salt water mix. Estuaries typically are ecologically diverse environments and its marshlands, shores, and calm waters provide breeding grounds for many different varieties of birds, fish, and shellfish. Long Island Sound has also been designated an "Estuary of National Significance." Historically, the region's rivers that flow into Long Island Sound have been centers of industry and trade - providing power, cooling waters, and transportation. Resulting development has resulted in rivers altered in shape and flow with some in desperate need of remediation. The CT Department of Environmental Protection (DEP) estimates⁴ that 30% of Connecticut's tidal wetlands have been filled and up to 90% have been ditched or altered through human activity.

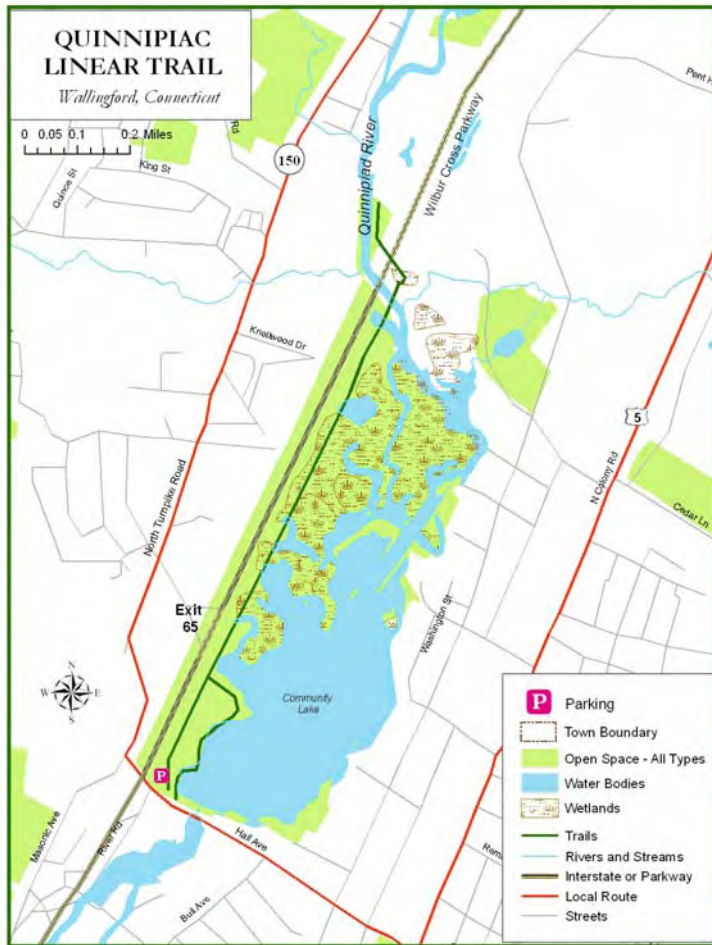
³ PA 07-239, An Act Concerning Responsible Growth, Section 6(a).

⁴ Connecticut Coastal and Estuarine Land Conservation Program Plan, CT DEP, Draft - October 2007, p 9.



Watersheds are natural drainage ways formed by a region's topography that vary in size from drainage for small ponds to headwaters and tributaries for rivers and streams. All the region's rivers, streams and waterways eventually feed into Long Island Sound watershed. Recently, the region's most prominent river – the Quinnipiac has shown signs of water quality improvement – with a new pair of nesting bald eagles mating and producing offspring for the first time in what some estimate to be the last century.⁵ The efforts of the Quinnipiac River Watershed Authority (QRWA) should be commended in helping to bring about many of the river's improvements – through their continuing education efforts about what impacts water quality, their nature programming that builds civic pride and awareness about this incredible regional resource, and their clean-up and stewardship efforts that ensure the future quality of this waterway. Their efforts and tenacity have also led to the development of the Quinnipiac Linear Trail in Wallingford - an important regional recreational resource. There are also two other trail segments along the Quinnipiac River located to the south in the Quinnipiac State Park in North Haven and to the north in along the Quinnipiac Gorge Trail in Meriden. Trail Committees in all three municipalities are working towards establishing links between these routes for a more contiguous trail.

⁵ Yale Daily News Article, November 2, 2007.



Quinnipiac Linear Trail map (left) and Entrance to the Quinnipiac Linear Trail (above).



A view of the Quinnipiac River from Meriden's Quinnipiac Gorge Trail (above).

Prior pesticide and mosquito control (DDT) in the 1950s is attributed with leeching into the region's rivers and fish populations infecting the area's birds of prey resulting in weakened eggs shells and diminished bird and fish populations. The region's other significant waterways include the Housatonic River, the West River, the Mill River, the Farm River, the Branford River, the West River, the East River, and the Hammonasset River

There are six major types of pollutants that affect water quality⁶ and continue to affect the region's waterways. These can present human health problems, but more importantly can damage entire aquatic ecosystems.

- Sediment: Excessive quantities of dirt and sand that change the shape of streambeds, smothering feeding and nursery areas of aquatic animals, and carry other pollutants into the water. Erosion from construction sites, agricultural fields, or suburban gardens are major sources as well as winter road sand.
- Debris: Non-degradable trash, mostly plastic. Aquatic animals can become entangled, or mistake plastic for food, and strangle or starve.

⁶ Excerpted from the Connecticut Sea Grant based at University of Connecticut.

- **Pathogens:** Disease-causing bacteria and viruses that generally comes from fecal material. If the pathogen concentration exceeds certain limits, areas must be closed to shell fishing or swimming to prevent infections or disease outbreaks. Major sources include: failing septic systems, leaky sewer lines, and concentrated run-off of animal waste from pets, farm animals or wildlife.
- **Nutrients:** High levels of nitrogen or phosphorus commonly found in plant fertilizers can alter aquatic plant communities and cause massive plant growth known as algal "blooms" which deplete oxygen concentrations in the water. Blooms are deadly to local fish populations and excess nitrates in drinking water have been linked to health problems such as heart conditions and birth defects.
- **Thermal Pollution:** During summer months, overheated water from run-off of paved or impervious areas can make the water in critical aquatic habitats too warm for sensitive native plants and animals to survive, as well as allowing the spread of non-native species.
- **Toxic Contaminants:** Many chemicals in use today are harmful to both humans and aquatic organisms. Some chemicals can be passed through the food chain (through fish) and concentrate in top predators (like humans). Extremely small concentrations of some toxic materials in the water can kill the eggs and larvae of many animals. Sources of toxic contaminants range from the exhaust (particulate matter) and fluids that come from automobiles to the cleaning and disinfectant products used in homes to the pesticides used in yards, farms and parks.

Regionally, the SCRCOG is not a legislative agency that can implement policies that can prevent these pollutants. However, locally many of the region's municipalities have already implemented storm water run-off and Best Management practices that better contain any negative impacts of construction or development. It is clear that the municipalities in our region are constrained by the limitations of their staffing resources in ensuring that the beneficial policies that are in place materialize when actual construction is complete. Individual municipalities can build on existing efforts to be ever more vigilant with enforcement when it comes to run-off of the built environment if they had additional staffing to do so. Some municipalities have even proposed local ordinances that restrict the use of pesticides and fertilizers at schools and other public playing fields to eliminate run-off concerns and to protect the health of their children as many lawn pesticides contain substances which are known carcinogens. No municipality has expanded this restriction to private property (as in the case in over 60 townships in Canada), but some municipalities promote "Freedom Lawns and Gardens" to reduce local pesticide use with local contests and promotions.

State Efforts

Based on the State's Coastal and Estuarine Land Conservation Program Plan⁷ all the municipalities in the South Central Region are located in both the designated Coastal and Estuarine Planning Area and Connecticut's Coastal Watershed. These designated

⁷ Connecticut Coastal and Estuarine Land Conservation Program Plan, CT DEP, Draft – October 2007, maps on pp. 4-5.

areas qualify the towns in our region for certain nonpoint source pollution management requirements and also qualifies these areas for conservation funding and other programs.

The State has taken several recent initiatives to help continue to clean up the Region's waterways and Long Island Sound.

- In 2007, Governor Rell designated all of the Long Island Sound along Connecticut as a No Discharge area⁸. This means that all recreation and other boats cannot dump their sewage into the LIS, but must take their waste to pump-out stations located in various locations along the shore.
- Since 2005, the State legislation has been in place that restricts the use of pesticides educational environments where children below the 8th grade level are present (CT Public Acts – 05-252: An Act Concerning Pesticides at Schools and Day Care Facilities and 07-168: An Act Banning Pesticide Use on School Grounds).
- Connecticut Sea Grant (CTSG) is funded principally through the National Oceanic and Atmospheric Administration (NOAA) but has matching funds from the State of Connecticut, through the University of Connecticut. The program's focus on Long Island Sound includes three areas: research, outreach, and education through workshop and different publication materials, and its website.
- LIS License Plate Program – Grant Program funded through the State's sale of specialty Long Island Sound license plates. Provides grants for education, research, habitat protection or restoration, and increased public access along Long Island Sound.
- Connecticut Clean Water Fund - The Connecticut Clean Water Fund (CWF) is the state's environmental infrastructure assistance program. The fund was established in 1986 to provide financial assistance to municipalities for planning, design and construction of wastewater collection and treatment projects. The fund is funded through the Federal Clean Water Act and consists of five accounts:
 - the Water Pollution Control State account;
 - the Federal Revolving Loan account;
 - the Long Island Sound Clean-up account;
 - the River Restoration account; and,
 - the Drinking Water Revolving Fund account.

The Federal Clean Water Act

The Federal Clean Water Act (§319) has created a national program that funds the control of non-point sources of water pollution including storm water run-off which is one of the primary sources of pollution to waterways in Connecticut. The Clean Water Act also requires states to establish Total Maximum Daily Loads (TMDL) for waterbodies that do not meet minimum water quality standards. In 2001, Connecticut

⁸ Governor's Press Release. Cite an Executive Order.....

set a 64% reduction goal for its 79 municipal treatment plants by 2014.⁹ In order to achieve these goals, the state DEP issues annual discharge permits that decrease by percentage in the allowed discharge per year every year. The Act also provides grant funding and every year the State creates a list of priority waterbodies of places with significant impairment to aid in remediation planning and action. In the South Central Region, the Priority Waterbodies for FY2008¹⁰ include:

- Branford Supply Pond, Northwest – Branford
- Farm River, Segment 2 – East Haven
- Meeting House Brook – Wallingford
- Allen Brook, Segments 1 & 2 – Wallingford
- Allen Brook Pond – North Haven & Wallingford
- Wepawaug River, Segments 1 & 2 - Milford

Interest appears to be growing at the Federal level to increase the amount of bonding for the Clean Water Fund, which provides grants and loans to municipalities to plan, design and construct wastewater treatment facilities. The upgrades are needed, in part, for the sewage treatment plants to meet progressively stricter goals in reducing the amount of nitrogen they discharge into Long Island Sound. (Excessive amounts of nitrogen disrupt the feeding, growth and reproduction of nearly all forms of aquatic life.) Reduced bond funding in recent years has slowed the pace at which treatment plant renovations and construction is occurring. Increased commitments in funding can ensure that the State is on track in meeting its reduction goals. Milford's two sewer treatment plant, the Houstatonic and Beaver Brook Plants are pending upgrade with Federal and State Clean Water Fund monies.

The Federal Environmental Protection Agency also has a special Long Island Sound Study Office based in Stamford monitors the progress of Clean Water Fund initiatives, conducts habitat and ecosystem research and coordinates restoration and implementation projects for the States of Connecticut and New York.

Aquaculture and Marine Fisheries

Aquaculture is the business of farming aquatic plants and animals including shellfish, freshwater fishing, and saltwater fishing. Aquaculture is expected to be among the top ten growth industries in the US in the next ten years and is currently the nation's fastest growing agricultural business. CT's Aquaculture industry per square mile was \$16,725,000 in 2005 driven mainly by its oyster industry.¹¹ In Connecticut, shellfish are defined as oysters, clams, mussels and scallops; either shucked or in the shell, fresh or frozen, whole or in part. Scallops are excluded from this definition when the

⁹ Clean Water Fund Financing and Long Island Sound (OLR 2006-R-0552), By: Paul Frisman, Principal Analyst, September 19, 2006

¹⁰ Table 1 of the Section 319 Nonpoint Grant Requirements for FY2008 published by the CT DEP.

¹¹ *Agriculture in Connecticut 2005*, by Dr. W.A. Cowan, Published by the University of Connecticut's College of Agriculture and Natural Resources, August 2006.

final product is the shucked adductor muscle only. Lobsters, crabs, snails and finfish are not included in this definition.¹²

Per CGS Section 26-192a, the Department of Agriculture (DOA) is the State's lead agency for aquaculture regulation, development and coordination¹³. The DOA chairs an interagency planning and steering committee which includes the DEP, Consumer Protection and Economic Development which is also charged with developing a comprehensive strategy for the planned development of aquaculture in CT. The strategy will address regulatory issues, marketing opportunities, disease control, aquaculture for natural stock enhancement and financial assistance programs for aquaculturists. The South Central Region has a direct link to the State's work in this area as the State's DOA Bureau of Aquaculture and Laboratory (Bureau) is located in Milford. The Bureau uses their laboratories there to focus on several different efforts:

- Monitoring Shellfish growing area and Coastal sanitary surveys along Connecticut's 250-mile shoreline by testing bacteria and bio-toxin levels of water and shellfish and coordinating emergency closures when necessary by posting signs and performing environmental investigations.
- Sanitary inspection and licensing of shellfish dealers involved in harvesting, shucking, depuration, repacking and reshipping of fresh and frozen oysters, clams, mussels and scallops, if whole or roe-on in coordination with twice-annual inspections of the FDA.
- Shellfish Habitat Management and Restoration by 1) leasing shellfish grounds, administering Perpetual Franchise grounds, providing survey and engineering services, maintaining maps and records, collecting fees and taxes, setting corner marker buoys, constructing and maintaining signals and mediating boundary and ownership disputes and 2) providing for the cultivation and propagation of shellfish through the management and restoration of state-owned natural clam and oyster beds. The Bureau issues Natural Bed and Conch Harvest licenses, sets corner markers, plants cultch, maintains spawn stock, monitors predators and diseases and makes assessments of natural disaster impacts.
- Aquaculture Development and Coordination: This program is responsible for planning and coordinating aquaculture development including: development and oversight of legislation and regulations, review of NPDES and Coastal Zone applications, liaison between industry and the regulatory community, promotion, marketing, technology transfer and assistance, communications and addresses issues of regional and national concern.

Locally, Branford, Guilford and Madison all have jurisdiction over their own shellfish beds and have the ability to lease these directly to commercial shell fishermen.¹⁴ Branford and Guilford have both received state Agricultural Viability funds toward reinvestment efforts in these beds for monitoring and revitalization.

¹² For more information, go to the DOA's website at <http://www.ct.gov/doag>

¹³ Ibid.

¹⁴ State laws extensively regulate state shellfisheries (CGS § 26-192 to 26-237c) and local shellfisheries (CGS § 26-239 to 26-294). CGS §§ 26-192 and 26-193

Aquaculture Education

The region also has a local focus on developing the next generation of aquaculturists through the Sound School Regional Aquavocation Education Center located in New Haven. The School is located on Water Street directly adjacent to New Haven Harbor and the curriculum is structured through the State's Vocational Agricultural Program and requires mandatory "Supervised Occupational Experience" hours of hands training within the field. The school's mission is to:¹⁵

- Provide motivated young people unique vocational educational programs about marine occupations within the aquaculture industry, especially Connecticut's oyster aquaculture industry.
- Encourage the teaching of environmental sciences that would include wise natural resource management and appreciation of Connecticut's coastal waters for commerce, recreation and food production.
- Prepare young people for future educational opportunities beyond a high school education both in aquaculture marine science and the marine trade fields

Regionally, the SCRCOG should institute the following strategies that work towards the region's goal for the continued improvement and protection of the region's Air Quality and Long Island Sound.

Strategies:

- Continue to coordinate; working with CT DOT and the Federal Highways and Works Administration, any Congestion Management studies necessary and as required reducing the traffic congestion patterns that contribute to air quality issues.
- Support regional Climate Change initiatives to reduce Greenhouse Gas Emissions.
- Continue to make the improvement of Long Island Sound a priority for the regional legislative card and to elected state and federal officials to ensure adequate funding for remediation, education, and acquisition projects.
- Improve access to Long Island Sound through support of open space set-asides coordinated with private developments that can provide public access to both Rivers and LIS.
- Continue to provide analysis of Dissolved Oxygen parts per million/hypoxia.
- Expand access to area Harbors (as identified by individual municipalities) as a way to develop ongoing stewardship relationships with the area's citizens.
- Support public access to Long Island Sound and the region's rivers as a way of developing regional stewardship through support of regional river trail systems and programs such as the CT Coastal Guide available on DEP website that identify public access points to LIS.
- Support the region's aquaculture industries where possible.

¹⁵ Information from the Sound School's website at <http://www.soundschool.com/>.

Consistency Findings

Public Act 07-239 requires that each regional Plan of Conservation and Development note any inconsistencies with the State Plan of Conservation and Development and any local Plans of Conservation and Development. The Regional Plan is consistent with all 6 State Plan Growth Management Principles. The principles are closely aligned with goals of SCRCOG's Regional Plan and are discussed in the Plan as follows:

State Plan Goal	Discussed in Regional POCD Chapter
1. Redevelop & Revitalize Regional Centers	Land Use, TOD and Smart Growth, Economic Development
2. Expand Housing Opportunities and Design Choices	Housing
3. Concentrate Development Around Transportation Nodes and Corridors	Transit Oriented Development and Smart Growth
4. Conserve and Restore the Natural Environment, Cultural and Historical Resources, and Traditional Rural Lands	Open Space and Recreation, Land Use, Agriculture
5. Protect and Ensure the Integrity of Environmental Assets Critical to Public Health and Safety	Open Space and Recreation, Air Quality and Long Island Sound, Public Utilities and Energy Conservation
6. Promote Integrated Planning Across All Levels of Government	Discussed in most Chapters

Some of the towns within the South Central Region are currently revising their local Plans of Conservation and Development, but each plan appears generally consistent with the regional plan. The sole exception is a local policy that restricts future safety improvements and service expansion for Tweed New Haven Airport which has been a South Central regional economic development and transportation goal, but which East Haven's Plan has not supported due to the disproportionate impacts experienced by the residents of the Town. The region continues to support Tweed as an important regional resource.

As State agencies are required to utilize both the State Plan and the Locational Guide Map as a guide for state funding priorities, issues with the Locational Guide Map as a policy guide have become more apparent, particularly when the text of the State Plan provides no other guidance. The State Plan clearly states that the "reuse or redevelopment of an existing site for economic development, affordable housing, or

public supported initiative may also be eligible for public funding even if it is not located in a development category on the Map”¹

Additional information for the region’s sites with one of the four conservation designations but that are already developed either in part or in whole is provided below. Many times these designations are due to potential flood hazard. It should be noted that land along the region’s waterways have been developed since colonial times when these waterways provided a crucial energy source for the region’s commercial and industrial development. These sites are adjacent to existing transportation corridors, have existing infrastructure, are in many cases major regional employment centers, and are important for redevelopment of the South Central region’s developed corridors. Redevelopment of these areas often improves existing environmental conditions such as where brownfields exist and requires adherence to new building, engineering, and environmental standards often improving existing development and environmental conditions. Some examples below reflect the region’s historic village or rural centers which require some reinvestment in order to restore a much needed sense of place to local gathering places.

- New Haven’s Long Wharf area is shown as Conservation Area. This developed area located between I-95 and New Haven’s central city area serves as a significant regional employment center with IKEA, Asso Abbloy/Sargeant, the Regional Water Authority, and the New Haven Register among others. This area is also a significant state and regional transportation resource with Union Station, the states busiest rail station, and the New Haven Rail Yard which houses and services Metro-North’s extensive rail fleet.
- The Port of New Haven is shown as Conservation Area. The Port has been functioning since colonial times and has the potential for additional freight traffic that could alleviate congestion on regional and state transportation corridors. The Port is also home to two of the four Federal Home Heating Oil Reserve sites in the northeast.
- New Haven’s Mill River Area along the southern coast of New Haven’s Fair Haven neighborhood is shown as Conservation Area. This area was industrially developed and has already received state and federal brownfields funds to assist in redevelopment efforts. As part of the comprehensive site design, a linear open space is planned along the Quinnipiac River, providing public access not previously available.
- Tweed New Haven Airport is shown as a combination of Conservation and Preservation area. The airport has already received state and federal funding and permitting for necessary runway safety expansion areas and is a significant regional and state resource necessary for economic development.
- North Haven: former Pratt & Whitney site along the Quinnipiac River has portions of the site as well as the proposed extension area of Valley Service

¹ *Conservation and Development Policies Plan for Connecticut – 2004-2009*, Office of Policy and Management, p. 5.

Road designated as Preservation Area. Current zoning for the brownfield manufacturing site is industrial although a proposed floating zone would allow for mixed-use development with less intense commercial development in conjunction with an identified train station along the New Haven/Hartford/Springfield line. This site is along a busy commercial arterial near Quinnipiac University's new home for their Graduate Degree programs. The proposed project also includes extending the multi-use Quinnipiac Linear Trail in North Haven providing a much needed multi-modal transportation alternative.

- Wallingford's northeast corner near the intersection of I-91 and Route 68 is designated as Conservation Area although the developed area currently serves as a regional employment center with major employers such as Bristol Meyers Squibbs and a Regional US Postal Service Facility.
- Madison - A Rural Community Center exists at the juncture of Route 80 and Route 79 with a combination of uses including a church, a fire station, a deli, a bank, a nursery and garden center, a restaurant, and a supermarket. This area is currently shown as a combination of Preservation, Conservation, and Rural Lands.
- North Branford's Route 80 commercial corridor from the East Haven town line to Totoket Road is shown as Preservation and Conservation Area due to the nearby Farm River whose watershed drains into the Lake Saltonstall reservoir. The town would like to expand sewer service to this area to allow for context-sensitive infill development among the existing commercial development and to mitigate impacts of the existing aging septic systems in place which currently impact the Farm River.
- North Branford's former Town Hall site which now includes the Town's Community Center and a town playing field is shown as Preserved Open Space, but is targeted for redevelopment to provide a more comprehensive village center and is more appropriately shown as Neighborhood Conservation.
- North Branford's Northford Center is indicated as a Rural Community Center on the south side of Route 17 only and should show this center north of Route 22 and Route 17. The Town Plan identifies enhancing the Center into a more pedestrian oriented area while "preserving the historic and natural character of the area" with buildings oriented toward the road and parking in the rear. A potential ring road suggested by a prior SCRCOG study is also recommended to alleviate the number of curb cuts and better pedestrian and automotive circulation.

Conversely, the Locational Guide map shows the following development category areas which the individual municipalities would like revised to reflect limited potential for additional growth. These revisions are consistent with the region's goals of protecting environmentally sensitive lands and rural areas and directing future significant growth to the region's existing development corridors which has the existing infrastructure to support it.

- Madison has indicated that the area between I-95 and the Route 1/Boston Post Road shown as Growth Area is already extensively developed with infill potential only and should be shown as Neighborhood Conservation. Madison is an outlying suburb of the South Central Region with no sewer service and a strong sewer avoidance policy.

Appendix

SCRCOG Resolution

List of Outreach Meetings

SCRCOG Resolution: Amendments 7/09

Individual Municipal Sewer Service Area Maps

Letters from Office of Policy and Management



Bethany - Branford - East Haven - Guilford - Hamden - Madison - Meriden - Milford
New Haven - North Branford - North Haven - Orange - Wallingford - West Haven - Woodbridge

SOUTH CENTRAL REGIONAL COUNCIL OF GOVERNMENTS

Judy Gott, Executive Director

Resolution Adopting an Update to the Regional Plan of Conservation and Development for South Central Connecticut

Whereas: Per Section 8-35(a-c) of the General Statutes, the South Central Regional Council of Governments is required to update its Regional Plan of Conservation and Development by July 1, 2008 including new sections on agriculture, mixed use and transit-oriented development, and consistency with the State's Plan to replace the last plan, Vision for the Future, which was adopted in November 2000; and

Whereas: The Regional Planning Commission (RPC) has undertaken relevant background studies, sought public input and after giving notice of the time, place, and subject of a public hearing in writing to the chief executive officer and planning commission of each South Central Connecticut member town, city or borough, and to the Secretary of the Connecticut Office of Policy and Management and publishing notice of the public hearing in the New Haven Register and placing the document on its website, conducted a Regional Plan of Conservation and Development public hearing on May 8, 2008 at 127 Washington Avenue, North Haven, Connecticut; and

Whereas: The RPC, after considering public comments including those offered on May 8, 2008, recommended, by resolution, that the Council adopt the Regional Plan of Conservation and Development for South Central Connecticut on June 12, 2008; and

Now, Therefore, Be It Resolved By the Council of Governments:

The **Regional Plan of Conservation and Development dated June 2008** is adopted for South Central Connecticut per Section 8-35(a-c) of the General Statutes.

Plan of Conservation and Development work by the Regional Planning Commission through the July 2006-June 2008 time period is greatly appreciated.

The Council's Executive Director, Judy Gott, shall, as directed by Section 8-35a of the General Statutes, transmit this resolution, and a copy of the adopted plan, signed by the chairman of the Council to municipal chief executive officers of South Central Connecticut municipalities; to town, city, and borough clerks of South Central Connecticut municipalities; to planning commissions of South Central Connecticut municipalities; and to the Secretary of the Connecticut Office of Policy and Management.

The undersigned, duly qualified and acting Secretary of the South Central Regional Council of Governments certifies that the foregoing is a true and correct copy of a resolution adopted at a lengthy convened meeting of the Council of Governments on **June 25, 2008**.

Date: June 25, 2008

A handwritten signature in black ink, appearing to read "James Zeoli".

James Zeoli, Secretary

127 Washington Avenue
4th Floor West
North Haven, Connecticut 06473-1715

Equal
Opportunity
Employer

Phone: (203) 234-7555
Fax: (203) 234-9850
E-Mail: jgott@scrcog.org

Meetings for Updates to Plan of Conservation & Development, the Long Range Transportation Plan, and (starting Sept 5th) for the Comprehensive Economic Development Strategy

Date	Organization	Place	Public Meeting	Contact
July 19, 2006 (SCRCOG only)	New Haven City Plan Commission	New Haven City Hall, 2 nd Floor Meeting Room	No	Karyn Gilvarg, Exec. Director - City Plan Dept.
July 20, 2006 (SCRCOG only)	Branford Planning & Zoning Commission	Branford Senior Center	Yes	Shirley Rasmussen, Town Planner
July 28, 2006	REDFO Meeting	SCRCOG Conference Room	No	Bob Santy, RGP
September 5, 2006	Woodbridge Planning & Zoning Commission	Woodbridge Town Hall	Yes	Kris Sullivan, P&Z Clerk
September 13, 2006	New Haven Environmental Justice Network	Fair Haven Police Substation - 295 Blatchley (near Clay St.)	No	Lynne Bonnett, Chair – NHEJN [nhejn@snet.net]
September 15, 2006	Regional Chambers Fall Meeting	SCRCOG Conference Room	No	Judy Gott, Exec. Director - SCRCOG
September 21, 2006 – 4 p.m. (COG only)	Guilford Town Center South Committee	Town Hall	No	George Kral, Town Planner or RPC Rep Rudy Horowitz
November 14, 2006	Hamden Planning & Zoning Commission	Hamden Memorial Town Hall	Yes	Leslie Creane, Town Planner
November 16, 2006 – 7:30 p.m.	North Branford Planning & Zoning Commission	North Branford Town Hall – Foxon Road	Yes	Carol Zebb, Town Planner
November 21, 2006	Orange Planning & Zoning Commission	Orange Town Hall	Yes	Tammy, P&Z Clerk or Paul Dinice, Zoning Administrator
CEDS -	North Branford	Town Hall	No	Karl Kilduff,

May 16, 2007				Town Manager
CEDS – May 29, 2007	Hamden	Government Center	No	Dale Kroop, Director of Econ. Development
CEDS – May 31, 2007	Bethany	Lakeview Lodge		Derrylyn Gorski/First Selectwoman & Mikey-
CEDS – June 4, 2007 (4:00 pm)	Meriden	City Hall Council Chambers	No	Chamber
CEDS – June 4, 2007 (6:30 pm)	Wallingford	Town Hall	No	Chamber
CEDS – June 12, 2007	New Haven	Career High School	No	Kelly Murphy/Economic Development
CEDS – June 18, 2007	Milford	Parsons Govt. Complex	Yes	Bob Gregory/Director/EDC
CEDS – June 21, 2007	East Haven	Melillo Middle School	No	Art DeSorbo/Town Manager
June 25, 2007	Meriden POCD Subcommittee	Meriden City Hall	Yes	Dominick Caruso, Ecominic Development & Planning Director
CEDS - June 26, 2007	Madison	Town Campus	No	Contacts through RGP
July 5, 2007	Madison P&Z	Madison Town Campus	Yes	Marilyn Ozols, Town Planner
CEDS – July 12, 2007	Guilford	Guilford Community Center	No	Contacts through RGP
CEDS – July 17, 2007	Woodbridge	Town Hall	No	Contacts through RGP
CEDS – July 19, 2007	New Haven – Tourism/Hospital/Food Retail Sector Focus Group	Clarion Hotel	No	Contacts through RGP

CEDS – July 23, 2007	Orange	Town Hall	Yes	First Selectman James Zeoli
CEDS – September 24, 2007	SCSU – Higher Education Focus Group	SCSU – Shanti Center	No	Contacts through RGP
September 26, 2007	Bethany P&Z	Town Hall	Yes	P&Z Chair & RPC Rep - Sharon Huxley
October 22, 2007	Guilford Planning Subcommittee	Town Hall – Selectman's Room	Yes	P&Z Clerk Sue Gomez & Planner George Kral
May 8, 2008	Regional Planning Commission (Public Hearing Required by Statute)	SCRCOG	Yes	SCRCOG
June 12, 2008	Regional Planning Commission (Public Hearing to Recommend to COG)	SCRCOG	Yes	SCRCOG
June 25, 2008	Council of Governments (Public Hearing for Final Adoption)	SCRCOG	Yes	SCRCOG



Bethany - Branford - East Haven - Guilford - Hamden - Madison - Meriden - Milford
New Haven - North Branford - North Haven - Orange - Wallingford - West Haven - Woodbridge

SOUTH CENTRAL REGIONAL COUNCIL OF GOVERNMENTS

Judy Gott, Executive Director

Resolution Adopting Amendments to the Plan of Conservation and Development: South Central Region

Whereas: Per Section 8-35(a-c) of the General Statutes, the South Central Regional Council of Governments has amended the "Sewer Service" section and the Regional Sewer Service Area Map of the Plan of Conservation and Development: South Central Region, including the addition of Individual Municipal Sewer Service Area Maps; and

Whereas: The Regional Planning Commission (RPC) has undertaken relevant background studies and after giving notice of the time, place, and subject of a public hearing in writing to the chief executive officer and planning commission of each South Central Connecticut member town, city or borough, and to the Secretary of the Connecticut Office of Policy and Management and publishing notice of the public hearing in the New Haven Register and placing the document on its website, conducted a public hearing for the amendments to the Plan of Conservation and Development: South Central Region on July 9, 2009 at 127 Washington Avenue, North Haven, Connecticut; and

Whereas: The RPC, after considering public comments including those offered on July 9, 2009, recommended, by resolution, that the Council adopt the amendments to the Plan of Conservation and Development: South Central Region on July 21, 2009; and

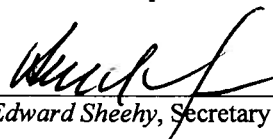
Now, Therefore, Be It Resolved By the Council of Governments:

The amendments to the **Plan of Conservation and Development: South Central Region** are adopted for South Central Connecticut per Section 8-35(a-c) of the General Statutes.

The Council's Executive Director, Judy Gott, shall, as directed by Section 8-35a of the General Statutes, transmit this resolution, and a copy of the adopted amendments to the Plan of Conservation and Development: South Central Region, signed by the chairman of the Council to municipal chief executive officers of South Central Connecticut municipalities; to town, city, and borough clerks of South Central Connecticut municipalities; to planning commissions of South Central Connecticut municipalities; and to the Secretary of the Connecticut Office of Policy and Management.

The undersigned, duly qualified and acting Secretary of the South Central Regional Council of Governments certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting of the Council of Governments on **July 21, 2009**.

Date: July 21, 2009



Edward Sheehy, Secretary

127 Washington Avenue
4th Floor West
North Haven, Connecticut 06473-1715

Equal
Opportunity
Employer

Phone: (203) 234-7555
Fax: (203) 234-9850
E-Mail: jgott@scrcog.org

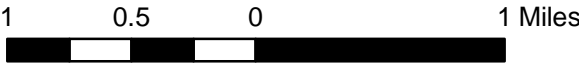
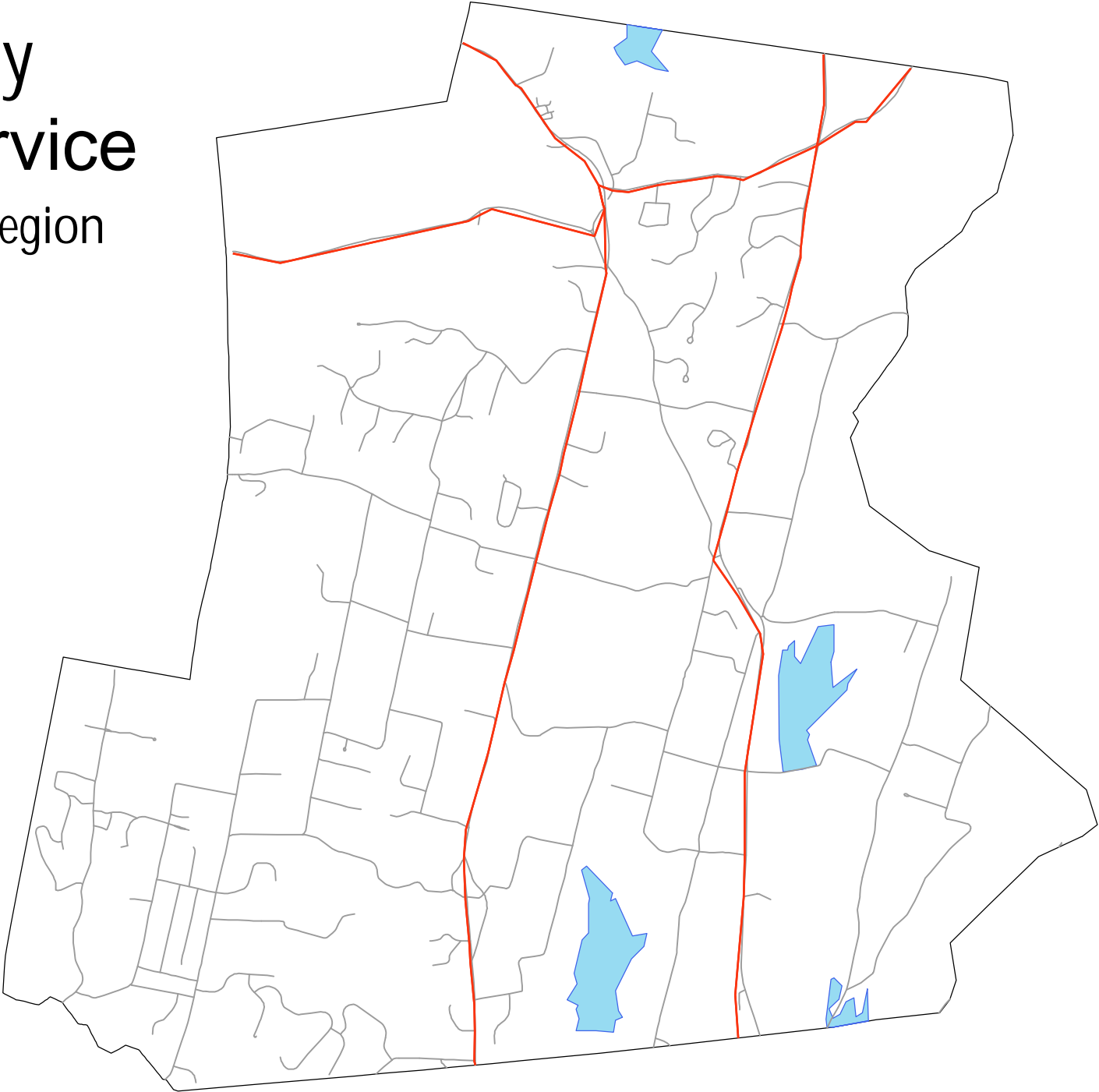
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Sewer Service

South Central Region



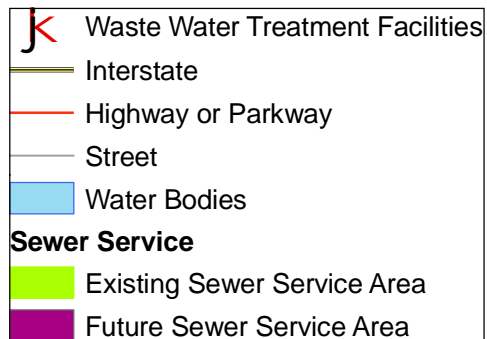
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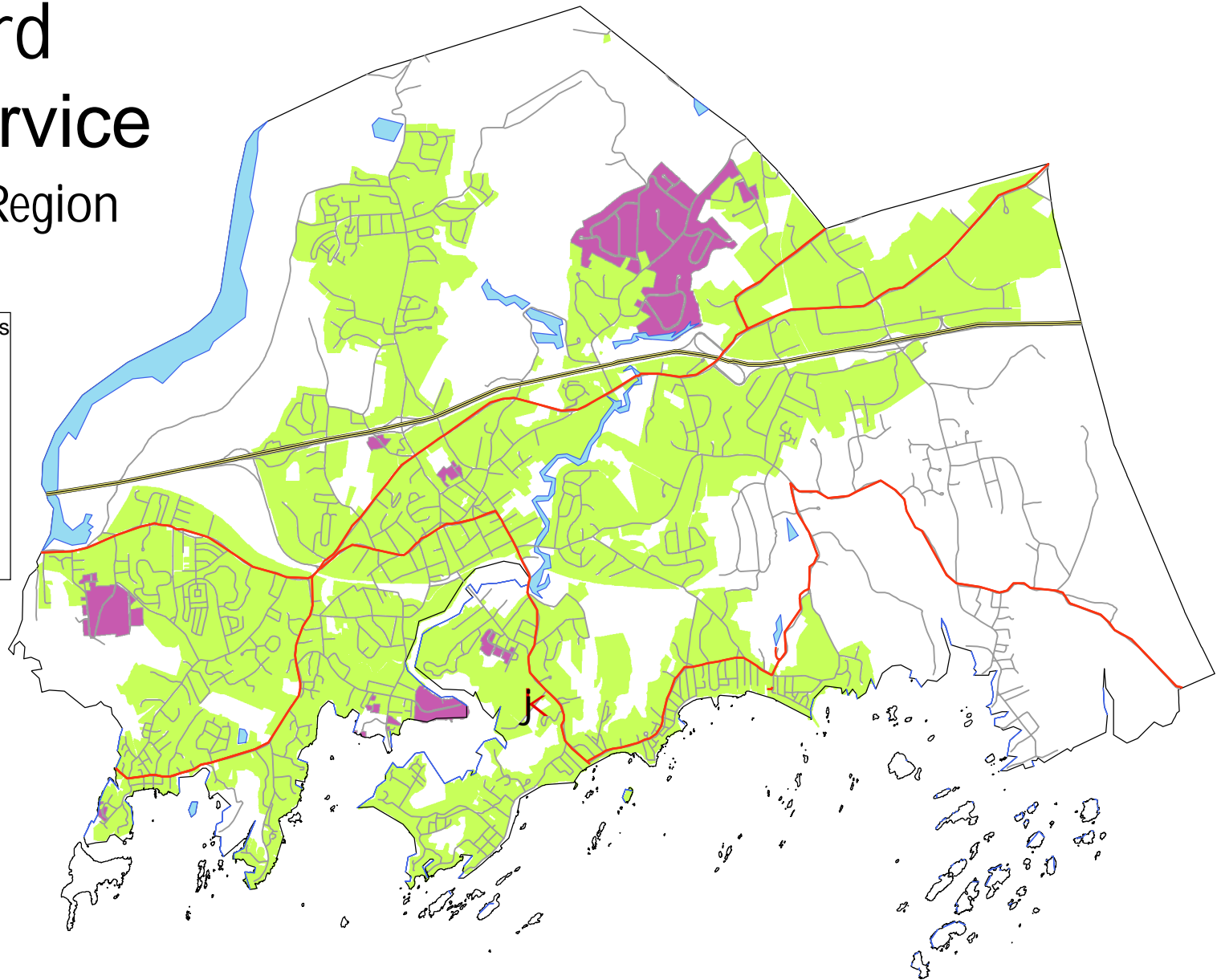
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Sewer Service

South Central Region



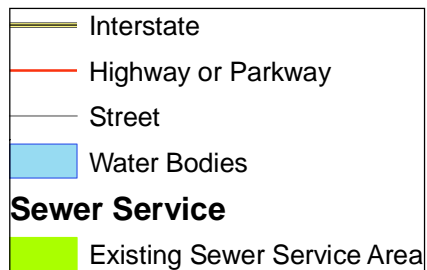
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prepared by
SCRCOG (E.L) 3/09



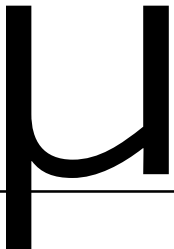
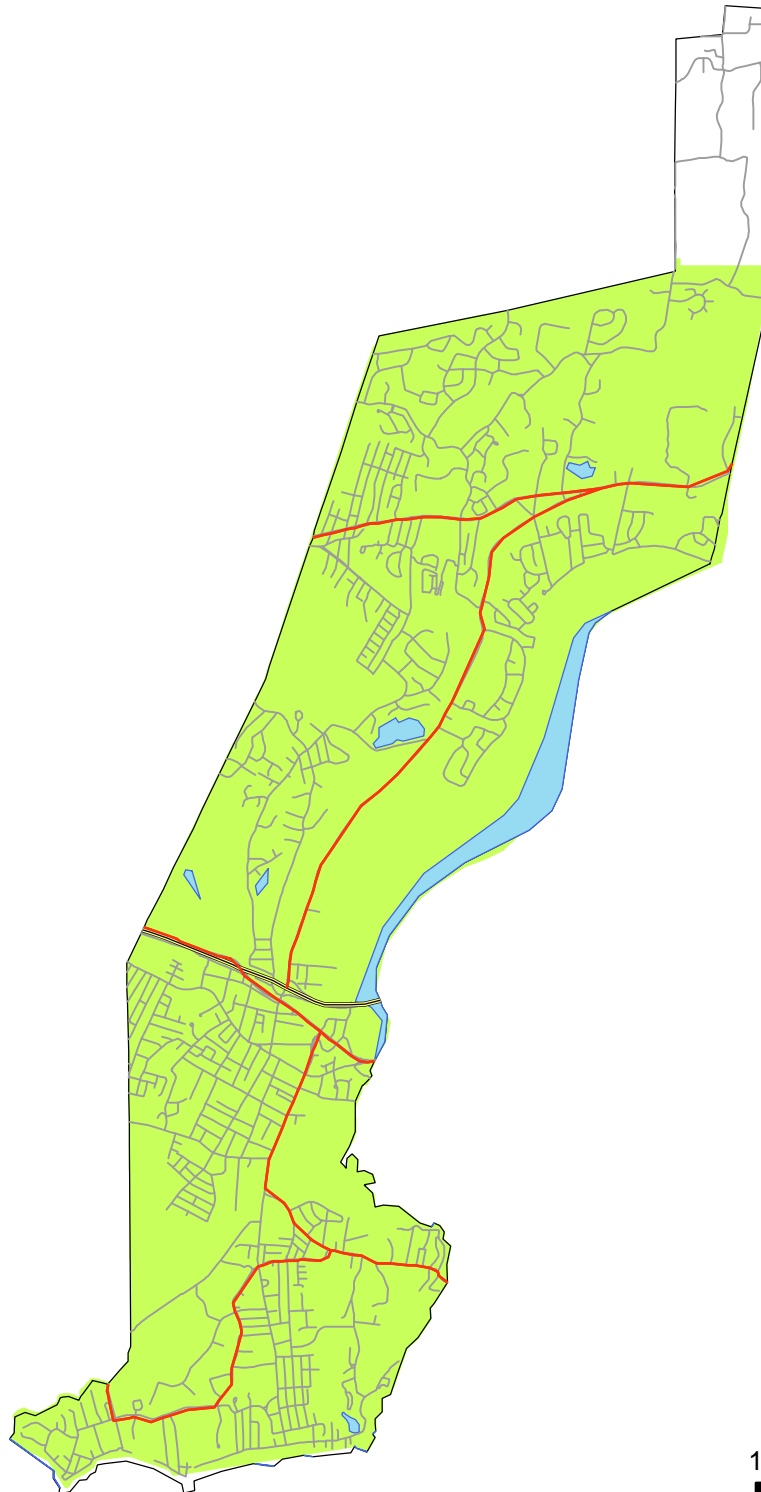
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Sewer Service

South Central Region

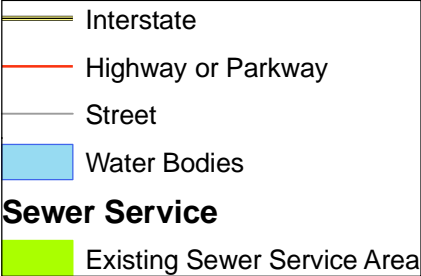


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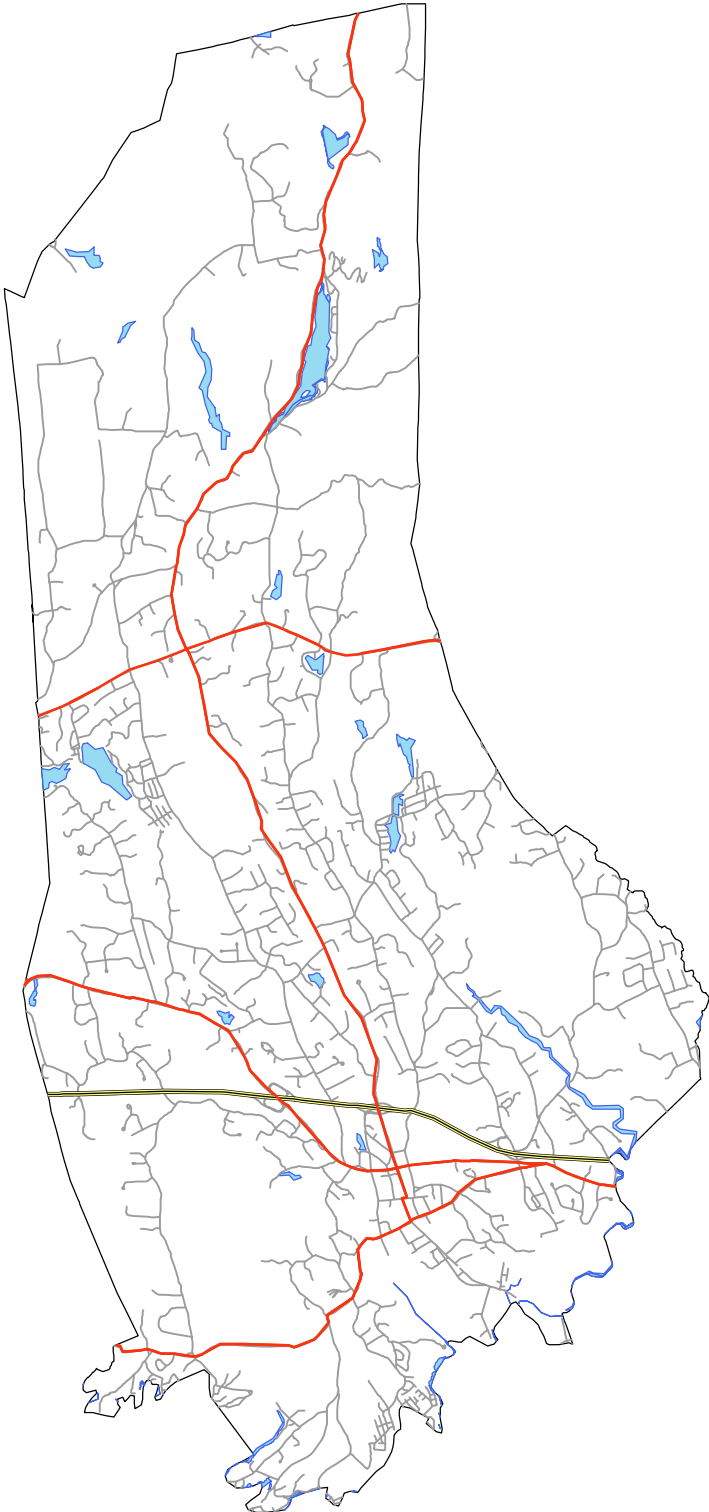


Guilford Sewer Service

South Central Region



prepared by SCRCOG (E.L) 3/09



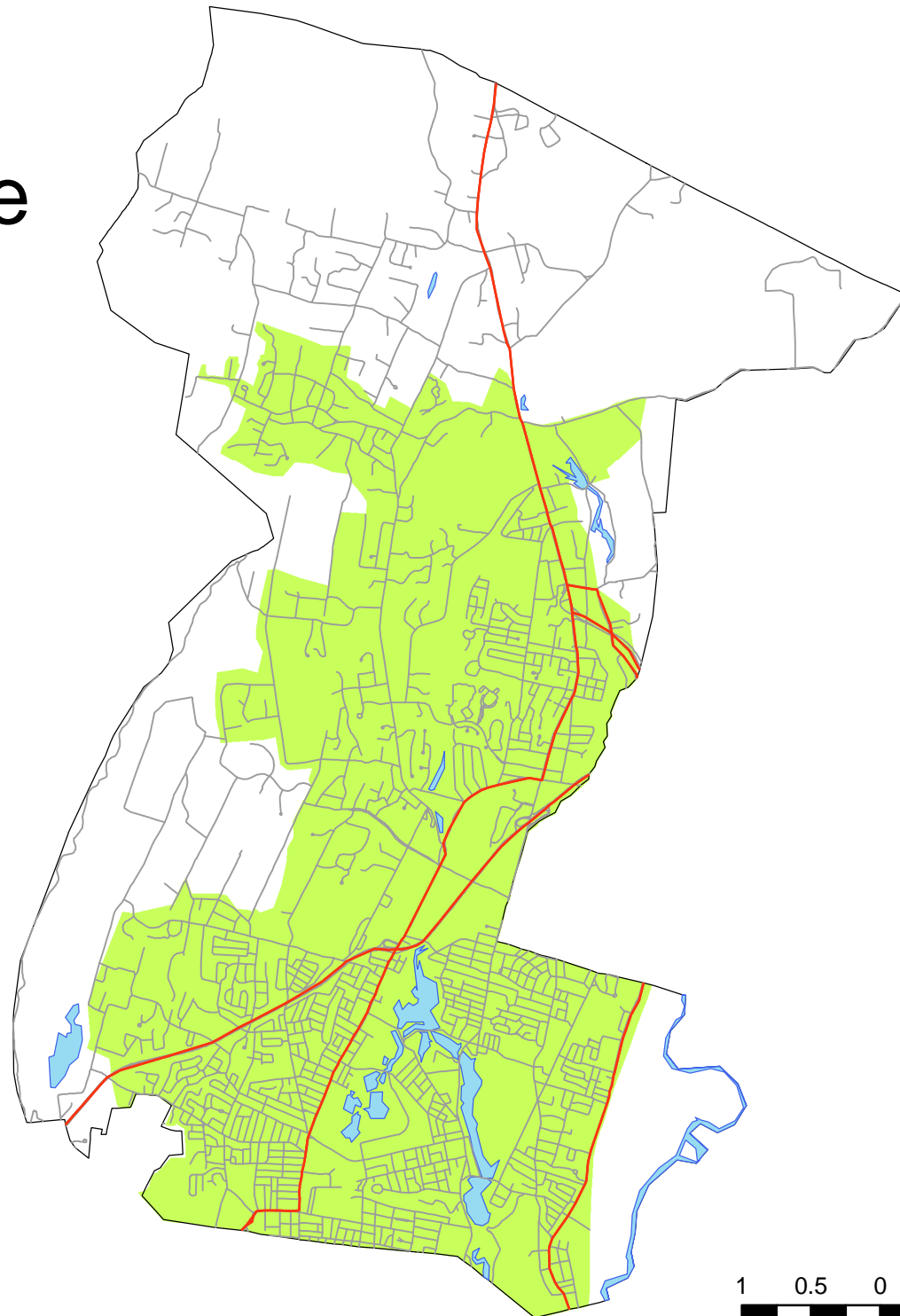
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Sewer Service

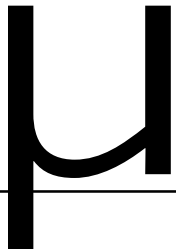
South Central Region

- Highway or Parkway
- Street
- Water Bodies
- Sewer Service**
- Existing Sewer Service Area

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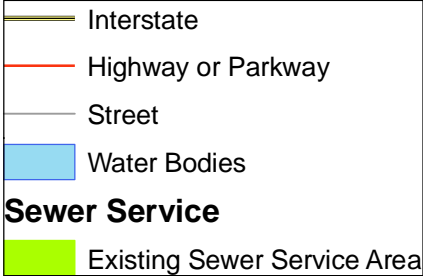


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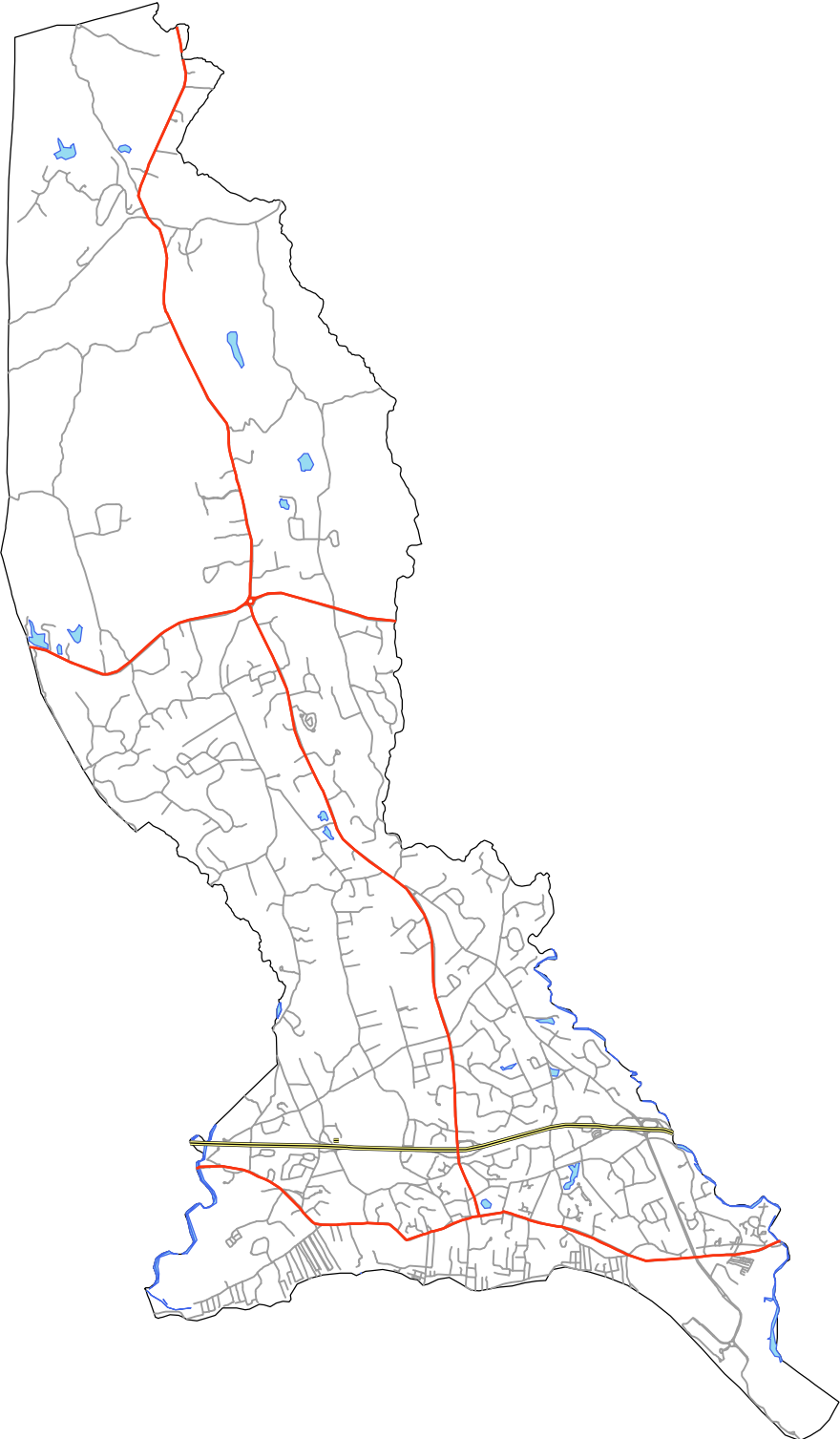


Madison Sewer Service

South Central Region



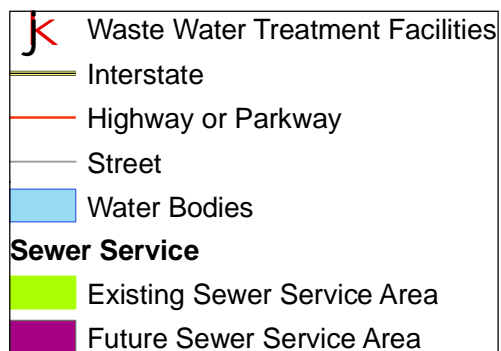
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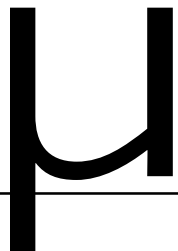
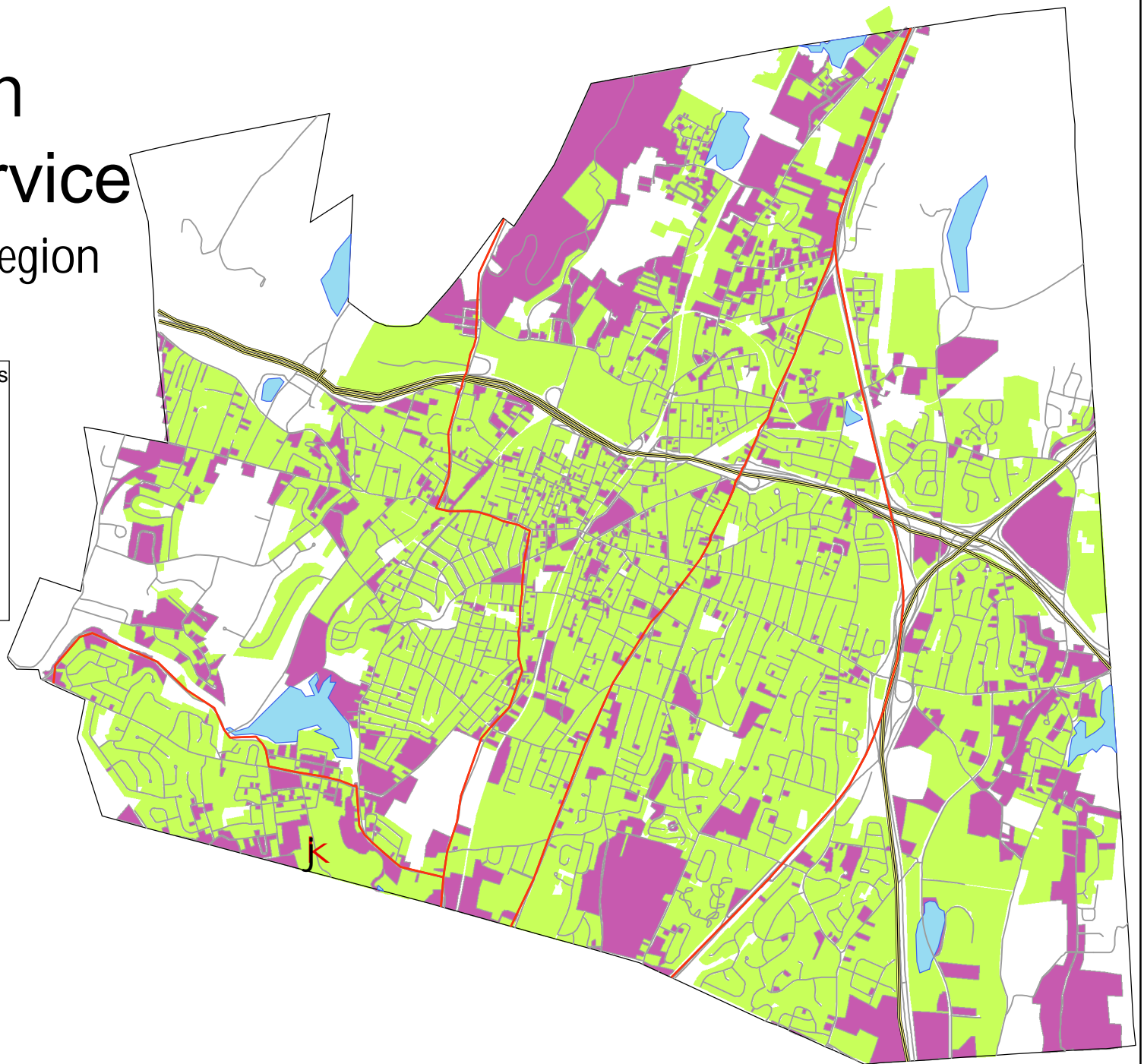
Meriden

Sewer Service

South Central Region



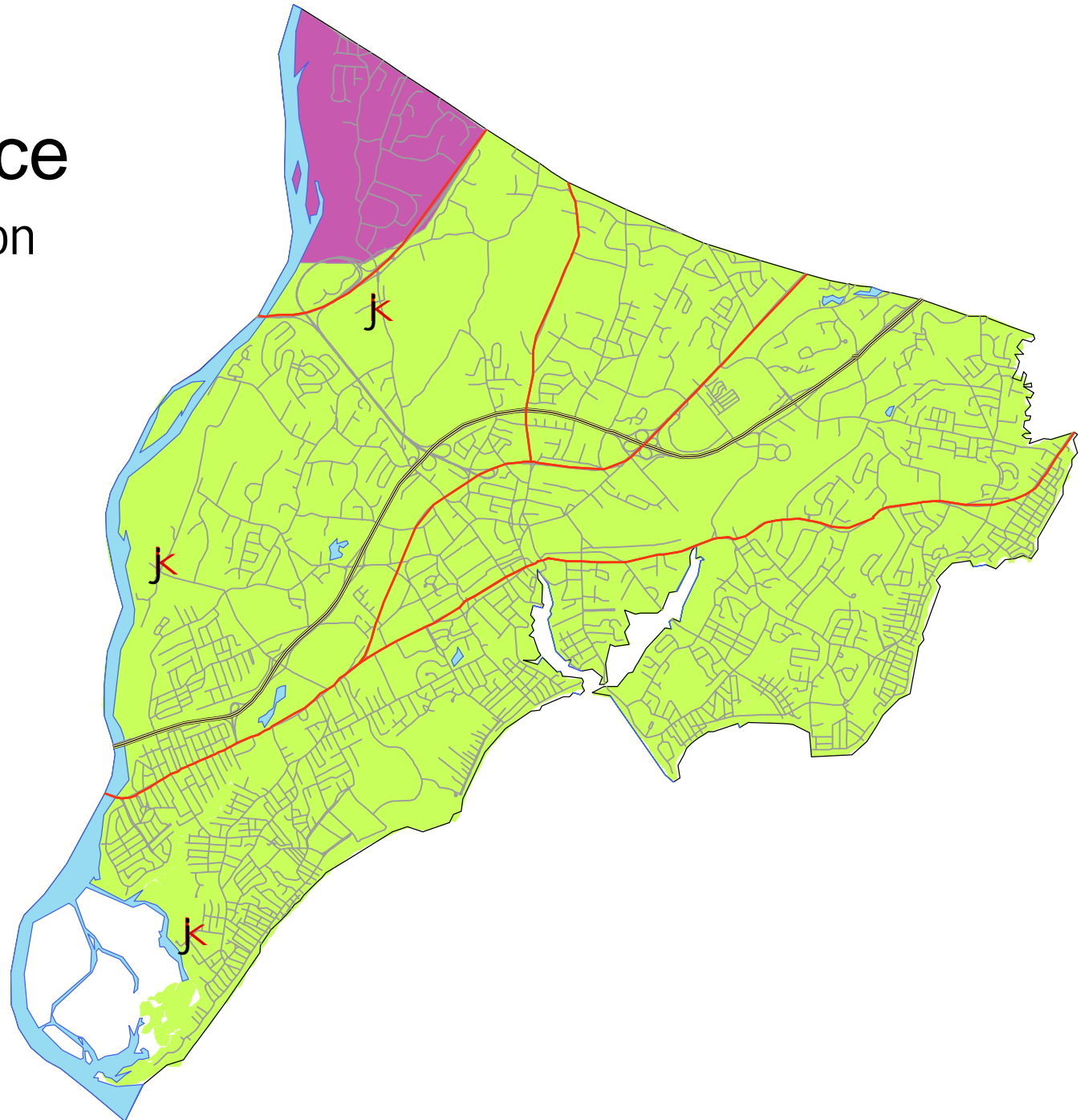
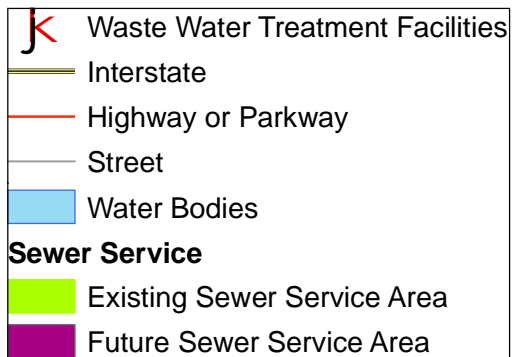
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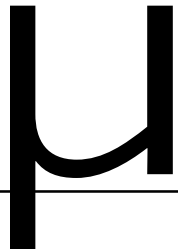
Milford

Sewer Service

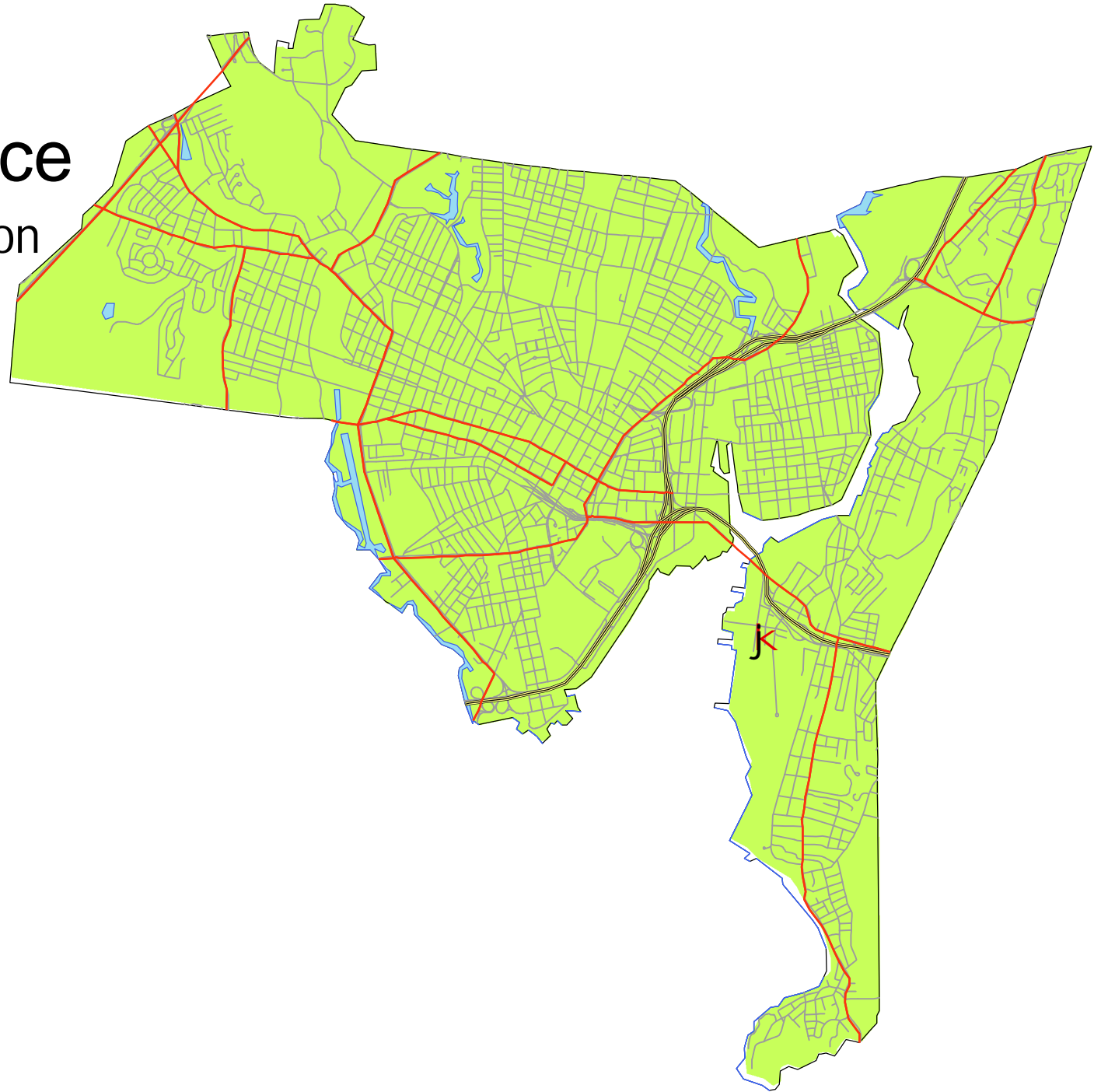
South Central Region



Source:
Sewer Service Area data
(Existing & Future)
provided by Milford
prepared by
SCRCOG (E.L) 3/09

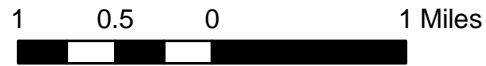


New Haven Sewer Service South Central Region



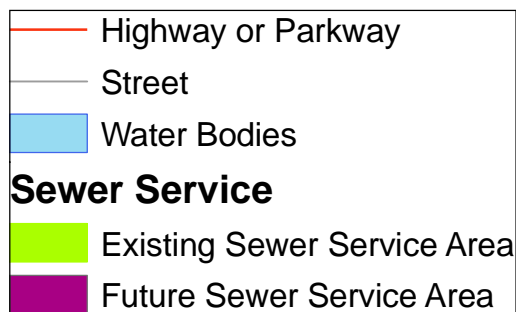
- Waste Water Treatment Facilities
- Interstate
- Highway or Parkway
- Street
- Water Bodies
- Sewer Service**
- Existing Sewer Service Area

Source: Existing
Sewer Service Area data
provided by GNHWPCA
prepared by
SCRCOG (E.L) 3/09

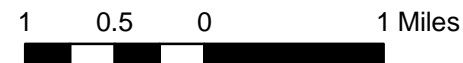
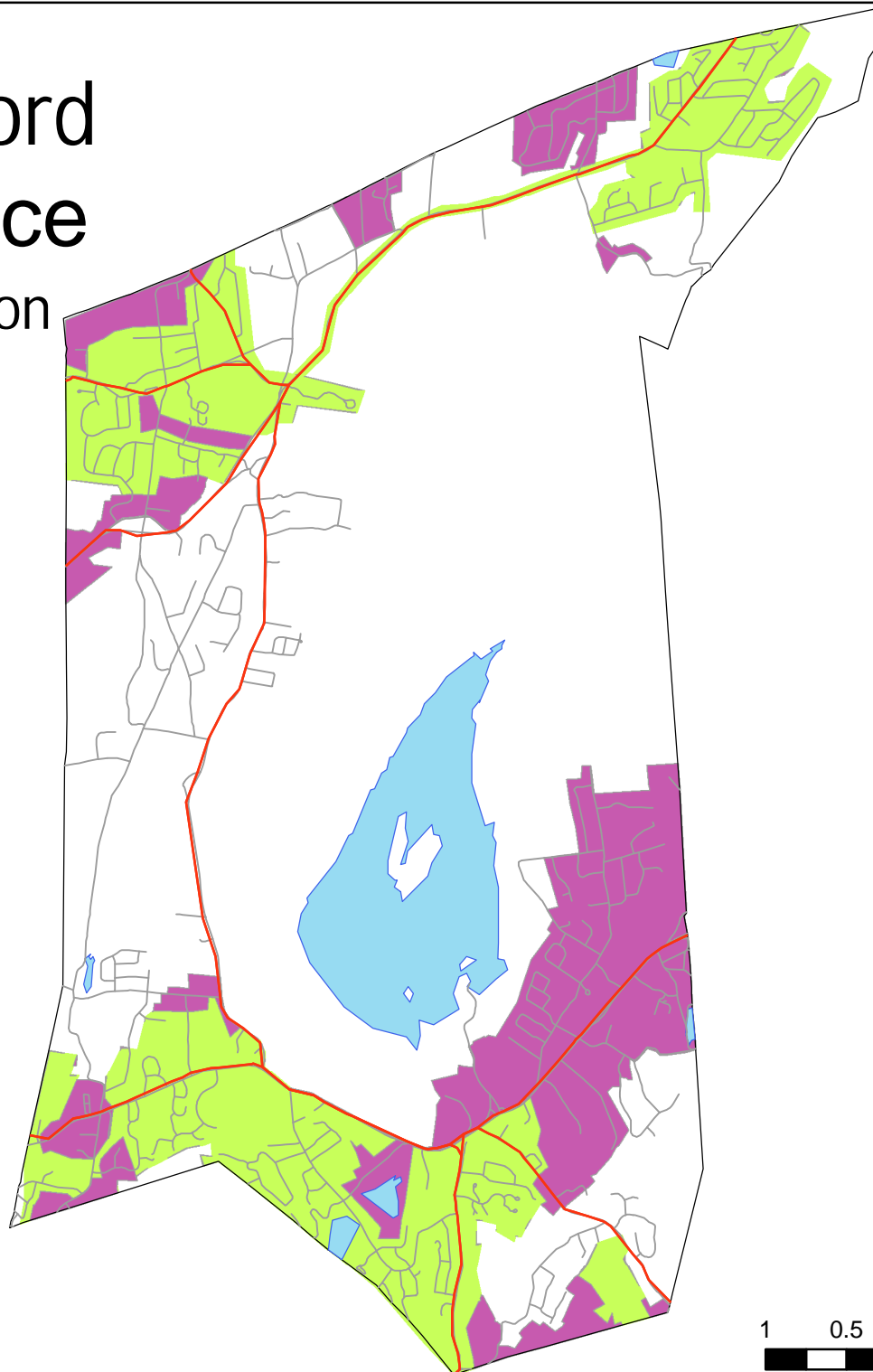


North Branford Sewer Service

South Central Region



Source:
Sewer Service Area data
(Existing & Future)
provided by North Branford
prepared by
SCRCOG (E.L) 3/09

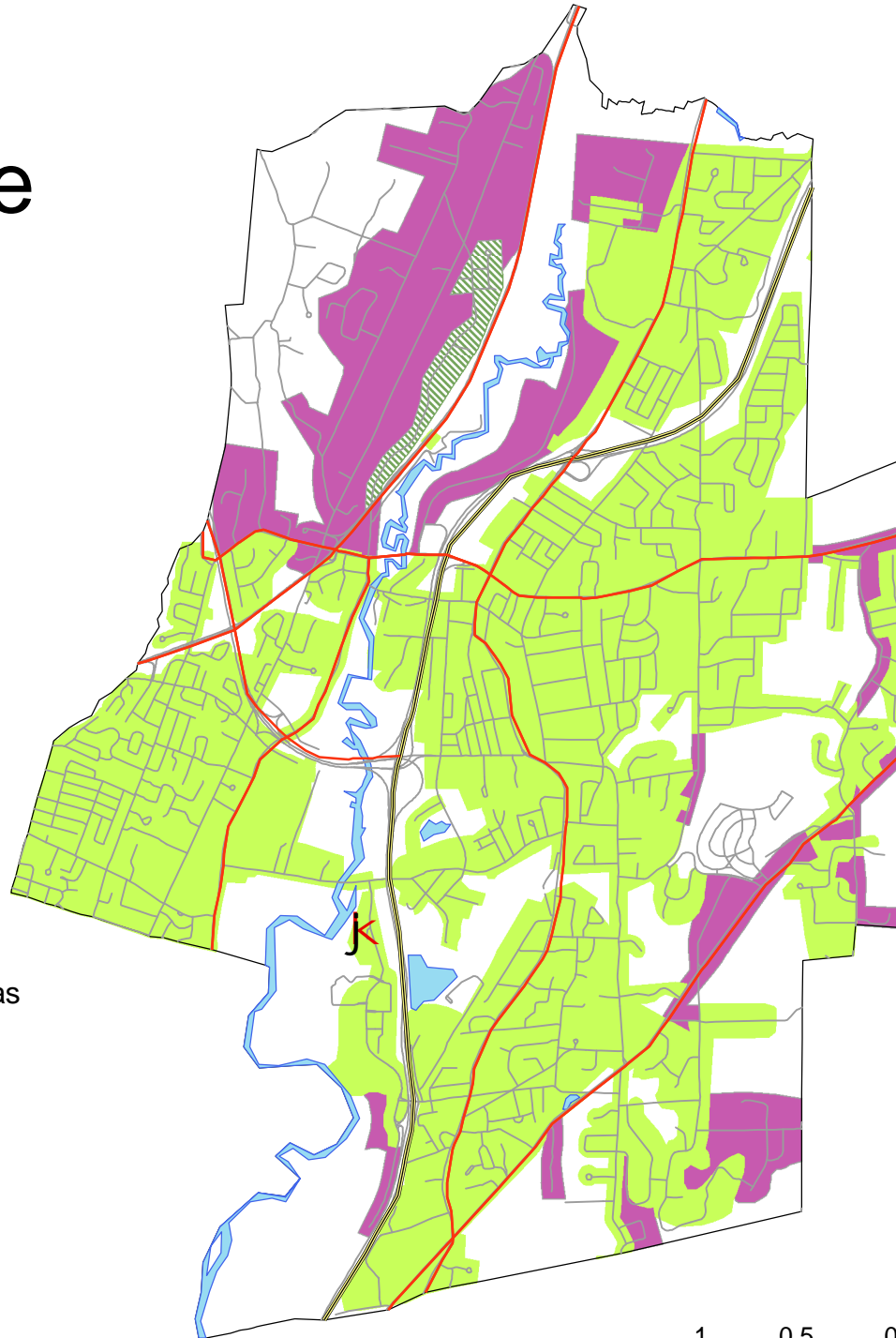


North Haven Sewer Service South Central Region



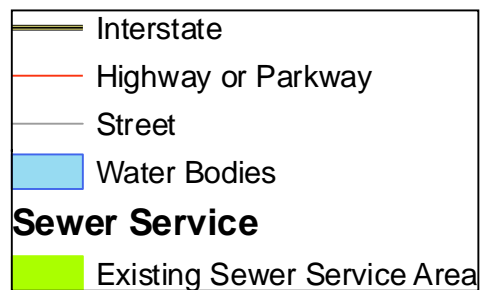
Source: Base Data
(Existing Sewer Service Area)
from DEP Website

Dry Sewer, Update to Existing Sewer
Service Areas & Future Sewer Service Areas
provided by North Haven
prepared by SCRCOG (E.L) 3/09

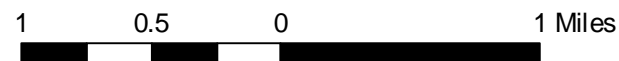
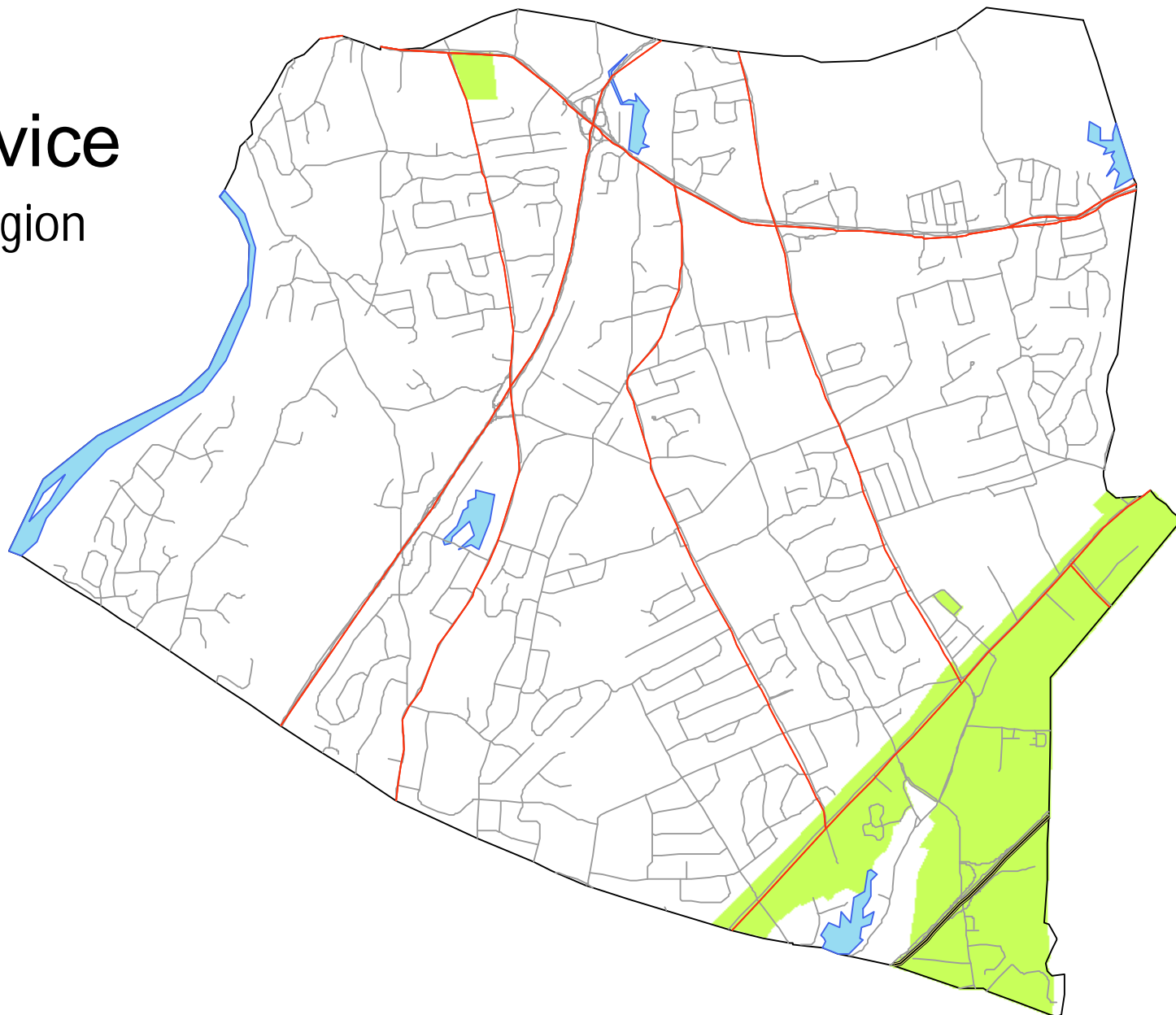


Orange Sewer Service

South Central Region



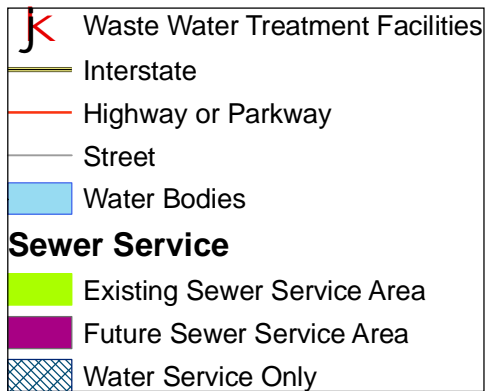
Source: Existing
Sewer Service Area data
provided by Orange
prepared by
SCRCOG (E.L) 3/09



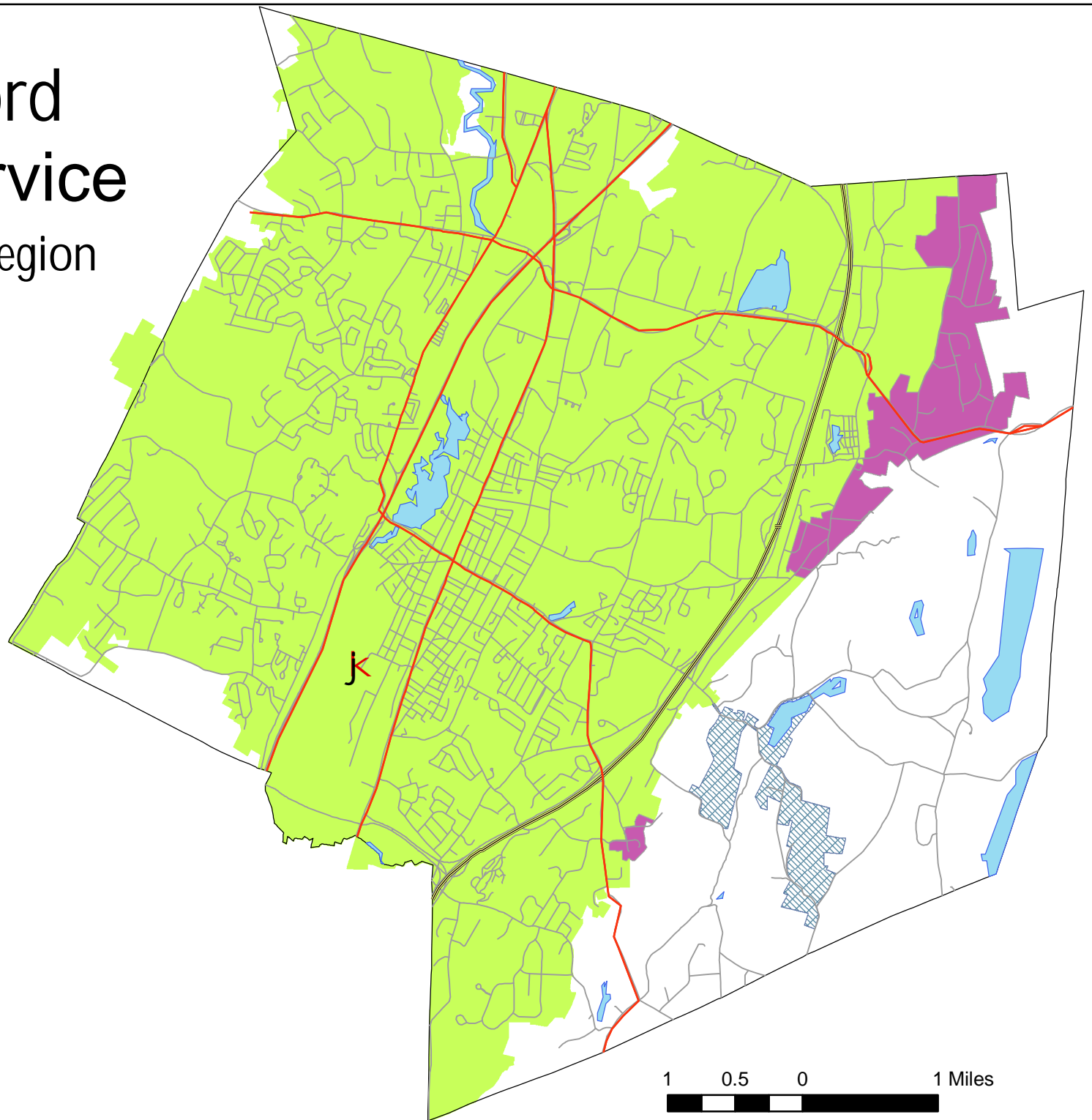
Wallingford

Sewer Service

South Central Region



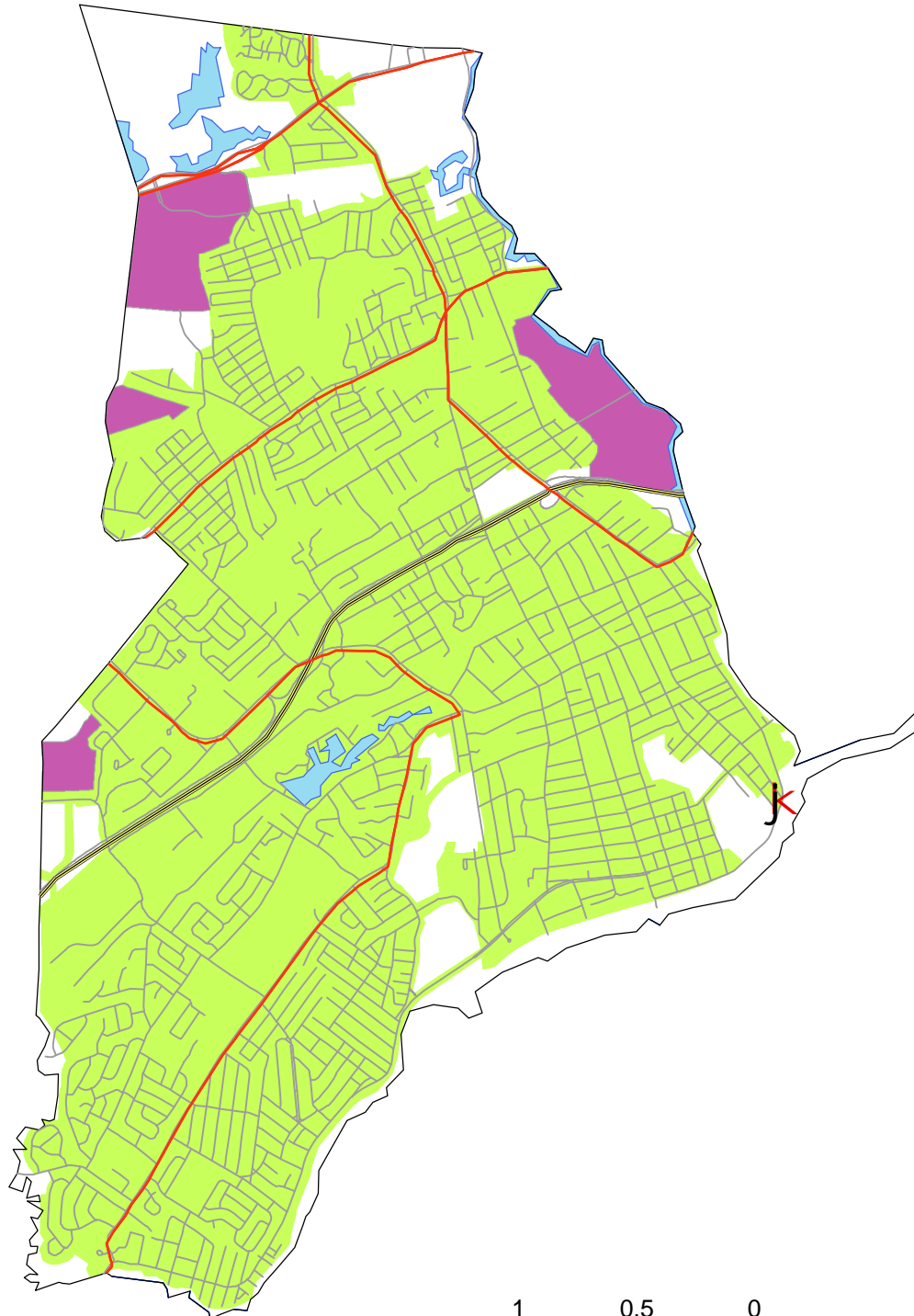
Source:
Sewer Service Area data
(Existing, Future &
Water Service Only)
provided by Wallingford
prepared by
SCRCOG (E.L) 3/09



West Haven Sewer Service South Central Region



Source: Base Data
(Existing Sewer Service Area)
from DEP Website
Update to Existing Sewer Service
Areas & Future Sewer Service Areas
provided by West Haven
prepared by SCRCOG (E.L) 3/09



Woodbridge Sewer Service

South Central Region

— Highway or Parkway

— Street

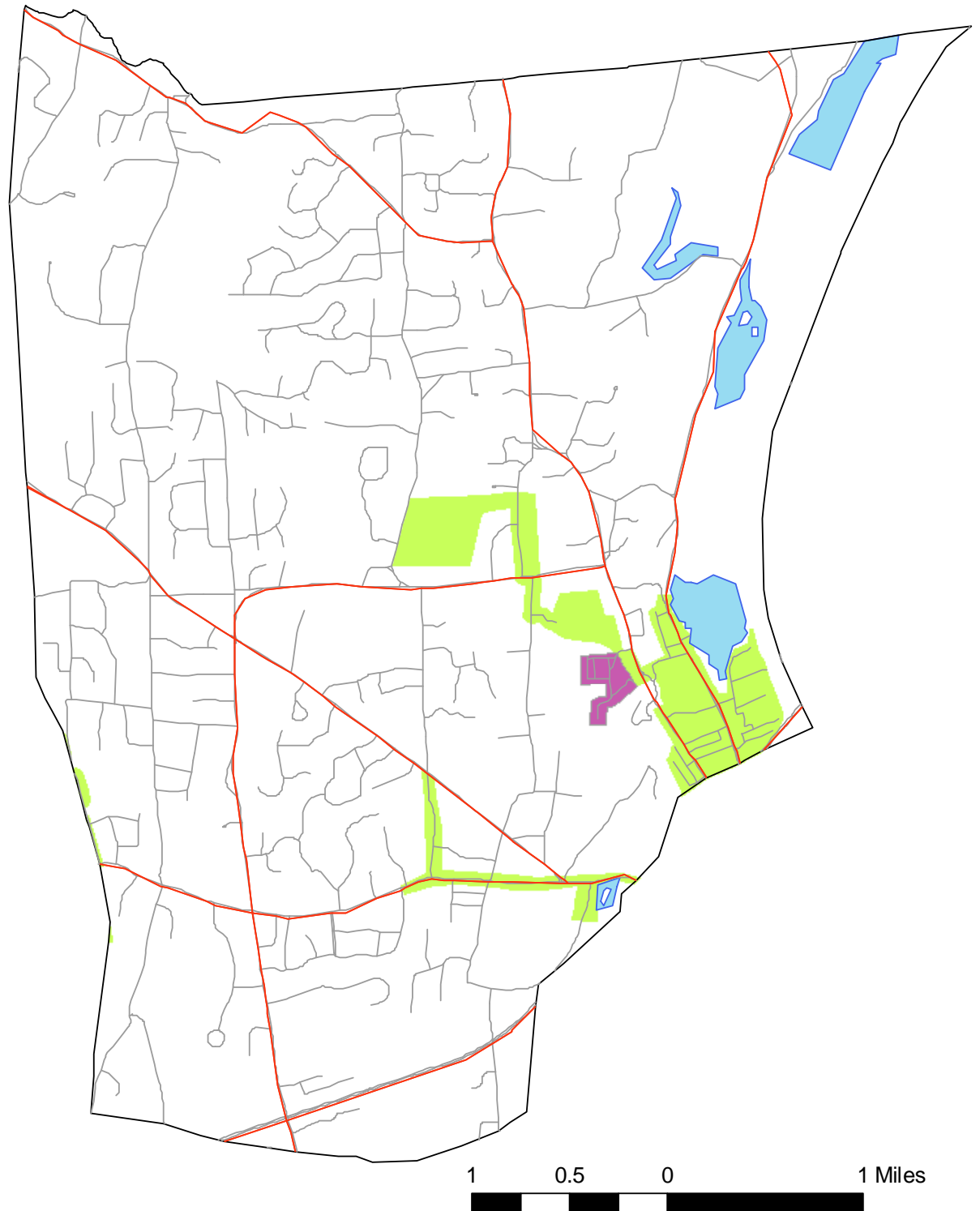
Water Bodies

Sewer Service

Existing Sewer Service Area

Future Sewer Service Area

Source: Base Data
(Existing Sewer Service Area)
from DEP Website
Update to Existing Sewer Service
Areas & Future Sewer Service Areas
provided by Woodbridge
prepared by SCRCOG (E.L) 3/09





STATE OF CONNECTICUT

OFFICE OF POLICY AND MANAGEMENT
INTERGOVERNMENTAL POLICY DIVISION

April 9, 2008

RECEIVED

APR 14 2008

SOUTH CENTRAL REGIONAL
COUNCIL OF GOVERNMENTS

Emmeline Harrigan
SCRCOG Regional Land Use Planner
127 Washington Ave., 4th Fl.
North Haven, CT 06473-1715

Dear Emmeline,

I'm very impressed with the comprehensiveness of your draft Plan of Conservation and Development. It shows that a great deal of time and effort has gone into it.

In the draft narrative I have found nothing inconsistent with the Conservation and Development Policies Plan, with one possible exception. There is a state policy issue raised twice in your plan relating to the modification of conservation locations which have significant environmental values. Development already existing in any of the four conservation categories does not change the policy related to these locations. Sensitive areas do not become less vulnerable because growth occurred there in the past. They must continue to be protected, and additional development is only acceptable to the extent that it is consistent with the specific concerns of the land in question. In other words, development of various types may occur in the conservation categories, but the type of construction is limited. See general statements below:

- Existing Preserved Open Space – The Plan discourages “sale and structural development of such areas except as may be consistent with the open space functions served.”
- Preservation Areas – The Plan avoids “support of structural development except as directly consistent with the preservation values.”
- Conservation Areas - The Plan tries to “ensure that changes in use are compatible with the identified conservation values.”
- Rural Lands - The Plan discourages “structural development forms and intensities which exceed on-site carrying capacity for water supply and sewage disposal and therefore cannot function on a permanent basis and are inconsistent with adjacent open rural character or conservation areas or which are more appropriately located in Rural Community Centers.”

This policy issue is raised in your draft plan in the Public Utilities and Energy Conservation chapter on page one, first paragraph in the sentence beginning with “However...” Here you refer generally to expansions, upgrades and enhancements that may or may not be appropriate for the sites mentioned. The concern comes up again in the chapter on Consistency Findings, last paragraph on page one and the first two bullets on page 2.

Phone: (860) 418-6306 Fax: (860) 418-6486
450 Capitol Avenue-MS# 54ORG, Hartford, Connecticut 06106-1379

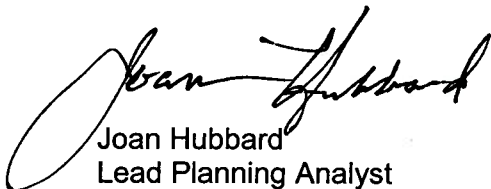
I should note that the third bullet on page two (noted above) raises a question about a development category, i.e. one of Growth in Madison. Previous Locational Guide Maps show that Growth Areas in the town have changed over time. If Madison wants to change this development area again, I would assume the request would be favorably received and can be changed in the next iteration of the C&D Plan, the process for which will begin this fall.

A final comment I have on the narrative relates to the Public Utilities and Energy Conservation chapter on page 12, last bullet. Conservation categories are colored both green and white, so you may want to add the latter word. At the end of the sentence, In addition, I suggest you may want to expand the phrase "infrastructure expansion" by including other capital funding. See page four of the C&D Plan for a description of the types of activities that must be consistent with the Plan. There you will find the former base dollar amount of \$100,000, which was, of course, increased to \$200,000 as of July 1, 2007.

Regarding the similarity of the maps, it is always difficult to compare local land use maps to our Locational Guide Map (LGP). Although Orange, East Haven, Madison, and Wallingford are missing from your General Land Use Map, I used it along with your Open Space Lands map to examine differences with LGP. There was extensive overlap in Milford, West Haven, New Haven, North Haven, Branford and Meriden. I found the greatest disparities with fewer conservation sites in Bethany and Woodbridge and some in northern Hamden, the western part of North Branford, and in various locations in Guilford. The undeveloped land, however, in the Change in Land Area Coverage map looks a great deal like the conservation categories on the LGP.

I hope these thoughts will be of assistance to you as you finalize your plan and look forward to seeing you at the public hearing on it.

Sincerely,



Joan Hubbard
Lead Planning Analyst



STATE OF CONNECTICUT

OFFICE OF POLICY AND MANAGEMENT
INTERGOVERNMENTAL POLICY DIVISION

May 26, 2009

Judy Gott, Executive Director
South Central Regional
Council of Governments
127 Washington Ave., 4th Fl. West
North Haven, CT 06473-1715

Dear Judy,

Thank you for submitting the proposed amendments to the "Sewer Service" section of the South Central Region's Plan of Conservation and Development that OPM previously reviewed in 2008.

In accordance with Section 8-35a(b) of the Connecticut General Statutes, I have reviewed the proposed amendments and found that they do not change the previous determination that the Regional Plan is not inconsistent with the State Conservation and Development Policies Plan (C&D Plan).

Sincerely,

A handwritten signature in blue ink that reads "Joan".

Joan S. Hubbard
Lead Planning Analyst

RECEIVED

MAY 29 2009

SOUTH CENTRAL REGIONAL
COUNCIL OF GOVERNMENTS

Phone: (860) 418-6306 Fax: (860) 418-6486
450 Capitol Avenue-MS# 54ORG, Hartford, Connecticut 06106-1379