



RECONNECT REGION

a comprehensive plan for
the METROCOG region

DECEMBER 2015
DRAFT FOR PUBLIC HEARING





The Regional Comprehensive Plan is a blueprint for future growth and development within the Greater Bridgeport Region. Based on a strong foundation of community input, the Plan is a guide for the Region's governments as they make policy decisions on land use, housing, transportation, infrastructure, economic development, sustainability, and more.

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IMAGE SOURCES

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INTRODUCTION



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Reconnect One Region is an overarching long-range planning and policy guide that provides guidance for future civic decision-making within the METROCOG Region. It represents one step towards a more connected, revitalized, and resilient region where common challenges are confronted and solved through collaborative efforts, large and small.

METROCOG

The Connecticut Metropolitan Council of Governments, or METROCOG, is one of several regional planning organizations authorized by the State of Connecticut. It is a multi-disciplinary planning and policy organization composed of six member communities: Bridgeport, Easton, Fairfield, Monroe, Stratford, and Trumbull. In addition to long-range planning, METROCOG also acts as the federally designated transportation planning agency for the area.

However, it is important to note that METROCOG is only an advisory and coordinating body, and it cannot make or enforce laws or ordinances. It exists to ensure that local planning is aligned with state objectives, provide technical expertise, build consensus on critical regional issues that do not stop at municipal boundaries, and create meaningful partnerships between member communities.

PURPOSE OF THE PLAN

The Regional Comprehensive Plan is a framework for future growth and development within the METROCOG as well as a strategy guide to help solve some of the region's greatest challenges. The Plan aims to guide the region's many governments as they make policy decisions on land use, housing, transportation, infrastructure, economic development, sustainability, and more. A collective vision increases cooperation and communication between governments and develops coordinated approaches to regional problems.

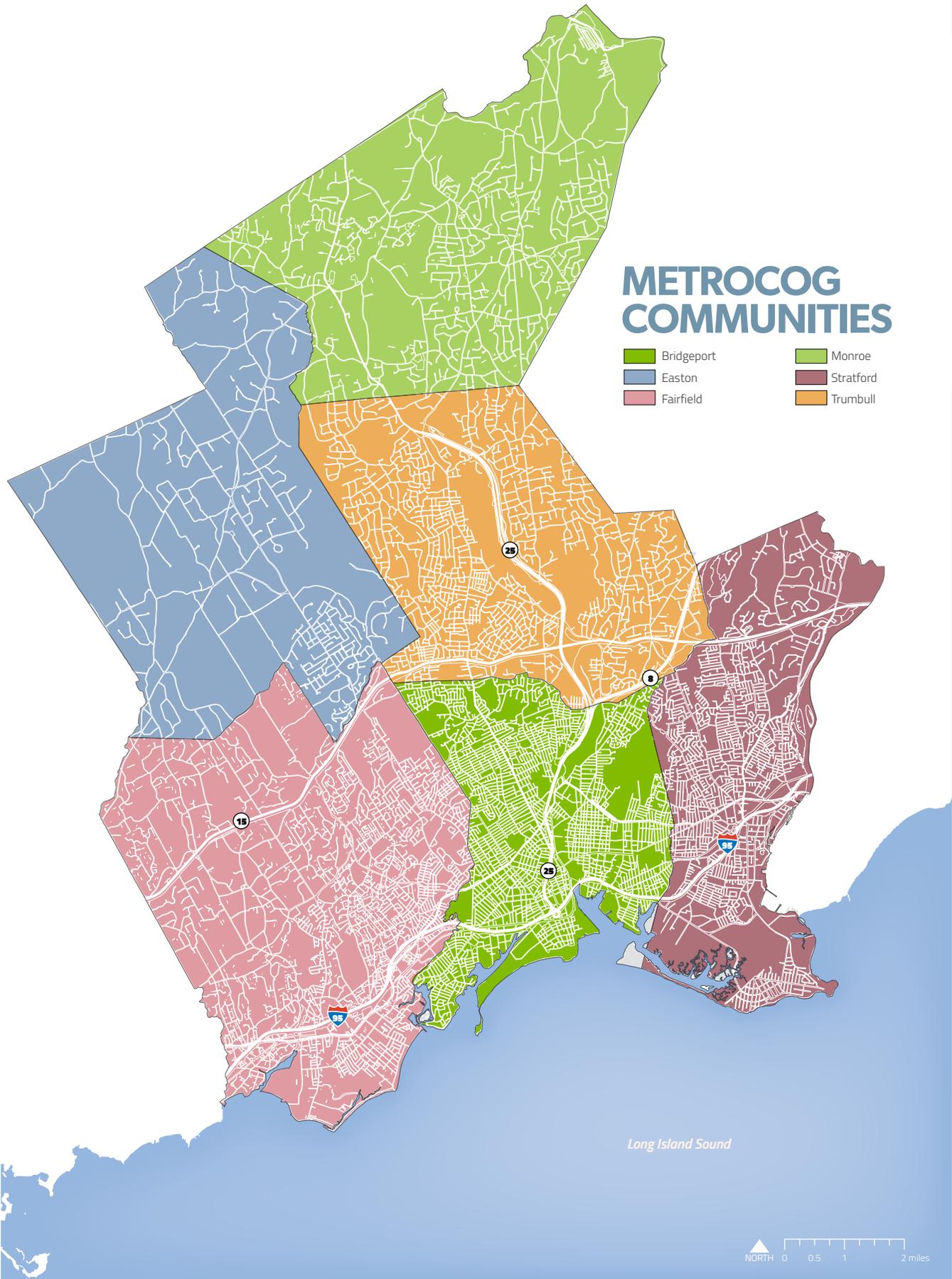
The State of Connecticut requires all regional planning organizations to develop a Regional Comprehensive Plan (formally referred to as a Regional Plan of Conservation and Development) every 10 years. The State and local governments also develop their own plans. In essence, the Regional Comprehensive Plan serves as a "bridge" between the six local plans and the state plan, as well as between the six local plans themselves. In some cases, the Regional Comprehensive Plan simply weaves together existing local and state planning efforts into a cohesive document; in others, it proactively suggests policies or practices that should be incorporated at the local level, enacted at the regional level, or changed at the state level.

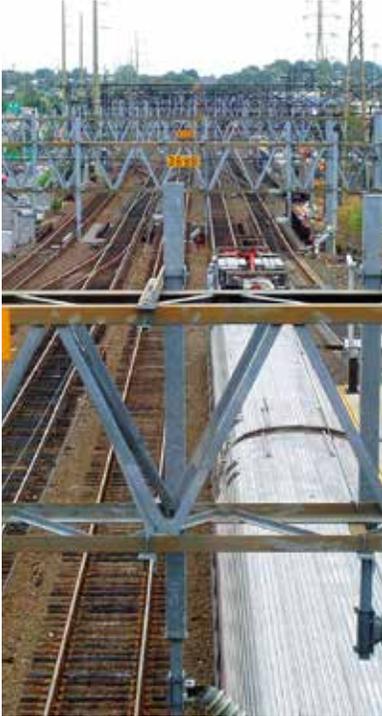
GUIDING PRINCIPLES

The Plan is built upon three core principles:

- **Reconnected**
- **Revitalized**
- **Resilient**

These principles represent a shared vision of the Region's future and should guide the Region's governments in the coming years. The core principles help focus recommendations while highlighting the interrelated nature of the topics discussed in the Plan's various chapters. Taken collectively, the core principles also provide a clear vision for the METROCOG Region – an end goal toward which all of the Region's communities, governments, and stakeholders can work toward.





RECONNECTED

A Reconnected METROCOG Region is a region where...

- Local governments, regional service providers, and the state government work together to solve common problems and investigate opportunities for shared services.
- Integrated networks of transportation, infrastructure, and public services provide a flexible response to evolving demands of a growing population.
- Public transit anchors new investments in mixed-use districts featuring housing, employment, commercial areas, and cultural amenities.
- A smarter road network minimizes congestion and travel times.
- Walking and biking are viable, safe, and attractive options for commuting, recreation, and everyday tasks.
- Access to bus, ferry, and commuter rail is easy and convenient and transitioning between these transit options is seamless.

REVITALIZED

A Revitalized METROCOG Region is a region where...

- Downtowns and town centers act as cultural and economic hubs of the region, with new housing and employers supporting a growing number of businesses, retailers, and entertainment venues.
- Brownfields and vacant land provide fertile ground for the development of neighborhood centers, open space, and infill housing.
- A quality education system and investments in cutting-edge technology help produce a new generation of home-grown entrepreneurs.
- Quality neighborhoods retain existing families and welcome new families to refurbished homes and redeveloped lots.
- New industries are attracted to the Long Island Sound waterfront but the environmental integrity of the Sound is preserved and enhanced.

RESILIENT

A Resilient METROCOG Region is a region where...

- Housing is concentrated in areas where residents can leverage existing investments in infrastructure, transportation, and established commercial districts.
- A strong and diverse employment base can adapt to shifts in the global economy.
- The unique, local sense of place of each community is preserved and promoted.
- Natural systems are integrated within new development, restored in established areas, and safeguarded in rural areas.
- The impacts of natural hazard events are minimized and short-lived.
- Local industries and construction are increasingly energy and resource efficient.
- An engaged and educated citizenry plays a critical role in implementing community-driven policies.

DOCUMENT ORGANIZATION

The Plan is organized into 9 chapters:



Chapter 1

Introduction, introducing the purpose of the Regional Comprehensive Plan, its guiding principles, and the organization of the document.



Chapter 2

Community Outreach, describing all of the in-person and on-line outreach that was conducted over the course of one year.



Chapter 3

Regional Profile, detailing a variety of important background information, such as the Regional setting, past plans and studies, and demographics.



Chapter 4

Land Use & Development illustrating and describing in very general terms the type and location of future land uses within the region. This section also addresses growth management.



Chapter 5

Housing & Neighborhoods, providing recommendations that can help foster the development and revitalization of neighborhoods and support a wide range of housing options in areas served by transit and other essential infrastructure.



Chapter 6

Transportation & Mobility, providing recommendations to maintain and modernize the Region's established regional transportation network while improving access to all modes of transportation including transit users, bicyclists, and pedestrians.



Chapter 7

Economic Development Plan, providing recommendations to promote investments in human capital and infrastructure, foster partnerships across government boundaries, and position the region to attract quality employers.



Chapter 8

Natural Resources, providing recommendations that can preserve sensitive natural areas and protect regional assets and promote an integrated network of park and recreation areas throughout the region.



Chapter 9

Moving Forward, presenting a framework to begin implementation of the Plan's recommendations.



2

OUTREACH





The “Reconnect One Region” Regional Comprehensive Plan utilized a planning process that actively sought input from a broad spectrum of stakeholders, including residents, business owners, policy experts, service providers, elected/appointed officials, regional staff, and municipal staff. A variety of ongoing outreach efforts, both in-person and on-line, were used to gather the concerns, ideas, and aspirations of residents.

This section briefly summarizes the community outreach efforts that were completed during the planning process, including:

- *Kick-Off Workshop (April 17, 2014)*
- *Community Workshop #1 (May 10, 2014)*
- *Community Workshop #2 (June 9, 2014)*
- *Community Workshop #3 (September 29, 2014)*
- *Municipal Staff Interviews (December 3-4, 2014)*
- *Stakeholder Interviews (January 2015)*
- *Project Website (April 2014 – July 2015)*
- *Resident & Business Questionnaires (April 2014 – July 2015)*
- *sMap (April 2014 – July 2015)*

KICK-OFF WORKSHOP

A Kick-Off Workshop was held on April 17, 2014 at the METROCOG headquarters in Bridgeport with staff members and the organization’s Steering Committee members. The workshop began with an overview of the planning process and ended with a discussion about key issues and opportunities within the Region.



Photos: Susan Rubinsky

COMMUNITY WORKSHOP #1

A Community Workshop was held on May 10, 2014 at Housatonic Community College in Bridgeport. The workshop was the first of many opportunities to publicly discuss regional issues and challenges. Hand-held polling devices were provided to workshop participants so they could answer questions in real time. Some of the key findings from the workshop included:

- Economic development, housing, and transportation were the three most important regional issues identified by participants.
- Participants felt that income inequality and taxes/regulations were seen as the greatest economic development challenges
- Blight and affordability were identified as the most important housing issues.
- Traffic congestion and transit-oriented development were seen as the most important transportation issues.

COMMUNITY WORKSHOP #2

A second Community Workshop was held on June 9, 2014 at the Fairchild Wheeler Magnet School in Bridgeport. This additional workshop allowed for residents who were unable to attend the first workshop to still provide input in-person. Hand-held polling devices were provided to workshop participants so they could answer questions in real time. Some of the key findings from the workshop included:

- Economic development, transportation, and regional cooperation/identity were perceived by participants as the three most important challenges facing the region.
- Brain drain and the region's reputation was identified by participants as being the most important economic development issue.
- Traffic congestion and connectivity were identified by participants as the most important transportation issues.
- Joint-planning and the need to think "regionally" were considered the top regional identity issues by the participants.

COMMUNITY WORKSHOP #3

A third Community Workshop was held on September 29, 2014 at the Holiday Inn in Downtown Bridgeport. While the previous two workshops aimed at identifying issues and challenges, this interactive workshop allowed participants to evaluate and brainstorm potential solutions in real time. Participants were given handheld polling devices and asked to rank strategies that could help solve some of the region's problems. A communication conversation was shaped around the polling results. Some of the key findings from the workshop included:

- Participants voted strengthening existing transit options and improving local roadways as the best ways to reduce traffic congestion.
- Changing local zoning regulations and acquiring/consolidating parcels were identified as the best strategies to create mixed-use transit hubs.
- Aligning schedules between transit providers and developing transit incentive programs were voted the best approaches to increase transit ridership.
- Increased vocational training and better access to technology were perceived as the best strategies to improve educational attainment.

Reunión con la comunidad

LUNES • 29 de septiembre de 2014 • 7 p.m.

en el Holiday Inn, 1070 Main Street, Bridgeport, CT 06604



Participe y comparta sus ideas con nosotros.

Los temas a tratar serán: vivienda, transporte, agua y otras inversiones en infraestructura, cuyo objetivo es hacer que los vecindarios sean más prósperos, que sus habitantes vivan más cerca de sus trabajos y que ahorren tiempo y dinero, y que además se reduzca la contaminación. Se utilizarán las sugerencias de todo el mundo para crear un Plan de Conservación y Desarrollo (“POCD”, por su sigla en inglés) para la región.

PARTICIPE EN LA ENCUESTA

bit.ly/reconnect-survey



BRIDGEPORT • EASTON • FAIRFIELD



MONROE • STRATFORD • TRUMBULL



MUNICIPAL INTERVIEWS

On December 3-4, 2014, the Consulting Team traveled to each of the six communities and met with local staff and key officials to discuss issues important to their city/town and identify strategies and policies they would like to see included within the new Regional Comprehensive Plan. Topics ranged from affordable housing to watershed preservation to transit-oriented development and beyond.

STAKEHOLDER INTERVIEWS

Throughout January 2015, the Consulting Team conducted a dozen interviews with practitioners in the housing, economic development, and governance fields. These policy discussions provided context, insight, and analysis into some of the region’s greatest challenges and helped shape the development of the Plan’s recommendations.

LIMITED ENGLISH PROFICIENCY OUTREACH

The primary non-English language spoken in the METROCOG region is Spanish. In order to involve and engage stakeholders whose primary language is Spanish, METROCOG provided the following:

- Spanish language versions of the resident and business surveys were available online
- An interpreter attended the June 9th public meeting
- The June 9th meeting was promoted on Radio Cumbre (a local Spanish language radio station).
- Printed materials were translated into Spanish, including seat drops that notified transit users of public meetings and a postcard with a link to the online survey.



PROJECT WEBSITE

A project website was created to establish a “one-stop-shop” for information regarding the Regional Comprehensive Plan. The website contained information and updates concerning the project, meeting notices, and downloadable versions of project documents and reports. To provide convenient and comprehensive information, the project website was accessed through a link on METROCOG’s home page. The project website also contained links to online questionnaires for residents and business owners, as well as the sMap mapping tool.

RESIDENT QUESTIONNAIRE

An online questionnaire for residents was posted on the project website. It was designed to supplement in-person outreach activities conducted throughout the community, and is not intended to be a scientific survey instrument. The questionnaire was launched in April 2014 and remained open during the duration of the process. More than 80 residents participated.

BUSINESS QUESTIONNAIRE

An online questionnaire for businesses was also posted on the project website, with the purpose of soliciting insight about the region’s business climate. The questionnaire was launched in April 2014 and remained open during the duration of the planning process. Roughly a dozen businesses participated.

SMAP MAPPING TOOL

sMap is a social mapping application developed by Houseal Lavigne Associates that allows residents to actively participate in the planning process. Participants were able to create their own community maps of issues and opportunities, including comments tagged to specific locations. Residents flagged key transit destinations, notable parks and recreation areas, sites that contribute to the Region’s character.



REGIONAL PROFILE



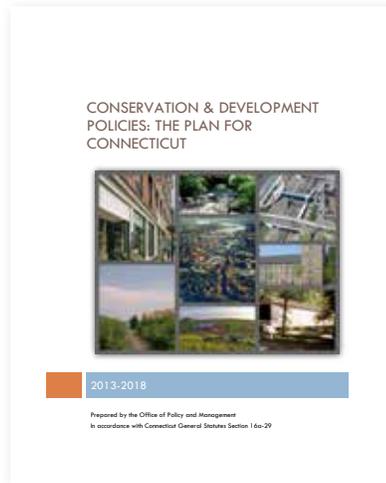


Long-range visioning and planning is founded upon an understanding of where the region is today. This chapter provides important background information about the community, including regional setting, an overview of existing plans and studies, and demographic and market snapshot. Collectively, this information establishes a profile of the METROCOG Region and the influences that shaped the development of the Comprehensive Plan.

REGIONAL SETTING

The METROCOG Region is located in southwest Connecticut, situated along the Long Island Sound roughly 50 miles east of New York City and 150 miles west of Boston, Massachusetts. It encompasses about 145 square miles and has a population of more than 318,000 people, making it the densest region in the state. It falls within the Greater New York City Metropolitan Statistical Area (MSA).

The region is a mosaic of unique and distinct cities and towns that carry forth their own histories and identities. Together, the municipalities of Bridgeport, Easton, Fairfield, Monroe, Stratford and Trumbull comprise the METROCOG Region. The character and development patterns vary by community, from urban (Bridgeport) to suburban (Fairfield, Stratford, and Trumbull) to exurban (Monroe) to rural (Easton). Defining elements include its New England heritage, proximity to Long Island Sound, cycling along the Pequonnock River Trail or Housatonic River Greenway, and walks through beautiful parks and rural farmland.



PAST PLANS & STUDIES

This section contains a review of past plans and studies impacting policy, planning, and development within the METROCOG Region. The Regional Comprehensive Plan recognizes the value of these prior planning efforts, and builds upon them, where applicable, as a component of the community's new vision.

STATE OF CONNECTICUT - CONSERVATION & DEVELOPMENT POLICIES (2013-2018)

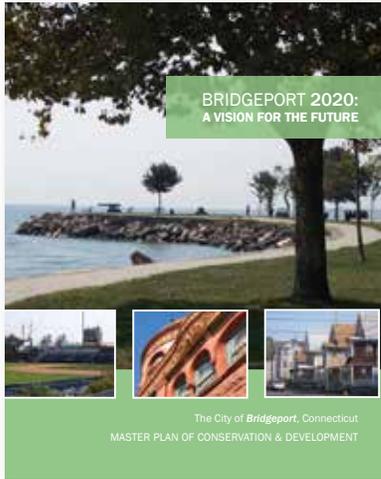
This Plan serves as the official policy for the Executive Branch in matters pertaining to land and water resource conservation and development. While Connecticut's planning framework does not require municipal, regional, and state plans to be consistent with one another, the law does require state agencies to be consistent with the State Plan when spending money on public transportation, land use, or other key projects. The Plan's six Growth Management Principles are:

- Redevelop and revitalize regional centers and areas with existing or currently planned physical infrastructure.
- Expand housing opportunities and design choices to accommodate a variety of household types and needs.
- Concentrate development around transportation nodes and along major transportation corridors to support the viability of transportation options.
- Conserve and restore the natural environment, cultural and historical resources, and traditional rural lands.
- Protect and ensure the integrity of environmental assets critical to public health and safety.
- Promote integrated planning across all levels of government to address issues on a statewide, regional and local basis.

LOCAL PLANS OF CONSERVATION & DEVELOPMENT

As per Section 8-23 of the Connecticut General Statutes, the State requires that all municipal governments prepare and adopt a plan of conservation and development that will guide public and private sector decisions related to land use and community development. Plans should also include analyses of population densities and growth management, land use, housing, economic development, cultural resources, open space and recreational elements, transportation, and more.

The following two pages summarize the Plans of Conservation and Development for each of the six member communities.

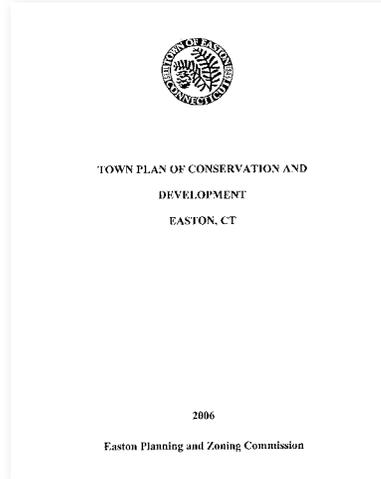


BRIDGEPORT 2020 - A VISION FOR THE FUTURE (2008)

As the urban core of the region, the City of Bridgeport faces unique issues. Deindustrialization and changes in growth patterns led to a decline within the City in the latter half of the 20th century. However, the City is in the process of reinventing itself as a model of smart growth for the New England region and is seeing many types of new investment.

To help reposition the community, the master plan establishes five plan priorities:

- Position Downtown as the major catalyst for rehabilitating Bridgeport’s image.
- Expand economic opportunities for all and attract 15,000 new jobs by 2020.
- Foster existing neighborhoods.
- Increase the quality of schools and the ability to choose one’s school.
- Upgrade infrastructure; an updated and efficient infrastructure system tells developers that Bridgeport is a sophisticated city worthy of investment.
- Make Bridgeport a greener city.

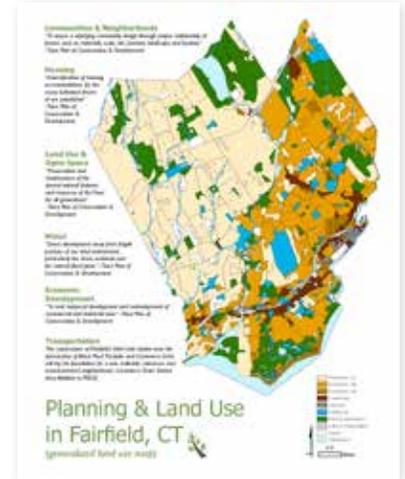


EASTON - PLAN OF CONSERVATION & DEVELOPMENT (2006)

Compared to the Region’s other communities, the Town of Easton is rural in nature with over a third of the Town’s area preserved as public open space. Easton envisions itself as an important source of clean water, air, natural open space, and recreational amenities for Fairfield County and the larger region. The Town Plan of Conservation and Development strives to retain its rural character and preserve natural environments, both as a central character of Easton, and as an important regional amenity. This includes promoting the preservation of watershed areas for the protection of regional drinking water sources and agricultural heritage.

Easton’s Plan of Conservation and Development builds off the Town’s focus on preservation, establishing a vision for continued development restrictions and conservation of the local environment. To accomplish this goal, the Plan addresses the Town in four unique sections of low-density residential:

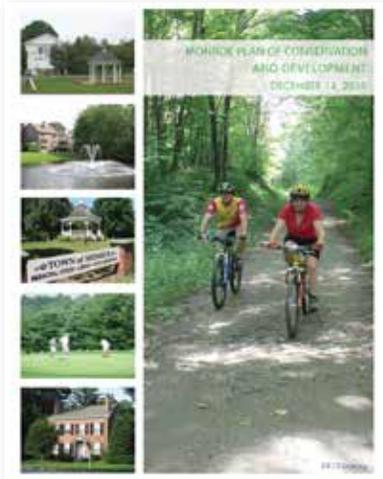
- A rural village of widely-spaced homes and small-scale public services and civic institutions.
- A neighborhood of suburban single-family homes in southeastern Easton.
- A “rural” hinterland of homes and open spaces where built and natural environments work together.
- A wilderness of interconnected greenspaces in western and northern Easton where lands have been assembled for posterity.



FAIRFIELD - PLAN OF CONSERVATION & DEVELOPMENT (2010 - UNADOPTED)

As one of the region’s three coastal municipalities, the Town of Fairfield is home to a suburban mixture of low to medium density residential areas, a Town Center, commercial corridors, and industrial areas. Growth within Fairfield is expected to remain minimal, with the local population and economy expected to remain stable. With no anticipated growth or decline, the Town’s Plan of Conservation and Development focuses on maintaining civic services while better managing the changing needs of a consistent population.

A key feature of the Plan is the reduction of permissible densities within certain residential areas, intended to limit growth that cannot be supported by the community. This includes reductions in density levels along the coastal region to benefit water conservation efforts. Higher density uses were supported in close proximity and as part of commercial developments, and a strategy regarding Fairfield’s Metro-North rail station was added to the document in 2011. The majority of Plan recommendations emphasize the need for preservation of the existing community fabric and local quality of life.

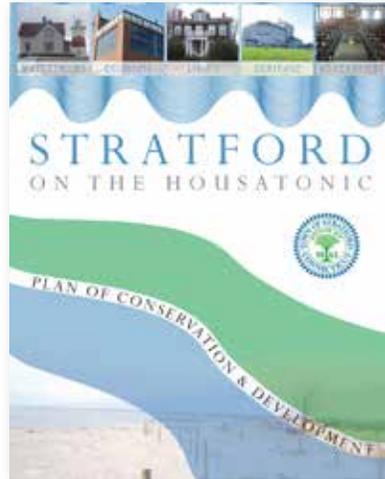


MONROE - PLAN OF CONSERVATION & DEVELOPMENT (2010)

The Town of Monroe is considered a suburban and exurban municipality with a noted “small town feel” consisting of large residential lots and scenic, natural areas. The Monroe Plan of Conservation and Development focuses on the development of new commercial, office, and light industrial uses to counterbalance the existing abundance of residential uses. Lacking a town center or downtown type development, the Plan recognizes the need for greater diversity of uses and expansion of local commercial development beyond “convenience” retailers. In addition, new housing and mixed use developments are prioritized to enable young adults and seniors to remain in the area. While addressing these concerns, the plan also focuses on preservation of the existing residential fabric and important natural resources. These issues are addressed through three central planning goals:

- Improve the economic base
- Maintain a good quality of life
- Be good stewards of a green Monroe

Through implementation, the Monroe Plan of Conservation and Development envisions a town that has capitalized on population and job growth while preserving the residential, historic, and rural character of Monroe.



STRATFORD - PLAN OF CONSERVATION & DEVELOPMENT (2013)

Stratford’s Plan of Conservation and Development focuses on preserving and enhancing the existing community fabric. The Plan envisions a Town that meets the needs of all citizens within a cohesive, inclusive community. Stratford is expected to experience only moderate population growth. The Plan reports that the Town is often seen as three disparate sections, divided by major transportation corridors and barriers.

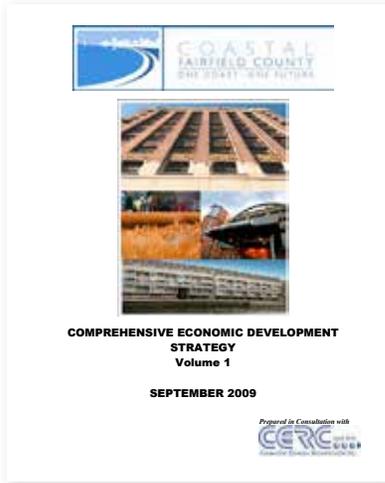
Stratford’s Plan largely focuses on making various improvements to the Town’s natural resources and built environment, including the introduction of a community greenway; preservation of important landscapes; and establishment of new pathways, trails, and open spaces that encourage redevelopment. The Plan visualizes many of these improvements, intended to repurpose existing developments and discourage investment in unsustainable uses. Bordered by both the Housatonic River and Long Island Sound, the Plan also includes dedicated sections on environmental considerations, sustainability, and waterfront review.



TRUMBULL - PLAN OF CONSERVATION & DEVELOPMENT (2014)

The Town of Trumbull is largely residential, with mostly single family detached, owner-occupied homes. Trumbull also lacks a town center or downtown, and has limited commercial and industrial uses, placing a larger tax burden on the residential population. The Town has seen a greater population increase than other municipalities in the region, largely due to the in-migration of younger families, though the population is expected to remain consistent or see slight decreases in the future. In addition, the Town has a high concentration of employment, providing jobs to residents throughout the region.

The Trumbull Plan of Conservation and Development focuses on two efforts: the preservation of the Town’s existing quality of life and the preparation for smart management of necessary long term changes. The Plan recognizes that further residential and business development will be necessary in the future and establishes a vision for preserving local heritage in the face of new growth.



FAIRFIELD COUNTY- ONE COAST, ONE FUTURE CEDS (2009)

Detailing Fairfield County’s comprehensive strategy for economic development (CEDs), the One Coast, One Future Plan is a regional initiative formed in 2005 by a consortium of 14 communities in lower Fairfield County whose mission is to promote vibrant economic growth in the region. The CEDs established regional goals, an action plan, and evaluation benchmarks. Goals of the CEDs include:

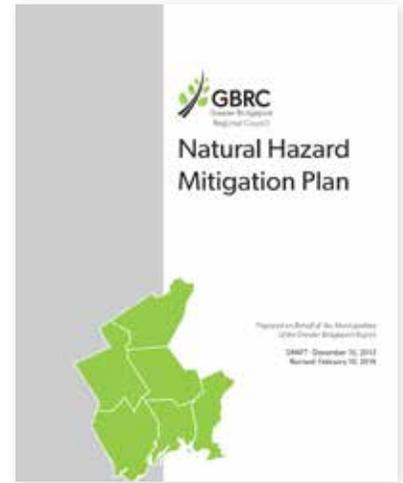
- Develop strategic partnerships possessing the appropriate authority, at the right scale, to affect change and ensure accountability.
- Achieve appropriate levels of sustainable growth in economic activity while recognizing the importance of key natural resources and appropriate community development.
- Systematically coordinate projects and planning for an integrated transportation system that promotes the efficient movement of people and goods within and through the One Coast Region.
- Create an environment that fosters educational success and lifelong learning for all students and residents using partnerships between schools and business.
- Improve the business environment by coordinating local, regional, state and federal assets.



METROCOG- REGIONAL TRANSPORTATION PLAN FOR 2011-2040 (2011, 2015)

Prepared by METROCOG in 2011 and updated in 2015, this long range plan (LRP) details the transportation needs of the area and includes recommended actions, programs and projects to improve and better manage the public transit and highway systems for all users, in addition to mitigating the region’s transportation environmental impacts. The issues and goals of the LRP include:

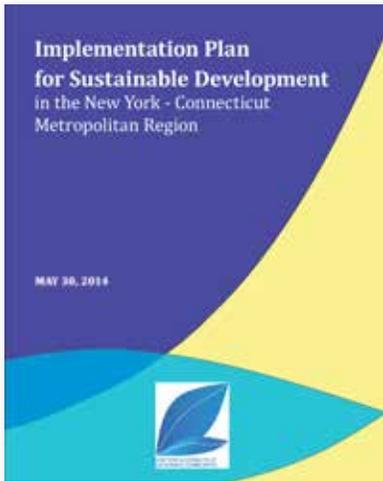
- Preserve, maintain, and enhance highway system
- Manage congestion
- Improve transportation safety
- Improve and expand security of transportation infrastructure
- Use advanced technology for transportation demand management
- Preserve and enhance public transportation services
- Link multi-modal transportation to increase access and efficiency of transportation
- Encourage and promote the increased use of bicycling and walking through safety and trails
- Promote flexibility in highway design
- Mitigate transportation impacts on culture and the environment
- Improve freight movement
- Upgrade the regional airport
- Create a sustainable LRP



METROCOG- NATURAL HAZARD MITIGATION PLAN (2014)

The purpose of the multi-jurisdictional Natural Hazard Mitigation Plan (NHMP) is to assure safety and reduce risk from natural disaster in the METROCOG Region. Prepared on behalf of the municipalities of the METROCOG a summary of the plan’s goals include:

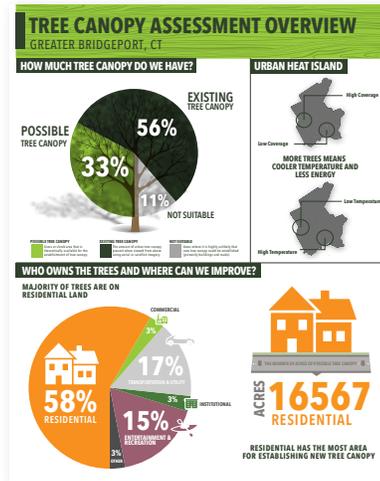
- Continue pre-disaster mitigation planning that assesses impacts from natural hazards and identifies effective strategies to mitigate future events and increase hazard resiliency.
- Protect buildings from the impacts of natural hazards and implement projects to safeguard against the impacts of natural hazards.
- Protect infrastructure from the impacts of natural hazards and implement projects (structural and infrastructure) to safeguard against the impacts of natural hazards.
- Protect and restore natural systems and features that mitigate the impact of natural hazards.
- Educate residents, businesses and stakeholders throughout the region about natural hazards and increase the awareness of severe and extreme weather events.
- Improve upon and ensure the continuity of emergency services during severe and extreme weather events.



NY/CT SUSTAINABLE COMMUNITIES CONSORTIUM – IMPLEMENTATION PLAN FOR SUSTAINABLE DEVELOPMENT (2014)

The NY-CT Sustainable Communities Consortium is a collection of municipalities, counties, regional governments, MPOs, and nonprofits across New York and Connecticut. The I Plan is a shared agenda that aims to create jobs and mixed-income housing in downtown locations and mixed-income neighborhoods served by rail. This shared vision rests on the following key characteristics of the Consortium’s planning area:

- A globally competitive regional economy requiring strategic investment in infrastructure, business centers, and neighborhoods to maintain and expand prosperity and improve quality of life.
- A low per capita energy consumption and greenhouse gas emissions, largely a result of safe and reliable public transit service providing for more compact and efficient land-use patterns.
- Transit systems with rich legacies and great scalability that have received and will require sustained investment.
- A network of downtowns and neighborhoods supported by the transit network with underutilized potential to provide needed housing and jobs.



METROCOG – TREE CANOPY REPORT (2014)

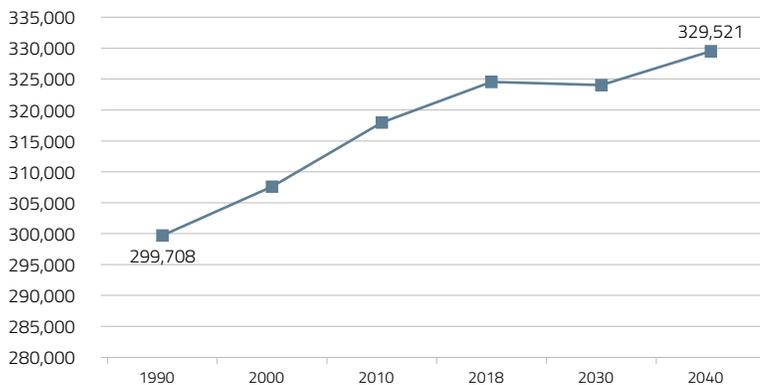
The Tree Canopy Report applied the USDA Forest Service’s Tree Canopy Assessment protocols to the METROCOG Region. The Spatial Analysis Laboratory (SAL) at the University of Vermont carried out the assessment in collaboration with METROCOG and the USDA Forest Service.

Some of the key findings of the study included:

- 56% of all land within the region is covered by tree canopy. An additional 33% could be modified to accommodate tree canopy, while 11% of land is not suitable.
- The built-out core of the region has lower tree coverage while more rural and suburban areas have greater coverage. More trees means cooler temperatures and less energy; areas with less tree coverage are experiencing higher temperatures.
- The majority of trees (58%) are found on residential land. More than 16,500 additional acres of residential land could accommodate new tree canopy.

Regional Population (1990-2040)

METROCOG Region



Source: U.S. Census, ESRI Business Analyst, State of Connecticut

Median Age (2010, 2018)

METROCOG Communities

	2010	2018
Easton	45.1	47.1
Trumbull	43.8	45.7
Monroe	42.5	45.2
Stratford	42.1	43.6
Fairfield	40	41.3
Bridgeport	32.7	33.8
Region	37.6	38.6

Source: ESRI, 2010 U.S. Census

DEMOGRAPHIC & MARKET SNAPSHOT

An analysis of the METROCOG Region’s demographic and market conditions was conducted as a part of an Existing Conditions Analysis, presented in June 2014. This research helped to guide the planning process and provide the necessary background information for developing market-viable policy recommendations. The analysis focused on three main topics: (1) population demographics, (2) employment, and (3) housing. A summary of the key findings are included in this chapter to provide a snapshot of the region’s current and projected competitive position and how it influences regional planning.

Data for this study were acquired from a variety of sources, including the 2008-2012 American Community Survey (ACS), the 2010 U.S. Census, and ESRI Business Analyst, a nationally recognized provider of business and market data.

DEMOGRAPHICS

POPULATION

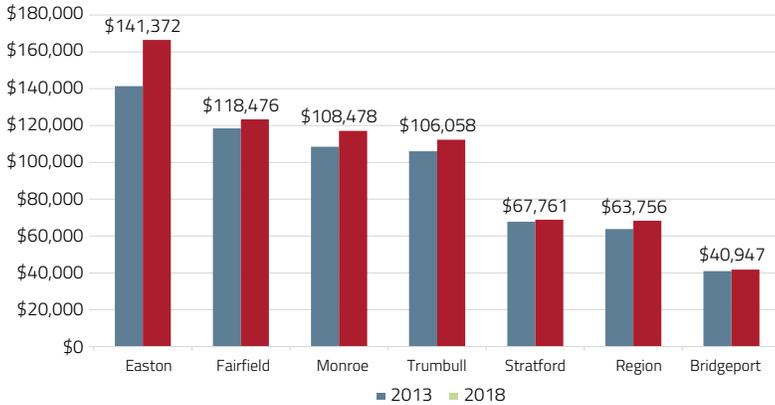
- The region’s 2010 population was 318,004 people. Roughly 1 in 10 Connecticut residents live in the METROCOG Region.
- The greatest share of the region’s population is Bridgeport (45%), followed by Fairfield (19%), Stratford (16%), Trumbull (11%), Monroe (6%), and Easton (3%).
- The region’s population is expected to grow incrementally to 324,536 people in 2018 and 329,521 by 2040.
- The densest census tracts of the region include most of Bridgeport, the southeastern portion of Fairfield, and the western portion of Stratford.

AGE

- The region’s median age in 2010 was 37.6 years. It is estimated that the Region’s median age will increase to 38.6 years in 2018.
- Between 2010 and 2018, all six communities will grow older, with median age increases of between 1.1 year and 2.7 years.
- Bridgeport is overwhelmingly younger than the other five communities. In 2010, its median age was 32.7 years compared to 40.0 years and older for the other five communities.

Median Household Income (2013, 2018)

METROCOG Communities



Source: ESRI Business Analyst

Race & Ethnicity (2010, 2018)

METROCOG Region

	2010	2018
White	65.60%	62.90%
Black	18.80%	19.00%
American Indian	0.30%	0.30%
Asian	3.30%	3.90%
Pacific Islander	0.10%	0.10%
Some Other Race	9.00%	10.50%
Two or More Races	2.90%	3.30%
Hispanic*	21.50%	25.40%

Note: Hispanic is considered an ethnicity, not a race. It is not mutually exclusive with racial categories.

Source: ESRI, 2010 US Census

INCOME

- The region’s median income in 2013 was estimated at \$63,756. It is projected that the region’s median income will rise slightly to \$68,343 by 2018. The median income is heavily influenced by lower incomes in Bridgeport.
- A noticeable income disparity exists between Bridgeport’s median income (\$41,778) and the remainder of the region: Stratford (\$67,761), Trumbull (\$106,058), Monroe (\$108,478), Fairfield (\$118,476), and Easton (\$141,372).
- In 2013, the region’s poverty rate was 12.1%, with 21.5% of Bridgeport residents living below the poverty line. The remaining communities had very modest poverty rates.

RACE & ETHNICITY

- In 2010, based on categories defined by the U.S. Census, the region was 65.6% White, 18.8% Black, 9.0% Some Other Race, 3.3% Asian, 2.9% Two or More Races, 0.3% American Indian, and 0.1% Pacific Islander. Between 2010 and 2018, the White share of the population is projected to decline to 62.9%, with increases in minority populations.
- In 2010, 21.5% of the region’s residents identified as Hispanic. For purposes of clarification, the U.S. Census considers Hispanic an ethnicity and not mutually exclusive with racial categories. For example, a resident may identify as both Black AND Hispanic. Between 2010 and 2018, the Hispanic share of the population is projected to grow to 25.4%.
- The census tracts with the greatest percentage of minority population include most of Bridgeport, the southeastern portion of Fairfield, and the western portion of Stratford.

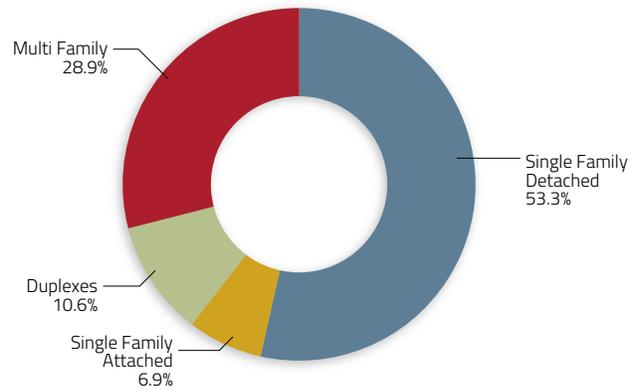
HOUSING

TYPE & TENURE

- The region contained 122,541 units in 2010. By 2020, the number of housing units is expected to increase to 126,999 units.
- The region's housing units are 59.1% owner-occupied, 33.5% renter-occupied, and 7.4% vacant. Owner-occupancy is much higher in the more suburban, exurban, and rural communities, while rentals are primarily concentrated in the urban core. Less than half of Bridgeport's housing stock is owner occupied (35.2%), compared to Stratford (74.1%), Fairfield (75.3%), Trumbull (83.0%), Easton (87.5%), and Monroe (89.2%). Bridgeport contains only 44.5% of the Region's households, but 73.8% of the Region's rental units.
- The region's housing stock contains several different types: 53.3% are single family detached homes, 6.9% single family attached homes, 10.6% are duplexes, and 28.9% are multi-family units. Similar to housing tenure, the more urban areas contain a lower percentage of single family detached housing units relative to suburban, exurban, and rural communities: Bridgeport (26.4%), Stratford (65.0%), Fairfield (79.3%), Monroe (85.4%), Trumbull (86.9%), and Easton (97.2%). Bridgeport contains only 44.5% of the Region's households, but 82.5% of the Region's multi-family units, 69.8% of all duplexes, and 47.9% of all townhomes/rowhomes.

Housing Type (2013)

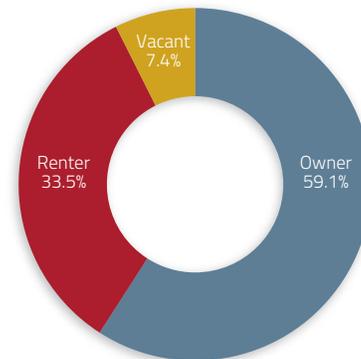
METROCOG Region



Source: American Community Survey 2009-2013

Housing Tenure (2013)

METROCOG Region



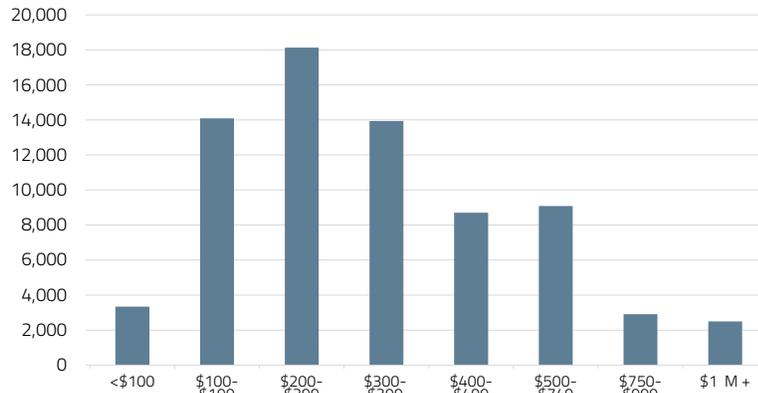
Source: ESRI

VALUE

- The region’s estimated median home value in 2013 was \$305,594. By 2020, it is estimated that the median value will increase to \$375,025. All six communities are expected to experience increasing home values through 2020.
- Home values vary widely within the region, from \$205,581 in Bridgeport to \$666,434 in Easton.
- The lowest home values, when based on median income by census tract, are found in Bridgeport and in west Stratford.

Owner-Occupied Housing Units by Value (2013)

METROCOG Region



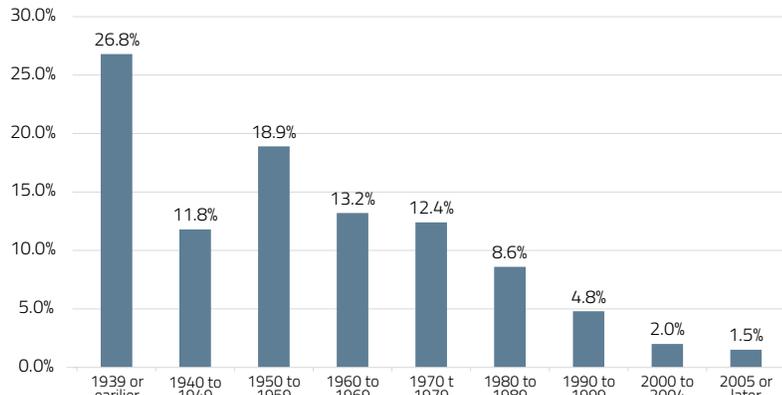
Source: ESRI

AGE

- The majority of the region’s homes (57.5%) were built prior to 1950, with 26.8% built prior to 1940.
- Only 3.5% of the region’s housing stock was built after 2000.

Year Structure was Built (2007-2011 Avg.)

METROCOG Region



Source: American Community Survey 2007-2011

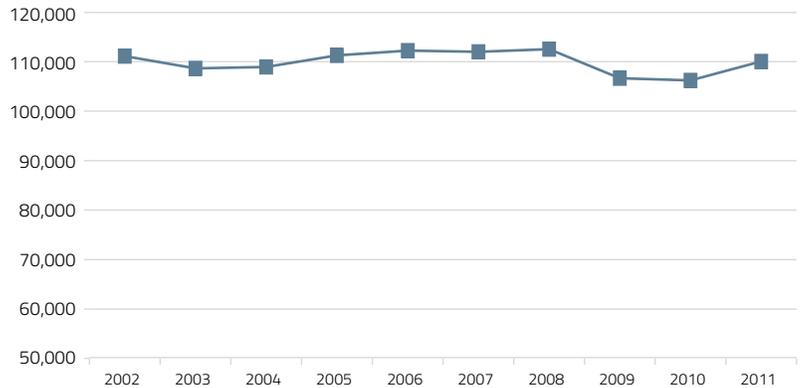
EMPLOYMENT

TOTAL EMPLOYMENT

- Employment levels within the region remained stable between 2002 and 2011, even in the face of a recession. In 2011, the region contained 110,066 primary jobs.
- The greatest concentration of the region's jobs are found in Bridgeport (40,430 jobs; 36.7% of all jobs), followed by Stratford (25,687 jobs; 23.3%), Fairfield (22,870 jobs; 20.8%), Trumbull (15,651 jobs; 14.2%), Monroe (4,792 jobs; 4.4%), and Easton (636 jobs; 0.6%).
- The region contains 37 jobs for every 100 residents. Trumbull's ratio of jobs to residents is the greatest at 0.57 (or 57 jobs per 100 residents), followed by Fairfield (0.41), Stratford (0.38), Monroe (0.36), Bridgeport (0.31), and Easton (0.24).

Total Primary Jobs (2002-2011)

METROCOG Region



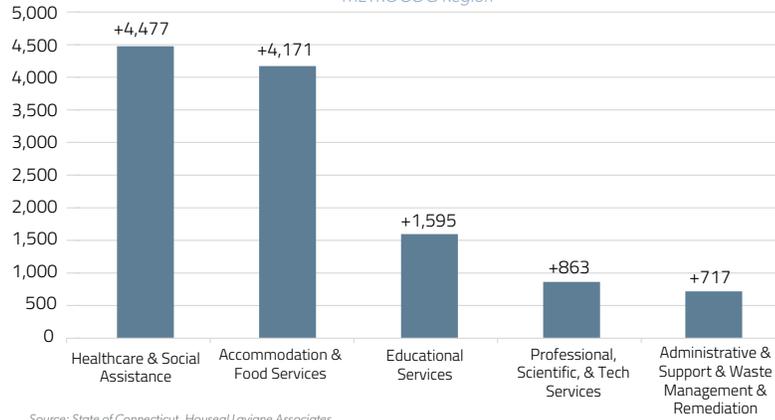
Source: U.S. Census Bureau

TOP INDUSTRIES

- The region contains a diverse mix of industries.
- The region's five largest industries are: Healthcare and Social Assistance (20,760 jobs; 19.5%), Manufacturing (16,424 jobs; 15.5%), Educational Services (12,772 jobs; 12.0%), Retail Trade (11,740; 11.0%), and Accommodation & Food Services (5,410 jobs; 5.1%).
- Based on projections released by the State of Connecticut, it is estimated that the region could gain roughly 14,000 jobs between 2010 and 2020. Key industries for growth are depicted in the accompanying chart.

Top 5 Industries for Job Growth (2010-2020)

METROCOG Region



Source: State of Connecticut, Houseal Lavigne Associates



4

LAND USE & DEVELOPMENT

CONCENTRATE • CONSERVE





Photo: Stan Gorzelany

GOAL

Promote growth and change development in and around established regional centers with existing infrastructure and conserve the region's precious natural resources, waterfront, and rural areas.

One of the primary roles of METROCOG is to provide guidance regarding regional land use and development. The subject of land use is complex with strong connections to other areas under METROCOG's jurisdiction including providing advice, leadership and solutions for regional transportation, housing, public facilities, open space, environment, energy, and economic development.

Many key factors are interrelated, with each influencing the other:

- The METROCOG region had a 2010 population of 318,000 and is anticipated to grow to nearly 330,000 by 2040.
- This residential growth will also be complemented by job growth. Businesses in the METROCOG region employed more 110,000 people in 2010 and the region could gain between 11,000 and 16,000 jobs between 2010 and 2020.
- Residents and workers in the region contribute to demand for goods and services, and a significant portion of that demand is unmet. In 2014, it is estimated that more than \$720 million in annual sales was leaking to retailers in adjoining communities outside of the METROCOG region. This represents unmet demand for between 1.4 and 1.8 million square feet of retail space that could otherwise potentially be located

within METROCOG region.

- The METROCOG region was rated as the 17th most congested in the world in 2014 and by 2040, ConnDOT estimates that more than 10% of all the region's roads will be in gridlock during rush hour. Meanwhile, rail ridership along the New Haven commuter line increased almost every year between 2005 and 2014 to 125,000 riders per day and 39 million per year.
- Outward development pressure and congestion are also being further exacerbated by rising sea levels. Areas that are currently the location of numerous community assets and home to thousands of residents must be repositioned to mitigate worsening flooding through the relocation and retrofitting of development and strategic investments of infrastructure.

It is within this context that METROCOG is tasked with identifying policies to ensure that changes in one system can be appropriately accommodated and leveraged in another system. The Regional Land Use Plan establishes a framework for development and reinvestment that can be used by member communities and partners to accommodate regional growth and change while improving quality of life for area residents.

GUIDING PRINCIPLES

The policies and recommendations in this chapter align with Reconnect One Region's guiding principles of Reconnected, Revitalized, and Resilient.



RECONNECTED

Public transit, complemented by a smarter road network, anchors new investments in mixed use districts featuring housing, employment, commercial areas, and cultural amenities.



Photo: D. Talbot

REVITALIZED

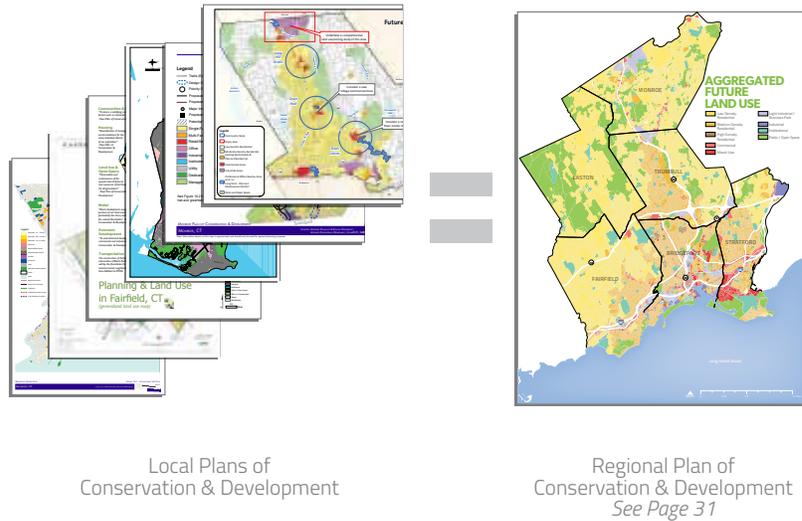
Regional centers act as cultural and economic hubs with new housing and employers supporting a growing number of businesses, retailers, and entertainment venues.



RESILIENT

Development is concentrated in areas where residents and businesses can leverage existing investments in infrastructure and transportation while adding to the unique, local sense of place of the surrounding community.

Aggregated Future Land Use Composition



REGIONAL FUTURE LAND USE PLAN

In developing the Land Use and Development Framework, the Local Plan of Conservation and Development (POCD) for each METROCOG member community was assessed. During the POCD assessment process, the land use plan for each member community was simplified to establish a single, unified future land use classification system for the entire region.

As shown in the adjacent Regional Future Land Use Plan, when the local POCDs are mapped side-by-side, they create a collective vision for future land use throughout the METROCOG region.

The Regional Future Land Use Plan identifies nine land use categories for the METROCOG region including:

- Low Density Residential
- Moderate Density Residential
- High Density Residential
- Commercial
- Mixed Use
- Light Industrial/Business Park
- Industrial
- Institutional
- Parks and Open Space

As a summary of local land use policy, the Regional Future Land Use Plan highlights general support among METROCOG communities for regional policies that prioritize infill and intensification of existing town centers and promote conservation and the development of a regional greenways network. These are the same policies promoted by the Regional Land Use and Development Framework, which provides guidance on the scale, intensity, and character of development.

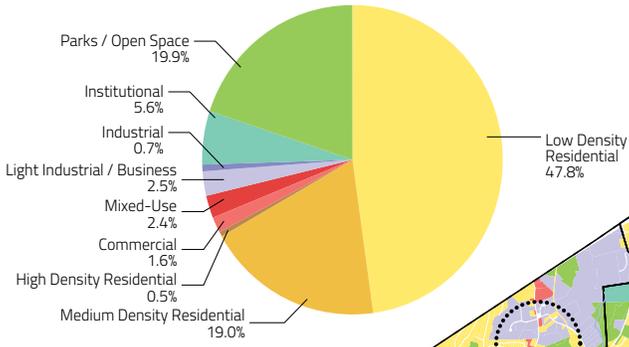
Future land use and development intensity should be applied in concert to guide future development throughout the METROCOG region. Focus areas, explained on page 32, are also depicted on the Regional Future Land Use Plan for additional perspective.

NOTE:

The land use classifications within each local POCD were generalized to create broad categories that can be applied across municipal boundaries. For example, the density of single family residential development is lower in more rural areas of the METROCOG region than in urbanized areas. As such the Regional Future Land Use Plan identifies most residential development in rural areas as "low density residential" while single family development in urbanized areas is defined as "medium density residential."

The need to create broader regional land use categories also creates instances where areas intended for a mix of uses such as retail and office park development with complementary open space is defined as "commercial" within the Regional Future Land Use Plan. While efforts have been made to reflect local policy within this document, it is up to local staff and officials to review the intent of this Regional Comprehensive Plan and judge how to best apply regional policy to local issues and land use decision making. The Regional Land Use & Development Framework discussed in the following section should assist in these efforts.

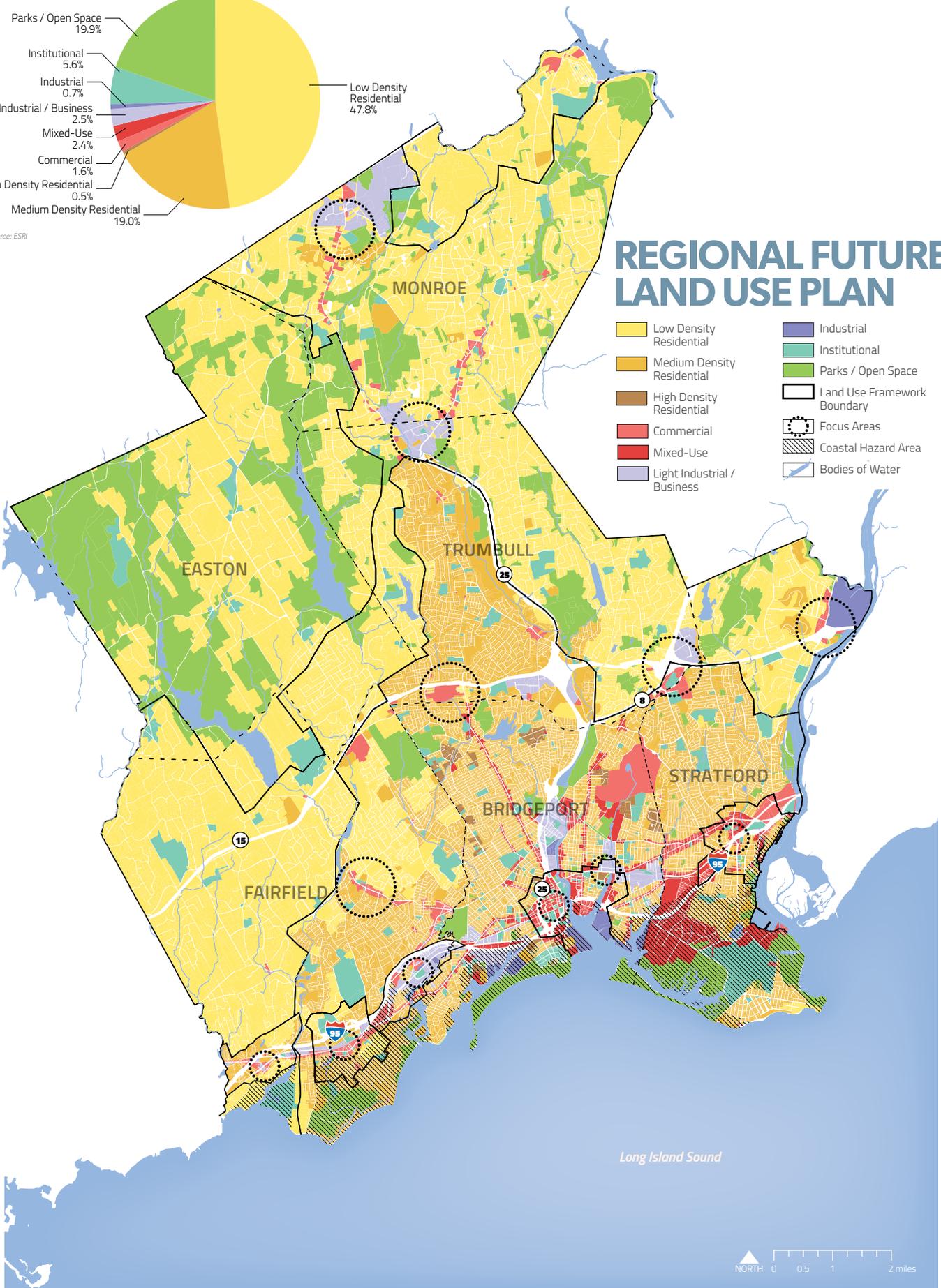
Aggregated Land Use
METROCOG Region



Source: ESRI

REGIONAL FUTURE LAND USE PLAN

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Mixed-Use
- Light Industrial / Business
- Industrial
- Institutional
- Parks / Open Space
- Land Use Framework Boundary
- Focus Areas
- Coastal Hazard Area
- Bodies of Water



REGIONAL LAND USE & DEVELOPMENT FRAMEWORK

At its core, the Regional Comprehensive Plan seeks to better balance housing and employment within the region, thereby maximizing efficient use of infrastructure, including the region's roadways. This approach also promotes the use of transit, encourages more intense residential and commercial development in urban areas, and supports the conservation of natural areas.

Using the Regional Future Land Use Plan (see page 31) as a basis, the Regional Land Use Framework (see page 39) streamlines and simplifies future land use to help develop a regional development perspective and to highlight key areas for development and reinvestment.

The Land Use and Development Plan consists of four character areas: Regional Centers, Urban Areas, Suburban Areas, and Rural Conservation Areas. Special consideration should also be given to targeting investments within identified Focus Areas and repositioning development within Coastal Hazard Areas.

SPECIAL CONSIDERATION AREAS

- **Focus Areas** – Areas of more intense development that serve as centers of commerce and employment for the surrounding community. Where transit service is available, transit-oriented development should be encouraged. In some instances these areas are already the location of established town centers, while in other instances they should be targeted for new growth and development to better serve regional needs.
- **Coastal Hazard Areas** – Areas along the Long Island Sound coast that are susceptible to flooding and increased risk due to future sea level rise. Hazard mitigation initiatives should be implemented to protect property, minimize the potential for coastal flooding, and restore natural systems that mitigate flooding. Existing development in these areas should be retrofitted or relocated while new development should be limited to safeguard against natural hazards.

CHARACTER AREAS

Future development patterns should be encouraged within each of these character areas that reflects the scale and intensity of development (or lack thereof) described below. Furthermore, the application of the strategies recommended throughout the Regional Comprehensive Plan should be tailored to reflect the purpose and intent of the different areas of the Land Use and Development Framework.



REGIONAL CENTERS
(HIGH INTENSITY, REGIONAL DESTINATION)

This portion of the region comprises the central business district within Bridgeport and the town centers of Fairfield and Stratford. These areas represent the most intense development and most integrated mix of uses within the METROCOG region. In addition to being the location of several major employers, regional centers are also home to numerous institutions that serve the greater METROCOG population. Underutilized sites should be targeted for redevelopment that maximizes development potential.



URBAN AREAS
(HIGH INTENSITY)

Urban areas include a variety of housing types with a high proportion of the region's multi-family development. Neighborhoods typically have access to local retail nodes where mixed-use development is common. While industrial and office development is typically located along nearby rail and highway corridors, clusters of employment-related development exist throughout. Waterways have historically been the location of industry, but these corridors now form spines of underutilized or vacant land that should be transitioned to active greenspace or repositioned for non-industrial development.



SUBURBAN AREAS
(MODERATE INTENSITY)

Development within suburban areas are characterized by single family neighborhoods served by community-scale commercial districts located at major intersections. Mixed-use development is limited and population density within this area is considerably lower than that of Urban Areas.



RURAL CONSERVATION AREAS
(LOW INTENSITY)

This portion of the region is predominantly rural in character and is the location of significant natural areas and agriculture uses. Moving forward, these areas should, for the most part, remain in their current state and experience very limited development (if any). Emphasis should be placed on improving quality of life for established residential areas. This includes extending infrastructure and transit to underserved areas and enhancing access to goods, services, and employment.



CONNECTING LAND USE & TRANSPORTATION

There is a strong connection between regional land use and transportation. Both systems feed into one another wherein investments in transportation can foster development and reinvestment, new development can also spur demand for transportation. In addition to encouraging growth and development, according to the framework's four character areas, the Land Use and Development Framework identifies several focus areas where development activities should be strongly encouraged to leverage transit to anchor vibrant mixed-use districts.

In accordance with *Chapter 6: Transportation and Mobility*, transit-oriented development should be encouraged in areas surrounding existing and future commuter rail stations and potential future bus rapid transit routes. Existing town centers and employment districts lacking transit service should also be areas of focus for future development.

It should be noted that focus areas are intended to be the most intense districts within a given character area; however, not all focus areas should be developed at the same intensity. For example, a focus area within the Suburban Transition area may comprise a mix of multi-family housing located in proximity to a regional shopping destination, while a focus area within the Urban Core may be the location of intense, vertical mixed-use development.

TARGETED GROWTH STRATEGY

Future growth and development is to be directed to the Town Centers, Urban Core, and portions of the Suburban Transition area where sufficient service capacity exists relative to roadways, mass transit, sanitary and storm sewers, water service, communications, and other public services and facilities. Emphasis should be placed on upgrading current services and facilities before resources are used to extend services to outlying areas. The development community should also be encouraged to maximize the potential of vacant or underutilized parcels within the Regional Centers and Urban Core where brownfield redevelopment, adaptive reuse, and infill development strategies can be effectively applied. In turn, concentrating investment within these areas will allow for the preservation of open space, natural areas, and prime farmland throughout the Conservation Area of the region.



KEY INFLUENCES

As a complex area comprising six communities, 30 local governments (including municipalities and service districts), and 318,000 people, growth and development within the METROCOG region is impacted by a wide range of factors. The topics of compact growth, economic development, and conservation have been identified as the highest priorities in developing the Regional Land Use Plan. This section identifies how these issues impact other aspects of development and why addressing them is of key importance to the region moving forward.

COMPACT GROWTH IN APPROPRIATE AREAS

WHY IT MATTERS

Compact development promotes walkability, reduces the need to use automobiles for local trips, and makes more efficient use of infrastructure.

Congestion is routinely cited as a top issue among residents, and 8 in 10 residents in the METROCOG region drive to work. With only 5.3% of the region's residents taking public transportation to work, and only 3.1% biking or walking, the development of a balanced transportation system with improved modal choice and access is a key goal of METROCOG.

While the location of housing in relation to job opportunities is a significant contributing factor to regional travel patterns, travel at the local level and providing connections between transportation options are significantly influenced by development patterns at the block scale. Residents living in compact neighborhoods and districts featuring mixed-use development located on small, walkable blocks are more likely to walk, bike, or ride transit.

Every time a neighborhood doubles in compactness (based on housing unit and block density among other factors), the number of vehicle trips residents make is reduced by 20% to 30%. Compact, mixed-use development reduces reliance on automobiles and thereby helps reduce congestion and household transportation costs. Compact development also reduces the road miles and infrastructure (and related maintenance) needed to serve new development.

By encouraging compact development in areas where this type of development aligns with local planning, METROCOG can maximize use of established transit routes while promoting healthier, more active lifestyles among residents. High quality design must be a priority to ensure that compact development complements the character of the surrounding community.



EMPLOYMENT INFILL

WHY IT MATTERS

Jobs with access to transit can spur demand for housing in areas with established infrastructure and encourage more intense development in areas with regional amenities.

There is an imbalance between housing and jobs in the METROCOG region. The regional workforce (116,000 in 2014) exceeds the number of jobs available (106,000 in 2014). In addition, less than half of all jobs located within the METROCOG region are filled by residents who live in the region. At the local level, for jobs provided within a given community, in no case are more than 30% of jobs filled by residents who also live in that community. A large commuting population, combined with a mismatch in location of residents and availability of jobs, contribute to significant congestion on area roadways and lost economic productivity.

Many of the communities within the METROCOG region are largely built-out, with limited opportunities for new development on “free and clear” sites. This is especially true within the Regional Centers and Urban Core areas, where accommodating new development would likely require parcel assembly, demolition, and/or environmental remediation. METROCOG and its member communities are positioned to play a key role in facilitating economic development that will enable the region’s workforce and tax base to grow in locations that are already accessible to the existing population.

The Plan calls for new industrial development and employment-based uses to be concentrated on vacant or underutilized infill sites near existing ports, airports, rail spurs, and highways. This will enable businesses to better capitalize on investments in existing transportation infrastructure that will provide excellent access to national and international markets as well as an educated workforce. Greenfield development that would exacerbate the housing-jobs imbalance and further reduce open space and valuable natural resources should be discouraged. The attraction of new employers and institutions to Regional Centers and Focus Areas should also be a priority wherein these anchors can serve as activity generators that sustain demand for other uses and foster mixed use development and sense of place within the heart of METROCOG communities.



CONSERVATION

WHY IT MATTERS

As the region's population and job force expands, areas of open space, sensitive natural areas, and farmland come under increasing pressure to develop. This, in turn, threatens the ecological health and character of the region.

The METROCOG region offers a wide range of development at varying degrees of scale and intensity. The transition from intense urban development to pastoral countryside happens within a relatively short distance in some areas of the region. These rural areas are home to expansive areas of open space and woodlands, historic farmsteads, sensitive wetlands, and water reservoirs that supply drinking water to hundreds of thousands of residents.

In addition to protecting resources in areas that have experienced limited development, conservation is also a priority for the region's numerous waterways, coastal areas, and Long Island Sound. With rising sea levels, the threat of flooding is increasing while the buffer between urbanized and natural areas is growing smaller. In addition to providing essential habitat for wildlife, coastal ecosystems naturally protect coastal communities from sea level rise by absorbing storm surge and slowing erosion. These areas should be conserved and restored to limit exposure to hazards related to rising sea levels.

Natural and cultural resources provide access to nature in an increasingly urbanized region. They also play a vital role in stormwater management and flood control, providing a reliable source of fresh water, in cleaning the air, and in driving tourism. As the need for housing and economic development increases within the region, opportunities to concentrate development within the Urban Core and Regional Centers should be pursued in order to minimize the need for the outward growth of the region.

GOAL

Promote growth and change that concentrates development in and around established regional centers with existing infrastructure and conserves the region's precious natural resources, waterfront, and rural areas while protecting residents and property from natural hazards.

OBJECTIVES

Priority

4.1

COMPACT GROWTH

Evaluate changes to development regulations to promote compact, walkable, context-sensitive development within the region.

1

4.2

EMPLOYMENT INFILL

Encourage development that leverages regional infrastructure and institutional assets located in the urbanized core of the METROCOG region.

1

4.3

CONSERVATION

Prevent the unnecessary or premature development of valued farmland, key coastal areas, drinking supply watersheds, and other natural areas by minimizing leapfrog development, conserving open space, and encouraging compact or contiguous growth.

1

4.4

POLICY COORDINATION

Continue to align and update local Plans of Conservation and Development with the recommendations of the State of Connecticut Conservation and Development Policies Plan and the METROCOG Regional Plan of Conservation and Development.

2

Applying Strategies to the Region

Strategies are identified for each objective in this Plan. While each strategy can be used to make progress in attaining the related object, a given strategy may not be applicable to all areas of the region.

A symbol representing each of the character areas of the Land Use and Development Framework has been provided to indicate where a given strategy could be meaningfully applied within the region. The implementation of a given strategy should also be tailored to the needs and unique context of the local community.



Regional Center



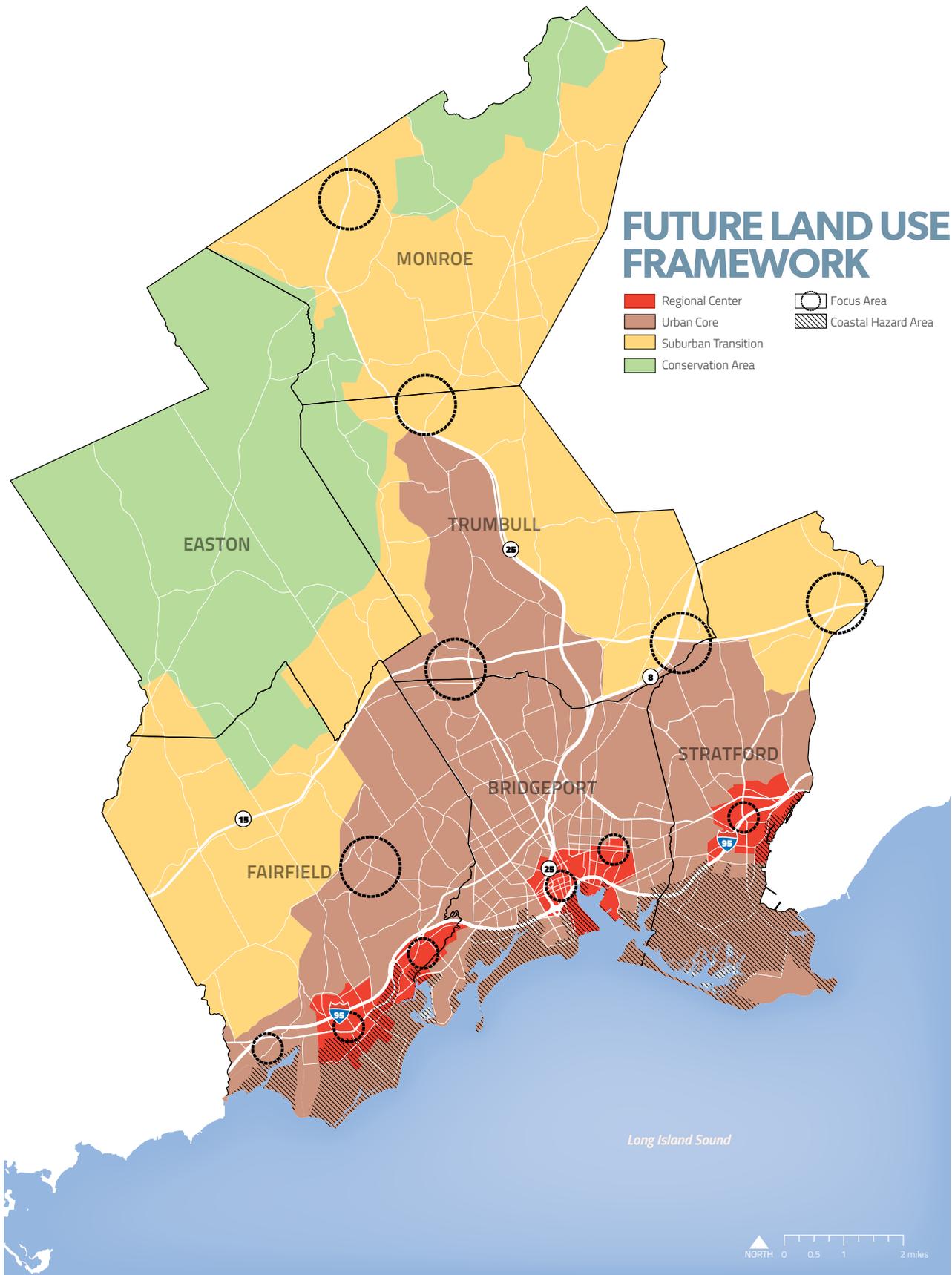
Urban



Suburban



Rural Conservation Area





The Storrs Center in Mansfield, CT is an example of a mixed-use district within a town center.

4.1 COMPACT GROWTH STRATEGIES

4.1A MIXED USE



Enhance and expand mixed use districts within the region's established town centers and encourage development of vibrant, mixed use districts along major transportation corridors and in communities currently lacking a town center or downtown areas.

Mixed use development combines multiple complementary uses (such as residential, office, retail, or a hotel) within a single building or development. When an appropriate balance of uses occurs, developments within a mixed use district can support one another. For example, close proximity to amenities such as dining, grocery and retail can drive demand for residential development which in turn drives demand for restaurants and retailers seeking a strong local customer base. This synergy between uses provides for more robust communities not as easily impacted by blighting factors.

Mixed use development offers property owners greater capacity for leasable area and typically higher property values that, in turn, lead to high property tax revenue for the community. Mixed use development also generates higher non-property tax revenues by providing for a wider range of goods and services within a small area and encouraging residents to shop and dine locally and more frequently.

To foster mixed use development, METROCOG should assist member communities in efforts to:

- Identify barriers to mixed use, including zoning, development, and subdivision provisions that prohibit such development.
- Evaluate the use of form-based code or zoning overlays to increase regulatory flexibility while maintaining consistent and context-sensitive design.
- Identify opportunities for infill and redevelopment such as underutilized properties along major transportation and transit corridors such as vacant commercial center properties or industrial brownfields.

- Conduct market analyses to identify gaps in retail, employment, and transit service and promote mixed use development in addressing these gaps.
- Provide financial and regulatory incentives such as a height or density bonus or tax abatement to facilitate mixed use development in locations where mixed use is not a proven concept.

Mixed use development should be strongly encouraged within Regional Centers and Focus Areas throughout the Urban Core and Suburban Transition areas. While many of these areas have established mixed use development that can be expanded upon, new mixed use development should be promoted in areas where it does not yet exist. For example, the Town of Trumbull has identified three nodes along its Route 111 and Route 127 corridors that should be targeted for mixed use development featuring multi-family units located above ground-floor retail.

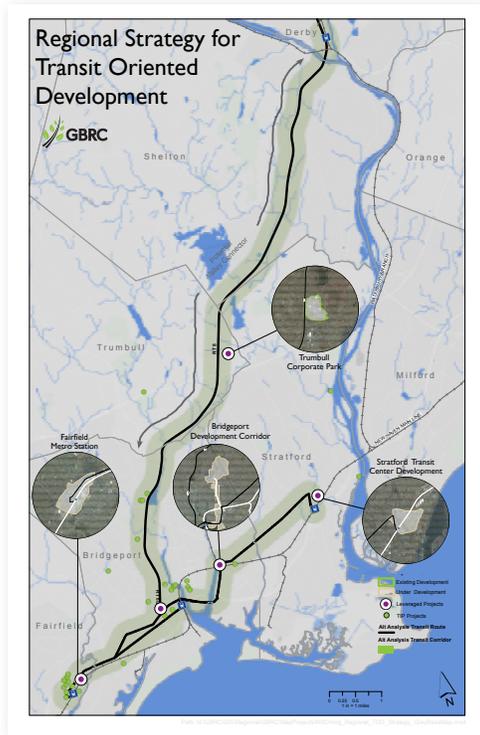


Illustration: Commerce Drive Area Draft Concept Plan, Regional Plan Association (2009)

4.1B TRANSIT-ORIENTED DEVELOPMENT



Leverage rail stations in Bridgeport, Fairfield, and Stratford, as well as key bus corridors such as Routes 8/25 and Long Hill Green, to drive new transit-oriented residential development.

Characteristics of Transit-oriented development (TOD) include moderate to high-density development within a 15-minute walk, or a 1/4- to 1/2-mile distance, from a transit station. TOD emphasizes convenience and efficiency by encouraging compact, concentrated, mixed-use development in conjunction with access to transit. The relationship between transit and land use is mutually supportive, with density as the primary factor in transit ridership. Increases in residential and employment density, along with a diverse mix of land use and housing types, expand the transit ridership base and support local retailers.

Strategies for encouraging TOD include:

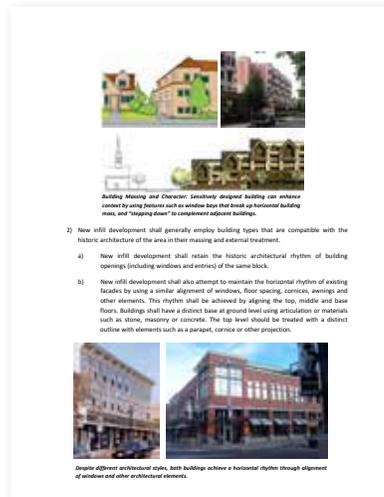
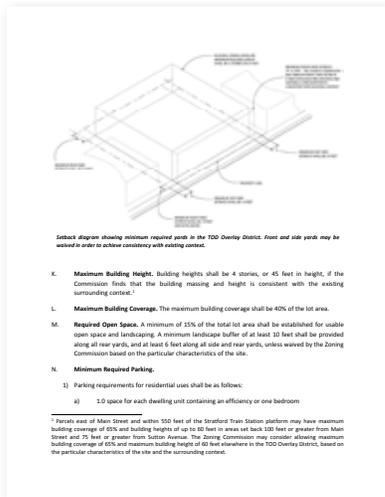
- Appropriate and innovative parking requirements and strategies to promote the use of public transit, including bicycle parking.
- Economic development incentives to attract employers and increase employment density.
- Zoning overlays that allow for increased flexibility in height, density, and setback requirements in comparison to conventional zoning requirements.
- Identification of underutilized sites along major corridors targeted for high-frequency transit service.

A minimum average density of 14 dwelling units per acre is recommended to support service along a corridor. However, a range of 30 to 40 dwelling units per acre is suggested for intense TOD sites. This figure varies depending on the mode of transportation, acknowledging that a stronger ridership base is needed to support rail in comparison to Bus Rapid Transit (BRT).

REGIONAL CONTEXT

The character of TOD areas should vary based on regional context. Much like a street system, there should be a hierarchy of TOD sites ranging from small to large sites along routes and within a regional network, where large sites contain multi-modal route transfer opportunities. There should be a spatial match between areas of high employment and transit and reflect common commuter patterns.

- *Regional Center* – High intensity districts with a mix of housing, retail, and office uses that serve as regional destinations for education, employment, and entertainment.
- *Urban* – Traditional mixed-use town centers with a focus on commercial and residential development. Mixed income residential developments are encouraged to provide adequate access for all users.
- *Suburban* – Moderate intensity district anchored by larger retail or employment users. These sites can be paired with park and ride lots to facilitate both inflow and outflow commuting.
- *Rural Conservation* – No TOD should be encouraged within these areas. While the linkage between transit and recreational opportunities is important and should be emphasized, expanding development to these areas is counter-productive to the compact principles of TOD.



The recent passage of a TOD overlay district in Stratford is a great example of local action to spur new transit-oriented development.

4.1C TARGETED DENSITY



When consistent with local goals, provide for smaller lot sizes, increased building heights, and higher dwelling unit maximums in targeted areas that leverage transit and infrastructure without negatively impacting community character.

Incentive-based zoning provides developers with rewards, like density or floor-area bonuses, for meeting certain housing objectives such as locating near transit. Generally requiring less up-front planning work than a station area plan, incentive zoning can be more effective in a political environment in which policymakers are apprehensive to require either mixed-income or mixed-use transit-oriented developments. Using a quality growth overlay district, or an explicitly named TOD or mixed use overlay district, on community maps can help market incentive zoning.

Some of the key elements included in Stratford's ordinance include:

- **Development Intensity** – The TOD overlay would provide increased unit density, reduced setbacks, and increased height in comparison to other town center and multi-family districts, creating a unique development opportunity within the community.
- **Parking** – Reduced parking would be allowed, when a project can demonstrate that - through transit use, shared parking, parking management, or a combination of elements -total required parking spaces will be fewer than the number of spaces normally required by local regulations.
- **High Quality Design** – Design standards would be used to ensure that buildings and site improvements are constructed consistent with an appropriate quality of design that reinforces the desirable characteristics of the existing district. These site design and architectural criteria are enabled according to the state statutes found at CGS 8-2j.

Other elements that could be included in a TOD ordinance , in addition to those highlighted in Stratford's, include:

- **Preservation** – Historic structures could be made ineligible for redevelopment except when proposed for a change of use that would not detract from the historic nature of the building, or is otherwise approved by the Zoning Code.
- **Required Open Space** – In calculating required open space, sidewalks, decks, and patios, could be included thereby reducing the overall area dedicated to open space on site.

STATION AREA BLOCK FORMS



Southport



Fairfield



Fairfield
Metro



Bridgeport



Stratford

4.1D CONNECTIVITY & SMALL BLOCKS



Where possible, provide for the development of small blocks by requiring new street segments to establish multiple points of access to the larger street network.

Fine-grained development patterns promote walkability by creating aesthetically appealing, safe and convenient space for pedestrians. A well-integrated, highly connected network of streets supports public health and is good for transit. A porous street grid can enhance fixed-route systems of transit by offering convenient multi-modal access points to such routes. Lengthy blocks can inhibit pedestrians access to local destinations, such as schools, shopping and employment areas.

New development should establish connections to the existing road network where possible. In addition, a high degree of connectivity should be promoted within the local street network of a given project area where development functions independent of the broader roadway network.

In previously developed areas, opportunities should be sought to modify street connectivity to better suit pedestrians and the transit system. While retrofitting previously developed areas will require localized solutions, strategies that can be pursued include:

- Acquiring contiguous vacant or blighted properties that can be assembled to create linear pedestrian corridors and break up large blocks.
- Providing mid-block pedestrian crossings that make it easier to walk in commercial districts and improve access to key pedestrian and transit destinations.
- Providing “complete streets” to increase transportation choices along key routes.
- Extending roadways through brownfields where industrial development previously prevented through access.
- Reconnecting cul-de-sac and dead-end streets.

CASE STUDY: HEALTH & WELLNESS DISTRICT

Flint, Michigan

The Health and Wellness Center in Flint, Michigan provides an example of how institutions with a small local presence can be collectively leveraged and expanded within a regional center to have a significant impact on the local economy. Michigan State University has had a presence in Flint, Michigan since the 1970s, having sponsored or affiliated with Flint area hospitals to train resident physicians and provide clinical education to more than 750 medical students. In 2011, MSU announced it would expand its campus extension in Downtown Flint with the development of a new campus for the College of Human Medicine.

The campus opened in Downtown Flint in 2014 and now anchors an emerging Health and Wellness District. This district is also the location to a newly relocated and expanded farmers' market and new Program of the all-Inclusive Care for the Elderly (PACE) Center. Occupying the former location of the Flint Journal newspaper, the MSU facility is also a positive example of adaptive reuse.



Image: Uptown Reinvestment Corp.

4.2 EMPLOYMENT INFILL STRATEGIES

4.2A RECRUITMENT & EXPANSION OF ANCHORS



Support the location and expansion of activity generators including key employers and cultural institutions within the Region.

Attracting large employers is a typical goal for any organization involved in economic development. METROCOG should augment this strategy to focus on infill sites that will enable new businesses to leverage the region's considerable investments in infrastructure and transportation systems, further supporting the mutually beneficial relationship between jobs and transit.

METROCOG should assist in identifying funding for strategic improvements to the region's employment centers, such as:

- Incentives for adaptive reuse and brownfields redevelopment.
- Improvements to housing quality and affordability within the Urban Core and Regional Centers that will support the needs of the target workforce.
- Improvements to established infrastructure to ensure that water, wastewater, utilities, and roadway capacity are adequate to accommodate modern industry.
- Investments in education and workforce development to ensure that the regional labor pool can meet the demands of new businesses.

In addition to targeted investments in economic development, METROCOG can play an active role in encouraging the growth and expansion of area employers and institutions. For example, METROCOG could work with municipalities, economic development partners, and local colleges and universities to identify opportunities to co-locate facilities in targeted areas served by transit and infrastructure.



Image: Bridgeport Landing Development, LLC

Steelpointe Harbor is a great example of brownfield redevelopment in the region.

4.2B BROWNFIELD REDEVELOPMENT

Continue to support and facilitate the remediation and redevelopment of brownfields as destinations for new industry and employment uses.



As large vacant or underutilized infill sites near transportation and other activity centers, brownfields represent an environmental justice issue and a key priority for the METROCOG region. The federal government offers assistance with brownfield remediation through nine different agencies including the US EPA and HUD. The State of Connecticut also offers assistance through the Department of Energy and Environmental Protection (DEEP).

METROCOG should continue to assist its communities in pursuing grants from state and federal programs as well as providing technical assistance with brownfields planning, environmental assessments, and directing funding for clean-up activities. METROCOG's on-going efforts to inventory and map brownfields throughout the region will be a key asset in reducing demands on municipal staff to identify and track the status of sites on the US EPA and CT DEEP brownfield lists.

CASE STUDY STEELEPORTE HARBOR

Bridgeport

The Steelpointe Harbor redevelopment project in Bridgeport highlights the remediation and infrastructure improvements needed to make development of a challenging brownfield market-viable.

The more than 50 acre brownfield site at Seaview Avenue and I-95 is the former location of a steel mill, and a power plant and is undergoing a transformation to a vibrant mixed-use retail and entertainment district. When complete, Steelpointe Harbor will feature more than 780,000 square feet of commercial space, a 12-screen luxury movie theater, two hotels, 1,100 residential units, and a 200-slip, full-service, deep water marina.

The project is being supported by up to \$190 million of tax incremental financing. Steelpointe Harbor redevelopment was made possible through extensive remediation and the infrastructure improvements that will result in fully reconstructed Stratford Avenue, East Main Street, Pembroke Street, and Waterview Avenue as well as the burying of utilities and a base ground elevation that brings the peninsula outside of the floodplain.

For additional discussion of a regional strategy for brownfield redevelopment including METROCOG's brownfield assessments and loan programs, see **Chapter 9: Economic Development**



4.3 CONSERVATION STRATEGIES

4.3A CONSERVATION DESIGN



Where appropriate, support the use of conservation design strategies such as clustered development to preserve sensitive natural areas and open space.

Development in the Suburban and Conservation areas of the region has traditionally followed a pattern of single family subdivisions served by small neighborhood-scale commercial areas. This development pattern has maintained the area's rural aesthetic, but also limits the ability to preserve natural stormwater flow and increases the risk of flooding without more extensive stormwater infrastructure in place. METROCOG should support the use of a conservation design approach to development that mitigates these issues while striving to maintain desirable rural aesthetic and community character and protecting drinking water supply and quality.

At its most basic level, conservation design is an approach to community development that clusters smaller lot residential homes to allow for the preservation of contiguous areas of open space and natural areas. This approach to development creates the potential for the use of naturalized stormwater management techniques to minimize or eliminate stormwater runoff and mitigate impacts to public drinking supply watersheds. It also establishes areas of open space that can be used as neighborhood or community parkland. Lastly, the conservation design approach minimizes the amount of roadway and utility infrastructure needed to serve a given development.

Policies specifically governing Conservation Design include:

- Significant environmental features, topography, and natural areas should guide development and shape the potential development area of a site.
- Housing should be strategically located to minimize impacts to natural features and maximize views.
- Lot lines, street, and trail locations should be defined, in part, by the presence and absence of natural features.

- Appropriate lot sizes should vary based on the size and character of nearby existing and planned residential developments and local environmental conditions.
- An ordinance should be developed which specifically identifies the characteristics of sensitive natural areas in need of preservation and identifies parameters for development within these areas.

Conservation design is a density neutral approach wherein a conservation oriented subdivision achieves the same number of homes per acre as a traditional subdivision. As such, METROCOG municipalities can encourage open space preservation, while facilitating development that approaches the same overall density that is typical of their established neighborhoods. In doing so, conservation development techniques will allow new development to minimize the impact on quality natural areas, preserving them for public enjoyment while maintaining the rural character of these areas and protecting public drinking supply watersheds.



4.3B COASTAL AREA HAZARD MITIGATION



Identify key coastal areas and hazard mitigation strategies to better protect the region from the destructive impacts of coastal flooding, storm surge, and the sea level rising.

Sea levels within the Long Island Sound region have risen between six and 12 inches over the past 100 years and are anticipated to rise between two and four feet over the next 100 years (www.coastalresilience.org). Currently, the METROCOG region experiences severe coastal flooding once every five years on average and the frequency and impacts of flood and storm surge events will be exacerbated by sea level rise.

Coastal communities are the most threatened by flooding and they are also the most populous. There are several low lying neighborhoods in Bridgeport in Stratford that are susceptible to flooding and these areas are disproportionately minority and low income when compared to other areas of the region.

The conversion of vacation homes to year-round residences has also increased flood area populations in Fairfield and Stratford. Critical infrastructure is also threatened with wastewater facilities (Bridgeport/Fairfield/Stratford) and pump stations (Trumbull) located in flood hazard areas.

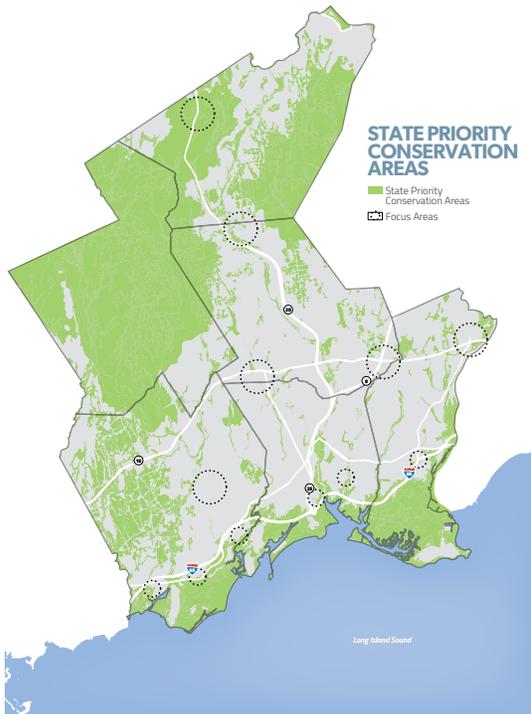
A comprehensive approach to land use and development within the Coastal Hazard Area is needed. Development within the Coastal Hazard Area is extensive and while these areas face long term issues related to sea level rise, they also represent established neighborhoods and commercial districts that contribute to the overall vitality of the region.

Retrofitting these areas will require a long term commitment on the part of METROCOG and local municipalities and the relocation of development may be needed in some of the most exposed areas. As communities reposition coastal hazard areas, METROCOG can serve as a resource in data gathering and management, and policy research and development. A unified regional approach will also enable local communities to collectively apply for grant funding in partnership with METROCOG.

Further discussion of sea level rise and hazard mitigation is included in **Chapter 8: Natural Resources**.

AREAS WITHIN FLOODPLAINS			
METROCOG Region			
	City Area (acres)	Floodplain (acres)	Percent of Floodplain
Bridgeport	10,463.8	2,220.1	21.2%
Easton	18,310.0	2,137.4	11.7%
Fairfield	19,432.1	3,283.9	16.9%
Monroe	16,823.1	1,473.7	8.8%
Stratford	11,563.9	3,955.1	34.2%
Trumbull	15,098.9	1,058.3	7.0%
Total	91,691.7	14,128.4	15.4%

Source: ESRI



4.3C OPEN SPACE PRESERVATION



Support communities and partner organizations in their strategic identification and preservation of open space areas.

Open space areas provide METROCOG residents and visitors with access to nature, serve as habitat for wildlife, and play a vital role in stormwater management and drinking water quality. Underscoring these benefits, each member community of METROCOG also highlights open space preservation within its local Plan of Conservation and Development. To assist local municipalities in their open space preservation efforts, METROCOG can establish a region-wide GIS inventory of dedicated open space, including conservation easements, and help identify potential areas of focus for expanded open space preservation.

In addition to mapping data, METROCOG can play a key role in open space preservation as a conduit for State and Federal programs targeted at preservation and land acquisition for parks and recreation. While programs such as the Department of Energy and Environmental Protection (DEEP) Open Space and Watershed Land Acquisition (OSWA) grant can be accessed by local municipalities, applications for competitive grants are typically better received when clear connections can be drawn to regional policies. Furthermore, METROCOG can assist with coordinated open space preservation efforts among adjacent communities and pursue grants with a potentially higher success rate.

METROCOG can also provide guidance and technical expertise regarding the design and development of recreation facilities such as trails and related amenities. The design of the Pequot River Trail and the Stratford Pathways Study and Plan: Housatonic River Greenway Project are positive examples of programs developed in partnership with local communities and METROCOG.

Additional discussion of open space preservation strategies is located in **Chapter 8: Natural Resources**.



4.3D WATERSHED PLANNING & PROTECTION



Work with local communities to identify sensitive watershed areas and implement strategies to limit the impacts of development to protect the health of regional natural systems.

Within the Suburban, Urban, and Regional Centers there is a common need to implement projects to address stormwater management and water quality. By addressing water quality issues in a holistic manner, watershed plans offer a useful framework for identifying stormwater infrastructure improvements, retrofits, and restoration projects that benefit multiple communities. Watershed plans also provide the best means of identifying significant regional water resource and pollution problems including development and agricultural practices within the less developed areas of the region.

The Pequonnock River Watershed Plan serves as a regional example and starting point for future watershed planning initiatives in the region. The plan is the product of coordination between the City of Bridgeport, the Town of Trumbull, and the Town of Monroe and identifies specific, measurable actions to improve water quality in the Pequonnock River, Bridgeport Harbor, and Long Island Sound, restoring the recreation and habitat uses that have been lost due to degraded water quality.

While water quality is a primary focus of the Pequonnock River Watershed Plan, flooding is also addressed as a related issue, along with habitat protection and restoration of local waterways that can reduce pollutants that enter Long Island Sound. A key recommendation of the plan is the establishment of a sustainable funding and maintenance program, potentially including the creation of a regional stormwater utility, for watershed-wide green infrastructure programs and stormwater retrofits.

While METROCOG may not be the entity that develops the management plan for a given watershed in the region, the organization can provide the valuable data needed to fully assess impacts to water quality. A GIS inventory of impervious surfaces throughout the region should be established to document areas that could cause degraded water quality due to contaminated run-off and increase run-off volumes. Such data could also be leveraged as METROCOG and its member communities evaluate stormwater funding mechanisms, including the stormwater utility fee identified in the Pequonnock River Watershed Plan.

As discussed in **Section 5.2A Critical Watersheds**, it is also a regional imperative that special protection measures exist for the three watersheds which supply the bulk of the METROCOG region's drinking water (the Aspetuck, Saugatuck, and Mill River Basins).



4.3E CONTEXT-SENSITIVE DESIGN GUIDELINES



Develop design guidelines unique to each community to promote context-sensitive development that responds to regional policies while respecting local character.

The concept of conservation goes beyond open space. Important aspects of a community, such as the scale and intensity of development, that define its character and unique sense of place should also be maintained. Design guidelines can be developed at the local level to ensure that desirable aspects of a community are preserved and enhanced by projects at the site level. Simple guidelines can provide guidance on preferred components of a site layout and building styles, height, massing, orientation, and other factors.

METROCOG can provide technical assistance to municipalities seeking to establish design guidelines, including professional expertise in authoring guidelines as well as GIS mapping and other data analysis needed to properly target areas for guidelines application. While some METROCOG municipalities already use zoning to prohibit uses that would compromise community character, form-based regulations should also be considered to ensure that new development (regardless of use) will complement established community form.

METROCOG can serve as a resource to municipalities through the research and exploration of innovative regulatory mechanisms such as form-based codes, overlay districts, neighborhood heritage districts, and other tools that may be more effective at meeting conservation goals than conventional zoning.



4.3F FARMLAND PRESERVATION



Educate working farm and large private landowners about State and Federal farmland and open space preservation programs and consider the development of a regional preservation program.

In 2007 (the most recent year for which data is available), farmland accounted for 405,616 acres (13%) of the State of Connecticut's total area. That farmland resulted in annual sales of approximately \$3.1 billion and farmland within Fairfield County accounted for \$1.1 billion of those sales (35% of the total)--the most of any county in Connecticut.

While agriculture remains an influential part of the region's image and provides METROCOG residents with access to fresh and healthy foods, farming in the region and the State of Connecticut as a whole is threatened by development. For example, between 1997 and 2002, Connecticut lost over 12% of its farmland, the highest percentage loss of any state in the country.

The Connecticut Farmland Preservation Program is a Purchase of Development Rights (PDR) program that allows landowners to sell an agricultural conservation easement to their property, providing money to continue or expand farming operations in exchange for a guarantee that the land will only be used for agricultural purposes moving forward.

With high real estate values, the incentive for farmers in the METROCOG region to utilize the PDR program is low and the Connecticut Farmland Preservation Program lags behind similar programs in other states. METROCOG can play an active role in evaluating use of the Farmland Preservation Program as well as other programs such as the state's P.A. 490 program (giving tax incentives to encourage landowners not to develop their land) and DEEP Land Acquisition grants.

METROCOG should also work with member communities to evaluate the potential development of an alternative preservation program that could be implemented at the local level.

For example, METROCOG could consider the development of an inter-municipal Transfer of Development Rights (TDR) Program (as permitted by the Connecticut General Statutes), that would allow member communities to coordinate farmland preservation efforts rather than relying on a top-down program from the State. A TDR program could be considered as a means of preserving farmland when state grant money and other public funding is limited.

A TDR program would allow developers to purchase development rights from "sending areas" (farmland within Rural and Conservation areas of the region) and transfer these development rights to "receiving areas" (the Urban Core and Regional Center areas) where more intense development is desired. Farmers could be encouraged to participate in preservation as they would be compensated at fair market prices. METROCOG communities could then also commit to farmland preservation without reliance on outside funding sources or usage of city/town revenue.

Montgomery County, Maryland provides a successful example of TDR program, having permanently preserved over 38,000 acres of farmland using TDRs.



4.4 POLICY COORDINATION STRATEGIES

4.4A MAJOR PROJECT REVIEW & JOINT PLANNING



Continue the role of METROCOG as the forum to collectively review, discuss, and provide meaningful input on major developments with the potential for regional impact and encourage joint planning initiatives between member communities.

Municipal boundaries have important implications for utilities, services, and development regulations, but can be of little concern in our day-to-day lives. METROCOG residents routinely travel outside of their own communities to go to work, to shop, to dine out, to learn, to relax and explore. Simply put, economic and social forces are not contained by municipal boundaries and neither should planning.

METROCOG communities share a wide array of natural resources and infrastructure with their neighbors (e.g., waterways, roads, and rail). Joint planning initiatives to coordinate future land use, development, and transportation policies across jurisdictions, ensure land use compatibility along municipal borders. Coordination should be encouraged between adjacent municipalities as improvements and initiatives are considered for physical assets of the region that cross borders.

Coordinated planning can start with planning departments from the region sharing future land use maps and then identifying overlapping areas for potential conflicts. Over time, as improvements are considered for these areas, adjoining communities can strive for mutually beneficial approaches to implementation. For example, ConnDOT may be considering improvements to a regional arterial that is experiencing development in a joint planning area. Partner communities could then work with ConnDOT to identify a unified approach to access management, widening, and signal placement.

METROCOG should also continue to utilize the Advisory Zoning Referral Process to increase coordination and reduce conflicts among neighboring communities. Any zoning text amendment or proposed development project within 500 feet of an adjacent municipal boundary must be reviewed by the regional council. METROCOG should also consider expanding this service to facilitate cross-border initiatives such as regional roadway improvements, greenway planning, and shared economic development initiatives for commercial districts that straddle multiple municipal boundaries.



Photo: Susan Rubinsky

4.4B OPEN SPACE PLANNING



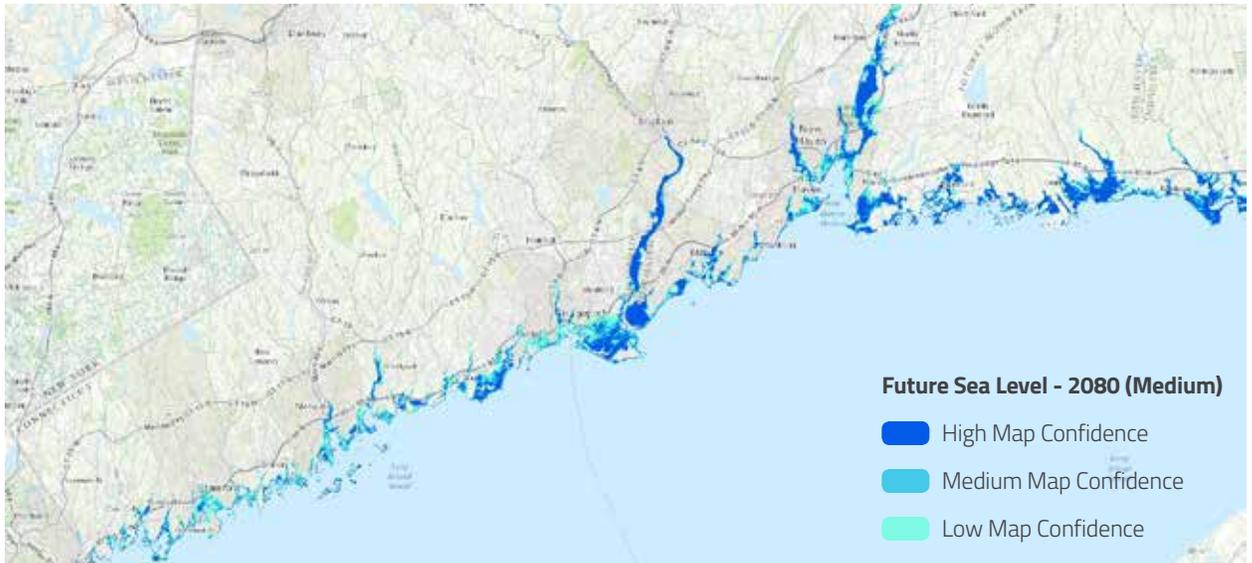
Develop a regional open space plan that can be used by local communities to guide open space preservation and establish a regional open space network.

Communities of the METROCOG region share the same waterways and watersheds. These features form the core of the region's remaining inventory of open space and natural areas. As development has occurred, the region's open space has become increasingly fragmented, hampering the movement of wildlife, reducing food sources, and reducing habitat size for wildlife. The loss of open space is a regional issue impacting regional systems; and thus, requires a regional solution.

Open space planning is also an example of a coordination opportunity with limited political barriers, because it has many benefits such as shared burden, opportunities for improved access to recreation, and hazard preparedness. As METROCOG communities seek to guide development and foster opportunities for rest and recreation, the regional population will benefit greatly from a coordinated strategy that links areas of open space to one another. A regional parks and open space plan is needed that identifies opportunities for shared investments in preservation and recreation.

Several significant open space areas in the METROCOG region cross multiple jurisdictions and are inter-regional in nature, such as the Saugatuck Forest Initiative, the Centennial Watershed State Forest, and various trail networks linking the region's open spaces with open space in adjacent towns.

A regional or state managed trail such as the Pequonnock River Trail (PRT) is another example of good open space planning. Not only can regional paths provide a contiguous space for wildlife to roam, it also supports alternative modes of transportation, as well as a space for recreation. Furthermore, because bike paths are contiguous, bicycle commuters prefer them to bike lanes or shoulders because they are efficient, direct and safe. Using memorandums of understanding or joint use agreements, towns can tap into existing trail systems by developing local connections and agreeing to maintenance assistance. In doing so, gaps of fragmented trails become well-aligned to create an integrated network of open space.



Rising sea levels will require greater land use infrastructure resiliency.

Image: The Nature Conservancy

4.4C RESILIENCY



Continue to assist communities in planning for coastal and inland flooding along local waterways and the Long Island Sound and develop a unified approach to responsible and resilient infrastructure networks, sustainable inland development, preservation, and wetlands restoration.

Sea levels within the Long Island Sound region have risen between six and 12 inches over the past 100 years and are anticipated to rise between two and four feet over the next 100 years (www.coastalresilience.org). Currently, the METROCOG region experiences severe coastal flooding once every five years on average and the frequency and impacts of flood and storm surge events will be exacerbated by sea level rise.

Coastal communities are the most threatened by flooding and they are also the most populous. There are several low lying neighborhoods in Bridgeport that are susceptible to flooding and these areas are disproportionately minority and low income. The conversion of vacation homes to year-round residences has also increased flood area populations in Fairfield and Stratford. Critical infrastructure is also threatened with wastewater facilities (Bridgeport/Fairfield/Stratford) and pump stations (Trumbull) located in flood hazard areas.

The region's coastal communities, Bridgeport, Fairfield, and Stratford, are already working to increase coastal resiliency and ensure long term sustainability of the coastal region.

A detailed, regional strategy is needed to mitigate flood impacts through a combination of infrastructure improvements to protect community assets and changes in land use and development to minimize potential impacts to property and infrastructure. Working together for improved stewardship of METROCOG's local waterways, wetlands and coastal areas will benefit all parties involved as stronger storms continue to threaten the region. This work will prove beneficial as the risk of hazardous storm damage is reduced by having coordinated approaches that value the ecosystem services of the region's natural infrastructure.

Hardening commuter transportation within the region and into the New York City area should be a key priority when approaching the resiliency of transportation. Bridges, passenger rail and roadways need to be able to endure more frequent and stronger storms. METROCOG should also work with the State DOT to identify strengths and weaknesses in the regional transportation network and begin to prioritize projects for enhancements.



Image: Josh Sikora

Twenty (20) percent of the City of Bridgeport's land area is within the 100-year floodplain.

This initiative should complement the Stratford Coastal Resilience Plan (financed by HUD) and the multi-region coastal resilience plan being developed for member communities of the South Central Regional Council of Governments and METROCOG that was funded by a grant from the National Fish and Wildlife Foundation.

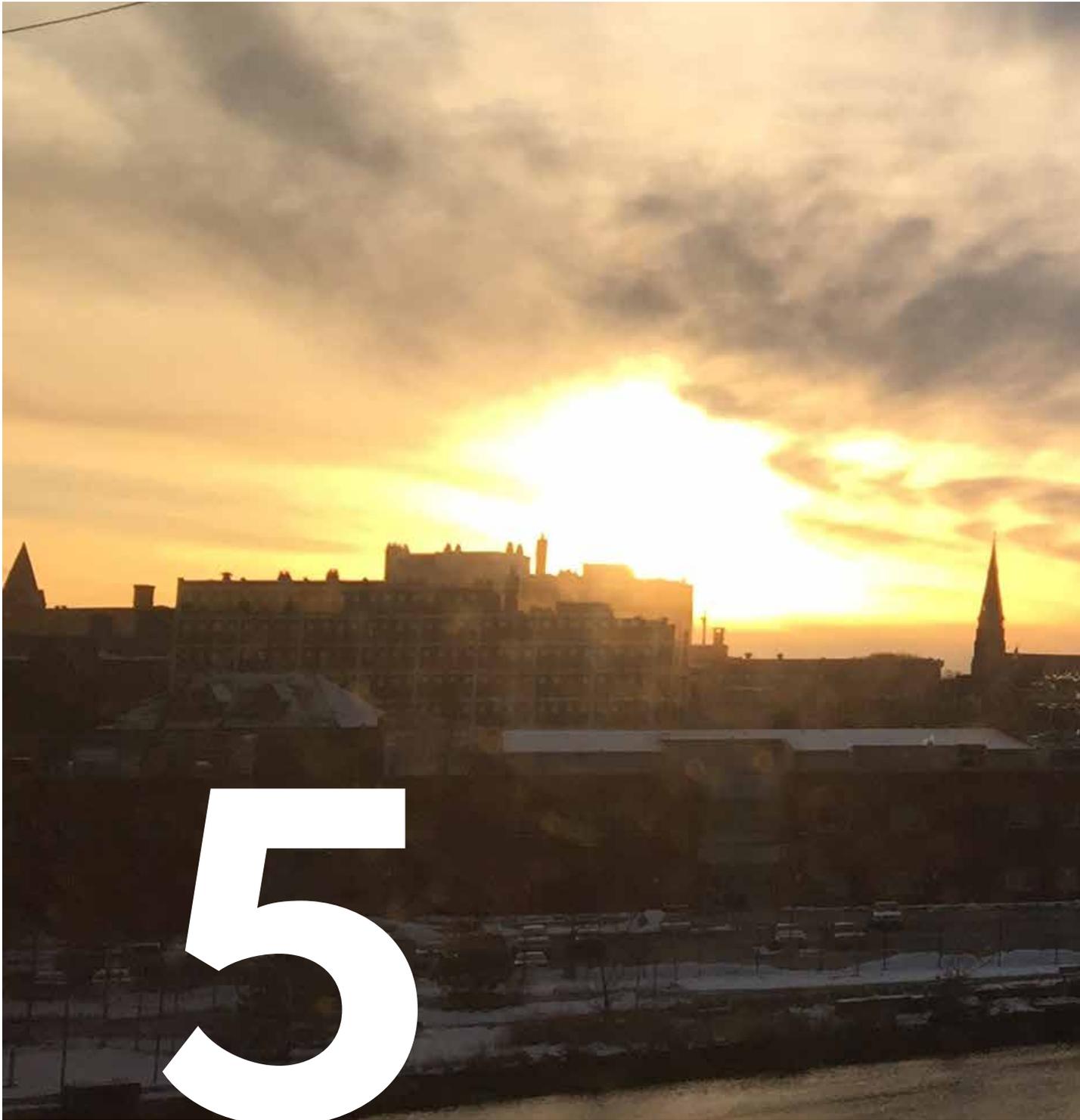
New York City is using a Sustainable Communities grant to implement resiliency strategies that may serve as a template for other communities of the Long Island Sound. This effort includes elements that could be adapted to the METROCOG region including infrastructure design standards and strategies to increase the resiliency of different neighborhood types. In developing a regional approach to this issue, METROCOG can position itself to compete for similar grant funding opportunities to assist with plan implementation.

Additional discussion of this topic is included in **Chapter 8: Natural Resources**.

CASE STUDY: FLOOD RESILIENCY ZONING CODE UPDATE

Bridgeport

Flood resiliency is a major issue for the City of Bridgeport as approximately 20 percent of the city's land area lies in the 100 year flood plain. To encourage flood resilient communities, the City of Bridgeport has recently incorporated flood resiliency standards into its zoning code. The new code requires that all development within the floodplain raise their first occupiable floor above the Design Flood Elevation (DFE), which is the Base Flood Elevation plus one foot freeboard. The purpose of this new standard is to ensure that buildings remain structurally sound and intact in the event of a flood event. Building height is also now measured from DFE elevation; with the maximum height allowance of five feet. Building street elevation design features that promote vibrant streetscape are also required to maximize visual connectivity between the sidewalk and elevated ground floor.



HOUSING & NEIGHBORHOODS

PRIORITIZE • DIVERSIFY





GOAL

Foster the development and revitalization of neighborhoods that can provide a wide range of housing options in areas served by transit and other essential infrastructure.

Housing and neighborhoods form the cornerstone of a community and the basis of resident quality of life. A diversity of home styles and types at a variety of price points is also integral to becoming a competitive region and attracting and retaining talent. The Region contains a variety of different neighborhood types - from dense urban neighborhoods with a blend of single family and multifamily units on a traditional grid pattern to curvilinear suburban neighborhoods composed of single family detached homes to rural and exurban homes on large lots in a scenic setting. The Plan celebrates this diversity, and recognizes that each of the six communities has their own unique character, priorities, and development ordinances.

At the same time, it is more important than ever to think holistically and work collectively to address the Region's housing challenges, such as better aligning transportation networks with housing development and addressing affordable housing requirements. Adopting a more regional approach to housing does not mean that all communities will "look the same" or communities will abandon their existing, cherished character. Each community has their own unique role in strengthening the Region. However, it is important to recognize that in the twenty-first century, challenges do not stop at municipal boundaries. The success and reputation of the Region's communities are intricately tied to one another and that communities must work together to solve common problems.

GUIDING PRINCIPLES

The policies and recommendations in this chapter align with “Reconnect One Region’s” guiding principles of Reconnected, Revitalized, and Resilient.



RECONNECT

Establishing a regional approach to affordable housing development helps coordinate intergovernmental efforts and create holistic solutions to a problem that does not stop at municipal boundaries.



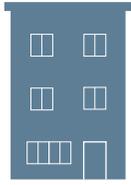
REVITALIZE

Transit-oriented residential development revitalizes underutilized neighborhoods and injects new investment into communities.



RESILIENCY

Protecting rural areas from development and utilizing sustainable design practices increases the Region’s resiliency against climate change and natural disasters.



82.5%

of all multifamily units are located in Bridgeport.

In 2040...



10%

of all the region's roads will be in gridlock during rush hour.



35%

more cars on the road.



Compared to other states, Connecticut ranks...

6th

in highest rental costs.

8th

in highest home values.

\$460,853

disparity in median home value between the community with the highest median value and the community with the lowest

KEY INFLUENCES

Several issues, influences, and challenges significantly shape regional housing policy and planning within the METROCOG Region. While other issues and topics certainly play a role, these four are deemed the most important and drive the heart of the plan and many of the recommendations presented later in this chapter. This section aims to provide background information and context for these issues; recommendations are included in the subsequent section.

HOUSING VARIETY

WHY IT MATTERS

A healthy mix of options will retain and attract a range of workers and families as well as ensure the ability for residents to remain within the community as they age and their housing needs change. Housing variety refers to both the type of housing (e.g. single family detached home, duplex, townhome, multi-family unit, etc.) as well as the tenure (owner-occupied or rental).

TENURE

The Region has a relatively healthy balance of owner-occupied and renter-occupied units, with 59.1% owner-occupied, 33.5% renter-occupied, and 7.4% vacant. However, owner-occupancy is much higher in the more suburban and rural communities, while rentals are primarily concentrated in the urban core.

Less than half of Bridgeport's housing stock is owner occupied (35.2%), compared to Stratford (74.1%), Fairfield (75.3%), Trumbull (83.0%), Easton (87.5%), and Monroe (89.2%). Bridgeport contains only 44.5% of the Region's households, but 73.8% of the Region's rental units.



Photo: 323 Fairfield at Bijou Square

TYPE

The Region's aggregate housing stock contains a balance of units of different types: 53.3% are single family detached homes, 6.9% single family attached homes, 10.6% are duplexes, and 28.9% are multi-family units. Similar to housing tenure, the more urban areas contain a lower percentage of single family detached housing units relative to suburban, exurban, and rural communities: Bridgeport (26.4%), Stratford (65.0%), Fairfield (79.3%), Monroe (85.4%), Trumbull (86.9%), and Easton (97.2%). Bridgeport contains only 44.5% of the Region's households, but 82.5% of the Region's multi-family units, 69.8% of all duplexes, and 47.9% of all townhomes/rowhomes.

On the whole, the Region has a fair balance of rentals vs. owner-occupied units and single family detached units vs. denser housing units. However, the location and concentration of these units varies widely. Location is important because the quality of, access to, and provision of public services is not consistent.

Changing attitudes and the aging of the Region are two factors that may shape housing needs moving forward. Between 2010 and 2018, all six communities are expected to age, with the Region's median age growing from 37.6 years to 38.6 years. Additionally, housing preferences are evolving among young professionals and young families regardless of income, with more opting to rent than in previous generations.

As housing needs change and the Region becomes more culturally and economically polycentric, it will be important for areas to identify locally-targeted incremental changes that can help adapt to shifts, where appropriate and in keeping with local character. It is not expected that rural areas will undertake any changes to housing composition.



HOUSING AFFORDABILITY

WHY IT MATTERS

Establishing a new regional model for affordable housing within mixed-income environments is integral to encourage racial and economic diversity and increase positive social and economic outcomes.

Connecticut has the eighth highest home values in the nation and the sixth highest rental costs, according to the Partnership for Strong Communities. High housing costs are a function of several variables, including a scarcity of developable land, proximity to New York City, development regulations that are often not conducive to increasing the supply of housing units, and reliance on property taxes to fund municipal operations. In FYE 2012, the average Connecticut community received 70.6% of its revenue from property taxes; property tax collections per capita in Connecticut are the highest in the northeastern U.S., at \$2,522 per capita in 2010, above the U.S. average of \$1,434 per capita.

A reliance on property taxes to fund municipal and education operations translates into a reluctance to support construction of any unit that does not pay for itself or increase net operational income with regards to services, education, and infrastructure.

Place is intricately tied to the quality and provision of service delivery, education, and infrastructure, and plays an important role in negative social and economic outcomes. The aforementioned affordability factors, along with other trends, have converged to create a landscape within Connecticut that is heavily stratified by municipality in terms of race, class, housing type and tenure, and quality of education. Connecticut, for example, has the highest education achievement gap in reading and math (comparing the gap in test scores between white and minority students) and ranks second in the nation in income inequality.

The Region is also an expensive place to live relative to other regions across the country. In 2015, the Region's estimated median home value is \$333,375 and a greater share of the Region's units are valued >\$750,000 (9.5%) than <\$150,000 (9.2%). At the individual community level, median values range widely: Bridgeport (\$205,581), Stratford (\$271,944), Trumbull (\$397,557), Monroe (\$404,861), Fairfield (\$576,995), and Easton (\$666,434).



8-30G

In an attempt to develop more affordable housing, particularly in urban and suburban areas, the State of Connecticut enacted the 8-30g statute in 1989, modeled on the State of Massachusetts's 40B statute. The law seeks to increase the amount of affordable housing by limiting the conditions under which towns may deny applications for such developments. Builders may appeal a denial in court based on claims that a city or town does not meet the 10% directed affordable housing stock, placing the burden on the town to prove to the State that the project's potential infringement upon the public interest outweighs the need for affordable housing, essentially overruling local zoning codes.

Currently, only 32 of the State's 169 cities meet the desired threshold of 10% or greater affordable housing units; the remainder are subject to lawsuits under 8-30g. Within the Region, only Bridgeport meets the State-threshold with 18.8% of housing units deemed affordable; communities below the threshold include Fairfield (2.2%), Easton (0.4%), Monroe (0.9%), Stratford (5.8%), and Trumbull (5.2%).

However, while 8-30g is rooted in good intentions the law has not produced the desired results and is problematic at the local level for several reasons, including:

- **Local character** – developments can be authorized that are out of scale and harmful to community aesthetics;
- **Infrastructure** – developments can be authorized that are incongruent with traffic patterns, long-range plans, and existing infrastructure;
- **Poor siting** – development can be authorized in rural or exurban communities that would be better suited in closer proximity to the urban core, where lower-income residents could have better access to jobs, services, and existing transportation infrastructure;
- **Greenfield development & sprawl** – development can be authorized in rural or exurban communities that convert greenfields into subdivisions or apartment complexes, and prevents smart, sound planning; and
- **Mathematical impossibility** – In some communities, the 10% threshold is virtually impossible to meet given existing build-out and the sheer volume of existing market rate units.

The Plan advocates for a more coordinated, regional approach to affordable housing development that encourages cooperation across borders and is better aligned with smart planning principles. For more information, please see the following section.



TRANSIT-ORIENTED DEVELOPMENT

WHY IT MATTERS

A closer alignment of public transportation infrastructure and residential areas will result in more healthy and accessible neighborhoods and a reduction in congestion and pollution.

Transit-oriented development (TOD) is a development pattern consisting of housing, office, retail, civic, and entertainment uses within a walkable environment near quality public transportation. Locations suitable for transit-oriented development typically include rail line stops, express bus stops, and bus rapid transit stops. TOD densities can vary widely, from small neighborhoods of townhomes in suburban or exurban areas to a large-scale, multi-story mixed-use development within urban areas.

At its core, TOD aims to reduce commute times, infrastructure costs, pollution, and congestion by aligning residential and commercial uses; facilitate business collaboration and co-location and economies of scale; create walkable communities that can support healthy lifestyles; and encourage more responsible stewardship of land.

Congestion is a serious problem within Southwestern Connecticut and transit-oriented development can play a strong role in increasing ridership of public transportation and reducing the number of vehicles on the road. Currently, the average resident living in the Region commutes an average of 57 minutes a day, and that number is expected to grow in the coming years. Between 2010 and 2040, the number of cars on the Region's roads is expected to increase by roughly 35%. By 2040, the State of Connecticut estimates that more than 10% of all of the Region's roads will be in gridlock during rush hour. The extension of public transportation infrastructure to existing residential areas combined with the addition of denser residential units near existing transit stops can help mitigate congestion, reduce air pollution, and increase happiness and quality of life for residents.

Transit-oriented development initiatives and projects are already underway within the METROCOG Region, although many more opportunities for new development exist. Because METROCOG is also the federally-designated receiver of transportation funds, it can play a critical role in further promoting development near existing and future transportation networks. Land use and transportation planning are intricately tied, and the Plan supports a coordinated approach to development.



RURAL CHARACTER & OPEN SPACE

WHY IT MATTERS

Rural areas contribute both environmentally and aesthetically to the Region's unique fabric, including providing protected open space, land for agriculture, permeable surface for stormwater mitigation, space for wildlife, and clean watersheds and drinking water.

The METROCOG Region contains a diversity of landscapes, ranging from dense urban districts to suburban neighborhoods to rural expanses. Over the past half-century, the region has decentralized and sprawled away from the core of the region, reducing open space, agricultural land, and rural character.

The region's currently rural areas, which include parts of Monroe and all of Easton, contribute both environmentally and aesthetically to the region's unique fabric, including providing protected open space, land for agriculture, permeable surface, space for wildlife, and clean watersheds and drinking water. Roughly half of Easton's and a quarter of Monroe's land is open space.

The Plan recognizes the importance of preserving and enhancing the region's rural character, protecting natural resources including drinking supply watersheds, and guarding it from incompatible development and sprawl. Rural areas should not become more like suburban, exurban, or urban areas; the Plan sees these areas as remaining distinct and unique and playing an important regional role.

GOAL

Foster the development and revitalization of neighborhoods that can provide a wide range of housing options in areas served by transit and other essential infrastructure.

OBJECTIVES

Priority

5.1

VARIETY & AFFORDABILITY

Maintain a healthy balance of housing types and tenures at a variety of price points across the region, acknowledging the need of each community to preserve its own local character.

1

5.2

RURAL CHARACTER

Protect the character and environmental quality of rural residential and agricultural areas and safeguard these areas from incompatible development.

1

5.3

TRANSIT-ORIENTED DEVELOPMENT

Leverage key nodes in the public transportation network to facilitate transit-oriented development of higher-density, mixed-use districts with residential units.

1

5.4

EXISTING NEIGHBORHOOD

Prioritize investment and development within established neighborhoods over the development of new neighborhoods in undeveloped areas.

2

5.5

SUSTAINABILITY

Encourage the use of sustainable and energy-efficient design and construction methods in new buildings and infrastructure.

3

Applying Strategies to the Region

Strategies are identified for each objective in this Plan. While each strategy can be used to make progress in attaining the related object, a given strategy may not be applicable to all areas of the region.

A symbol representing each of the character areas of the Land Use and Development Framework has been provided to indicate where a given strategy could be meaningfully applied within the region. The implementation of a given strategy should also be tailored to the needs and unique context of the local community.



Regional Center



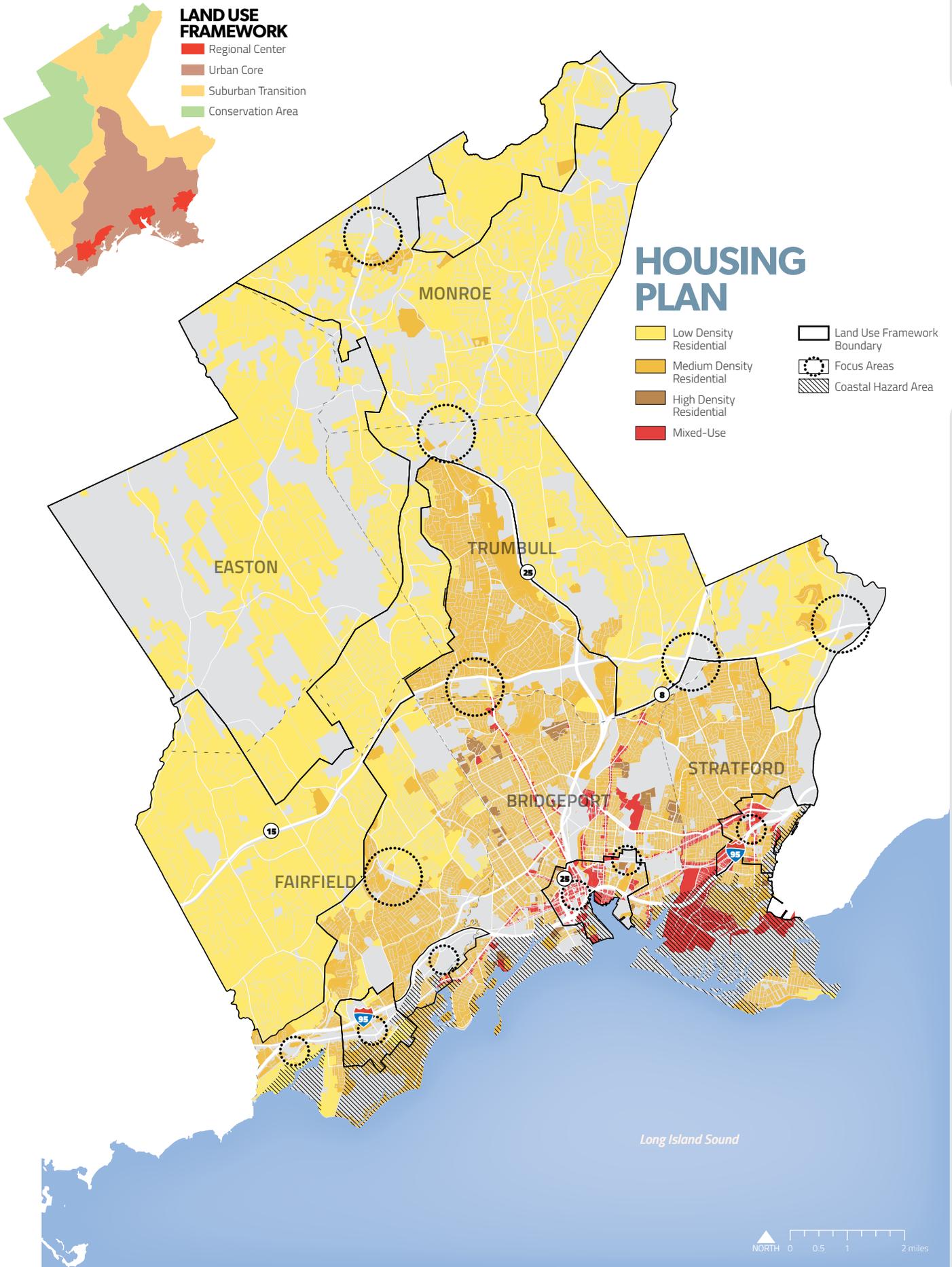
Urban



Suburban



Rural Conservation Area





5.1 VARIETY & AFFORDABILITY STRATEGIES

5.1A REGIONAL APPROACH TO AFFORDABLE HOUSING



Develop a new regional approach to affordable housing development that can be used as a model to enact changes to the state's affordable housing laws, recognizing both the value of affordable units within the region while also safeguarding incompatible areas from the impact of 8-30g.

While the State of Connecticut's 8-30g statute is well-intended, and the Plan advocates for diversity and housing affordability, the law has not produced the desired results and can harm local character, overwhelm existing infrastructure, and promote green-field development and sprawl. For some communities, obtaining the 10% threshold is a virtually unobtainable feat.

A more coordinated approach to affordable housing development is needed that moves away from a "one-size-fits-all" flat 10% requirement for every community and towards a more regional threshold that the six communities could meet collectively. Within such a model, each community within the region would likely have a different role instead of a flat 10% requirement for all. For example, it makes little sense to encourage dense housing in rural areas, removed from public transportation, social services, and employment opportunities. Instead, rural communities should support, through a variety of means, the construction of affordable housing in more suburban, urban, and central business district areas, with a focus on promoting a mixed-income environment. It is important to not concentrate all units within these areas, and to ensure that suburban areas provide an adequate level of affordable housing.

CASE STUDY

30 HAVEN

Reading, MA

The 30 Haven is a mixed-income, mixed-use development in Reading, MA. The attractive complex was built in a Smart Growth Zone adopted by the City of Reading and authorized by the State of Massachusetts, a program similar to Connecticut's Incentive Housing Zones (detailed in 5.5A below). Sited within Downtown Reading and near the commuter rail station, 30 Haven was built at 15% lower cost than similar buildings and the usage of modular technology led to a quicker development schedule and increased design sustainability. It contains 53 rental apartments (11 of which are affordable units), 22,000 square feet of commercial space, and underground parking for 78 vehicles. The development is a successful example of attractive, transit-oriented development that can utilize state incentives and provide affordable housing in a mixed-income environment.

Source: Partnership for Strong Communities, Daily Times Chronicle (MA)



Photo: 30 Haven

It is unlikely that the law will be substantially changed in the short-term. In the meantime, the Region's central business district, urban, and suburban areas should work to incrementally increase the stock of affordable housing, where appropriate, under the existing regime while ensuring that any new development is appropriate and of a high quality and safeguards against poor planning. By showing voluntary progress, an 8-30g development is less likely to be forced upon a community. Opportunities include:

- **Create Incentive Housing Zones.** HOMEConnecticut is a state program enacted in 2007 that provides incentives for communities to voluntarily support development of affordable housing and creation of Incentive Housing Zones (IHZ). IHZs are zoning overlays authorized by a municipality that permit developers to increase housing density in exchange for creating mixed-income housing. State funding incentives are provided throughout the timeline of evaluating and establishing such a zone, and include predevelopment funding, zone adoption grants, and building permit grants. Within the Region, Fairfield, Bridgeport, and Trumbull have all participated in some level in the program. In 2013, for example, Fairfield was awarded \$20,000 and developed a "Diversifying Fairfield's Housing Portfolio" Plan. That Plan advocated for establishment of an Incentive Housing Overlay Zone with design guidelines.
- **Secure a temporary moratorium.** The State's Department of Housing can issue moratoriums from 8-30g developments to communities who demonstrate substantial progress on new affordable housing units but remain under the 10% threshold. In 2014, for example, the Town of Ridgefield was given a four year moratorium for making significant progress, even though only 2.5% of the Town's units are deemed affordable. A moratorium for any of the Region's communities currently under the threshold could "buy time" to either (a) develop a more comprehensive strategy to move towards achieving the existing threshold or (b) proactively work with regional partners to lobby for changes to the law.

Over the longer term, the Region's communities should work with the State of Connecticut to re-invent existing 8-30g law and move towards a more regional approach to affordable housing development and thresholds.



5.1B AWARENESS



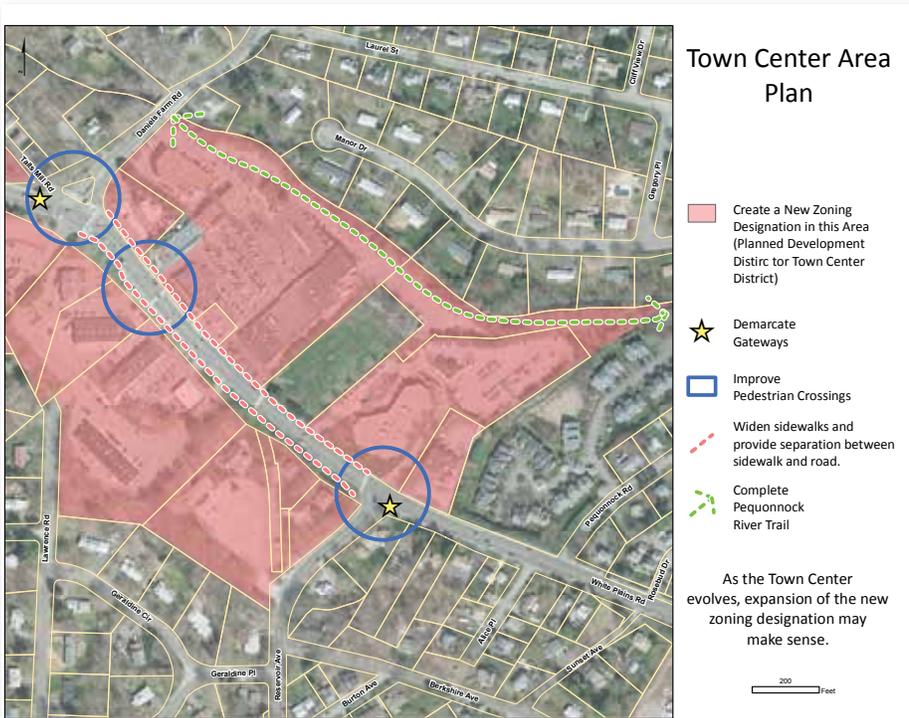
Publicize the impact of housing affordability and diversity on “brain drain,” access of young families to starter homes, and the ability of seniors to age in place within their current communities.

Housing affordability and diversity are often stigmatized, with aversion rooted in misconceptions. It’s time to change that.

“Affordable” housing extends beyond just subsidized units targeted at very low income earners and those living in poverty. Because Connecticut has some of the highest home values (#8) and rental costs (#6) in the nation, it can also be an unaffordable place for young professionals, young families, and senior citizens. For example, the region’s median home value in 2015 was estimated at \$333,375, nearly double the national median value of \$176,700. Even for those fully employed and earning a decent wage, the region remains unaffordable to many key demographics.

Similarly, increasing the diversity of the housing stock (smaller lots, multi-family development, etc.) could also increase affordability while aligning with the needs of these constituencies, who often need less space than traditional, multi-member families. Smaller does not necessarily mean of a lower quality or in a style that is out of character with the community. New developments should be in keeping with the character of the community, well-designed, and constructed with quality materials and finishes.

In the coming years, as communities continue to engage in public conversations on improving housing affordability and diversity at both a local and regional level, it is important to keep at the forefront of the debate that an unaffordable region prices out a range of individuals who could contribute greatly to the community, from fire fighters to nurses to recent college graduates, and reduces the region’s competitiveness for new talent.



In Trumbull's Plan of Conservation & Development, it advocates for a new zoning designation that can facilitate a mixed-use town center with upper floor residential.

5.1C AMEND REGULATIONS



Encourage and assist localities in amending local ordinances, policies, and plans to support development of a wider range of housing options, where applicable and consistent with local development goals.

Several decades ago, Bridgeport was the undisputed cultural, social, and intellectual center of the Region. While Bridgeport remains the heart of the Region, other urban and suburban communities have become centers of their own over the past several decades, constructing new neighborhoods and establishing or enhancing their own institutions, commercial areas, town centers, and more. Accordingly, the Region, its development patterns, and infrastructure continue to be more polycentric in nature. Access to rail and investments in quality bus transportation in urban and suburban areas will accelerate this trend. However, in some cases, zoning has not kept pace with these developments and capitalized on opportunities to become more walkable and transit-friendly, with a diversity of housing options.

Zoning codes and development ordinances are the legal teeth that regulate land use, intensity, building design, and more within communities. They help organize and structure the built environment in a manner that protects the health, safety, and welfare of residents and ensure a character that is in alignment with local objectives.

Existing zoning codes and ordinances, in some urban and suburban communities, prevent the feasible construction of housing units that could better diversify the region's stock, including condominiums, apartments, townhomes, rowhomes, and duplexes. Areas suitable for such higher-density (relative to each community) development are often within or near major commercial areas, downtowns/town centers, transit stops, and white-collar employment areas.

Regulations that could be evaluated to promote higher-density include:

- Types of housing permitted
- Permitting of/friendliness to mixed-use
- Minimum lot size
- Minimum setbacks
- Maximum Building height
- Density bonuses
- Types of garages
- Parking maximums

It is important to balance the diversification of the housing stock with preservation of local character. However, a litany of examples from across the nation show that it can be done tastefully. Efforts to adapt local regulations are already underway. METROCOG is working with several communities to develop a Transit-Oriented Development Ordinance that would support a greater mixture of land uses and densities within a designated transit area.

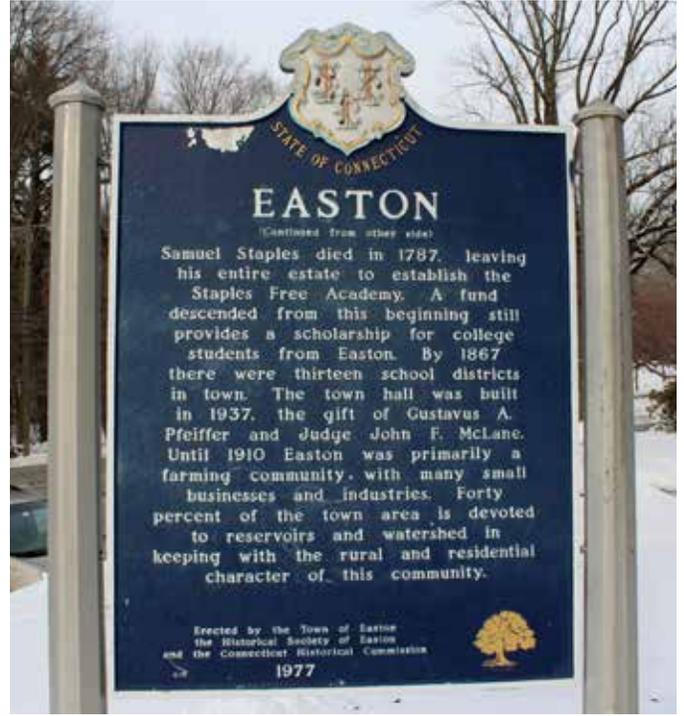


Photo: Ron Person

5.2 RURAL CHARACTER STRATEGIES

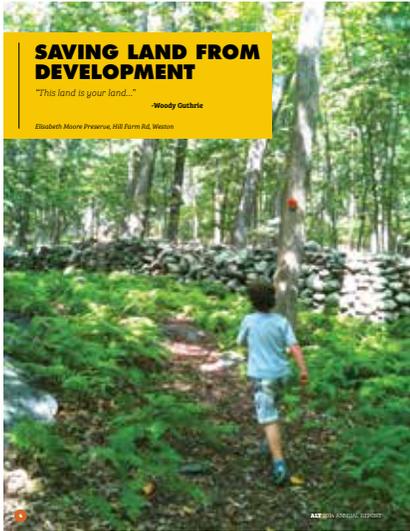
5.2A CRITICAL WATERSHEDS



Prevent development on critical watershed lands of any residential structure that exceeds one dwelling unit per two acres of "buildable" area (excluding wetlands), as detailed in the 2005-2010 State of Connecticut Conservation and Development Policies Plan.

The Region's rural areas contribute greatly to the Region, and are home to important watersheds linked to the purity of the Region's drinking water. A watershed is the area of land where all of the water that is under it or drains off of it goes into the same place. For example, water supply watersheds encompass nine-tenths of Easton's land and water resources and Easton's watersheds provide water to more than 300,000 people.

To ensure that rural areas are not overdeveloped and critical watershed land is not contaminated, the Plan supports rural communities using regulations that prevent residential development greater than one dwelling unit per two acres of buildable area. It is also recommended that the next State of Connecticut Conservation and Development Policies Plan include such language from the 2005-2010 State Plan that was omitted in the 2013-2018 State Plan. This will help assist rural communities safeguarding the landscape from incompatible 8-30g challenges and litigation.



SAVING LAND FROM DEVELOPMENT

"This land is your land..."

-Woody Guthrie

Elizabeth Moore Preserve, 103 Farm Rd, Weston

SUPPORT

If you are interested in learning more about preserving your land we can discuss the various preservation options with you, many of which come with federal income and estate tax benefits. To learn more visit our website and click on Donating Land or contact David Brown at (203) 351-1906.



SUSTAIN

We are excited to announce that in 2014 we created a Land Stewardship Endowment Fund to support maintenance and special land conservation projects on our properties. The Endowment Fund was started with donations from two generous members of the community and currently has a balance of \$92,725. We will continue to fundraise to increase the size of this fund to generate annual income to support our land stewardship efforts. Please contact us to learn more or to make a donation to the fund.

WHAT CAN I DO TO HELP?

If you are not a current member of Aspetuck Land Trust we have enclosed a pre-addressed envelope if you wish to make a donation. Or you can donate online by visiting www.aspetucklandtrust.org.

Donations are tax deductible and a receipt will be provided. Members receive a member book, a town map, and access to special events and member only hikes and the satisfaction that you are supporting YOUR local environment.

CONNECT

Become a Fan of Aspetuck Land Trust on Facebook. Or sign up on our website to receive our e-newsletter.

What Do We Look For When Preserving Open Space?

- Farms and larger parcels of 25 Plus Acres
- Land that creates connectivity opportunities and wildlife corridors. We are especially interested in expanding the 10 sq. mile Deep Brook Valley Forest block corridor.
- Priority habitats like soft coastlines, grasslands, riparian trout streams, and riparian corridors.
- Aesthetic, scenic and historic lands.

LEGACY GIFTS

Making a gift to Aspetuck Land Trust through a bequest in a will and/or a revocable living trust allows the donor to decide how his/her estate will be distributed and enables the donor to take advantage of tax-saving opportunities. Please consult your attorney or financial adviser.

2014 FINANCIAL HIGHLIGHTS

30% contributions income from individual, foundation grants and other sources was \$284,717. Expenses were \$210,815. Our general endowment fund earned 102% and increased to \$1,712,278. We received a bequest of \$79,083 which was deposited in our general endowment. These funds are used for land purchases and extraordinary expenses not covered by membership contributions. We received a \$40,000 donation to our Land Stewardship Endowment Fund which ended with a balance of \$92,725.

2014 in Review



Revenue	2014 Actual	2015 Budget
Donations from members	\$169,343	\$175,150
Foundation Grants	86,671	99,331
Restricted Grants	1,222	
Other	27,481	20,000
Total	\$284,717	\$294,481

Expenses	2014 Actual	2015 Budget
Property acquisition	\$7,646	\$2,409
Property maintenance and upgrades	64,855	88,540
Program implementation	88,208	111,420
Administrative Costs	50,126	51,894
Total	\$210,815	\$254,263

2014 Endowment Funds	Main Act	Restricted	Land Stewardship Fund
Beginning Balance	\$1,622,456	\$1,333,095	\$51,592
Donations	138,365	264	40,000
Investment Income	108,949		1,133
Expenses/Transfers	(51,992)	17,000	
Ending Balance	\$1,712,278	\$1,421,838	\$92,725

2014 Restricted Grants	Total Received	Transfers/Expenditures	Ending Balance
	\$30,550	(1,222)	
			\$29,328

Image: 2014 Annual Report, Aspetuck Land Trust

The Aspetuck Land Trust preserves more than 1,700 acres of land. Property owners can transfer the development rights to their property to the trust.

5.2B CONSERVATION EASEMENTS

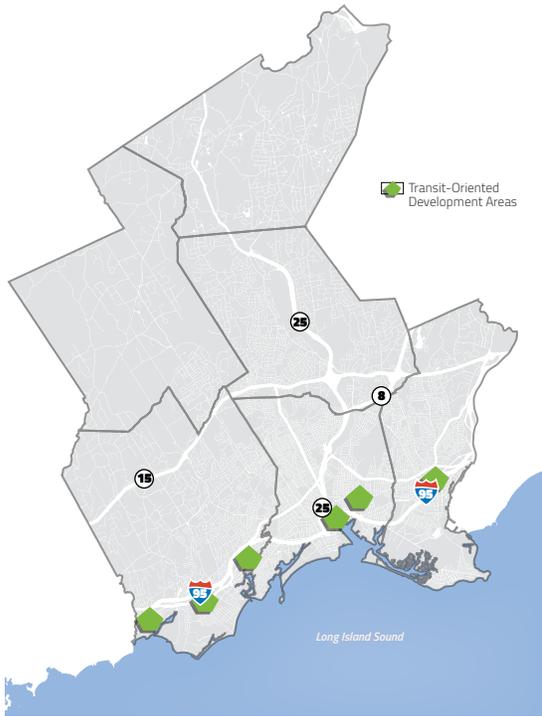


Support the usage of conservation easements that restrict development on forested, rural, environmentally-sensitive, and agricultural land.

A conservation easement is a voluntary legal agreement that limits certain types of uses or prevents development from taking place on a piece of property in perpetuity. For example, a rural residential property owner or a farmer could transfer the development rights of his/her property to a not-for-profit organization while still maintaining ownership. This ensures long-term preservation of the property's open space and ecology.

Conservation easements protect farmland and sensitive environmental features and reduce sprawl. Some conservation easement properties can also be suitable candidates for regional trails, parks, and open spaces. While easements are most useful in rural areas, select locations within urban and suburban areas could also be appropriate, particularly forested and environmentally sensitive land. Several land trusts or land conservancy organizations manage land within Southwestern Connecticut, including the Aspetuck Land Trust. The State of Connecticut has also established a goal to preserve 130,000 acres of farmland by purchasing development rights from property owners.

METROCOG should support local governments and residents in the utilization of conservation easements to protect open space and farmland. METROCOG should also act as a coordinating body between multiple conservation entities in order to streamline policies, identify recreation opportunities, identify land for purchase/transfer, and centralize properties into a GIS database.



Bridgeport



Stratford



Fairfield



Fairfield Southport

5.3 TRANSIT-ORIENTED DEVELOPMENT STRATEGIES

5.3A TOD ZONING



Encourage localities to amend zoning ordinances to include transit-oriented development (TOD) overlays or planned development districts that allow for increased residential densities (varying by community), facilitating easy access to regional rail and bus systems in key locations.

Transit-oriented development (TOD) is a development pattern consisting of housing, office, retail, civic, and entertainment uses within a walkable environment near quality public transportation. TOD areas can support diverse housing options for residents, reduce commutes, and facilitate healthy and walkable neighborhoods.

A special zoning overlay or planned development TOD district would create a regulatory environment conducive to a mixed-use, transit-oriented environment. The ideal locations of a TOD district or overlay would be proximate to the Region's five existing rail stations (Southport, Fairfield, Fairfield Metro, Bridgeport, and Stratford), as well as the proposed Barnum Station. The exact size or radius of such a district depends on a variety of local factors.

Some of the core regulatory elements of a TOD overlay or planned development district include:

- Greater density (e.g. a higher floor-area ratio)
- Permitting of multi family units, townhomes, cottage homes, or rowhouses
- Permitting a mix of uses within the area as well as mixed-use buildings
- Higher building heights
- Reduced or eliminated set-backs
- Reduced parking requirements
- Stronger design guidelines or requirements
- Pedestrian-oriented design
- Incorporation of public spaces, such as benches, plazas, and/or parklets

Several communities within the Metro COG Region are currently evaluating TOD overlays or planned development districts, and METROCOG is drafting a Model TOD Ordinance that is consistent with the character areas the Plan identifies. Each community with commuter rail access should assess opportunities to make their zoning more TOD-friendly, adapting the ordinance to reflect local priorities and concerns. While the development of bus rapid transit (BRT) is not expected within the region at this point, zoning for transit oriented development proximate to future BRT stops may be appropriate.

5.3B TRANSIT PARTNERSHIPS



Partner with MTA Metro North, Greater Bridgeport Transit, and the Bridgeport-Port Jefferson Steamboat Company to identify opportunities for new transit oriented developments and increased connectivity between transportation infrastructure and neighborhoods.

As the Region's development becomes more transit-oriented in the CBD, urban, and suburban areas, it will be important to work closely with existing transportation providers on multiple levels and to foster a sense of collaboration and partnership. Opportunities include:

- Identifying underutilized properties proximate to existing rail stops and express bus stops that could be suitable for new transit-oriented residential developments. More residences would be mutually beneficial on multiple levels: higher ridership for the transit provider, more residences and tax-revenue for the municipality, and reduced commute times and easier transportation access for residents.
- Identifying opportunities for expansion of existing rail or express bus service to existing dense residential areas that are currently underutilized or suitable for intensification.
- Coordinating any land use intensification around transportation infrastructure with the impacted transit provider and neighboring municipalities to ensure service delivery remains appropriate and efficient.
- Enhancing the pedestrian realm around rail stops and express bus stops to better link to surrounding neighborhoods and commercial areas.

5.3C METROCOG INCENTIVES



Utilize METROCOG resources, such as federal and state funding, grants, partnership opportunities, and staff expertise, to incentivize and/or stimulate mixed-use transit-oriented development in locations identified in the Future Land Use Map.

As the federally-designated transportation funding mechanism for the Region, the METROCOG's disbursement of federal funds can help incentivize or support mixed-use transit-oriented developments in suitable locations. METROCOG could leverage funds itself for identified TOD projects and infrastructure or encourage grant funding and other awards to be directed toward TOD-friendly actions at the local level.

Additionally, METROCOG's staff expertise can be an important resource for local communities as they evaluate opportunities for TOD, including identifying grant opportunities, writing letters of support for grants and affirming they are in line with regional priorities, drafting regulatory language, identifying potential development partners, and acting as a facilitating body for projects that span multiple jurisdictions.

5.3D MARKETING



Market the region's easy rail access to New York City, Stamford, and New Haven to residential developers and prospective residents, such as young professionals, empty nesters, and seniors.

By living near one of the region's five commuter rail stops, a resident can ride the train and arrive in New York City in less than 90 minutes, as well as access a variety of other regional destinations such as Stamford.

When speaking with developers, presenting at conferences, issuing marketing materials, and more, it is important to constantly reiterate the Region's great position within New England in an effort to attract residents or new residential development. Those who desire to live in a more affordable urban setting, within the greater New York City region will find the METROCOG Region attractive.

5.3E AFFORDABLE HOUSING IN MIXED-INCOME ENVIRONMENTS



Work with local officials and developers to identify incentives for the financing of affordable housing in mixed-income transit oriented development (TOD) areas.

Residents who occupy affordable or accessible housing are often reliant upon easy and direct access to local goods and services and public transit. Accessible housing that is located near and connected to transit centers by connected pedestrian systems enjoy reduced transportation costs, increased local and regional mobility, and greater access to a variety of commercial land uses. Transit-oriented development areas are highly desirable for the addition of affordable housing within a mixed-income environment, in a design and intensity that is in keeping with local character. Numerous academic studies show that for the best possible social and economic outcomes, affordable housing units should be blended in with market rate units, creating a mixed-income environment.

The creation of TOD overlays or planned development districts (5.3A) and Incentive Housing Zones (5.1A), could help facilitate the integration of some affordable housing within transit-oriented development areas by permitting increased density, positively affecting the development economics. Additionally, the METROCOG should work with communities and developers to identify gap-funding opportunities for the creation of affordable units.



5.4 EXISTING NEIGHBORHOODS STRATEGIES

5.4A INFILL DEVELOPMENT



Work with communities to identify and market brownfield, vacant, and underutilized sites within existing residential or mixed-use areas for infill development.

Within CBD and urban areas, the Region contains vacant and underutilized properties suitable for "infill development," including brownfields, which are formerly industrial properties that are contaminated from prior uses. Currently, the METROCOG is working to establish a centralized GIS database of all brownfield properties within the region to ensure better land use planning, identify redevelopment opportunities, and conduct spatial analysis.

Many of these sites are within traditional urban areas and are proximate to desirable uses, including established neighborhoods, commercial goods and services, and civic uses. The METROCOG should work with local communities to highlight infill sites for redevelopment and assist in securing state or federal funding for remediation of contaminated properties.

Prioritization should be given to properties near major public transportation infrastructure. In more suburban or rural areas, localities could also utilize incentives to steer developments towards more established areas and away from greenfield sites. By focusing new development inward where existing infrastructure is already located, the region can promote efficient and sustainable development, address environmental justice concerns, and create critical masses of activity in underutilized areas.



Image: Sean Marshall

The Kaufman Lofts in Downtown Kitchener, Ontario is an example of a successful adaptive reuse project. Formerly a shoe factory, it is now lofts.

5.4B ADAPTIVE REUSE



Support the adaptive reuse of historic and other existing structures for residential uses.

The reuse of existing buildings can serve to both meet a specific market demand and revitalize underutilized properties. Desirable buildings for reuse typically include formerly commercial, industrial, or agricultural buildings with historic value or character, although formerly residential uses may be suitable as well. The Two Roads Brewery, located in the former U.S. Baird Corporation Headquarters building in Stratford, is an example of a successful adaptive reuse project within the region.

Prioritizing revitalization and reuse over demolition can protect distinct buildings that add to the character and fabric of the Region, as well as prevent greenfield growth.

Local communities can pursue federal or state funding or offer local incentives that will support the adaptive reuse of spaces or vacant buildings for residential, commercial, and arts-related uses. The adoption of an “adaptive reuse” ordinance, aligning and updating regulations to ensure ease of adaptive reuse, may also be desirable. It may be appropriate for METROCOG, in some cases, to lend either financial or staff support to major adaptive re-use projects when it aligns with broader regional objectives, especially relating to transit-oriented development



Low Impact Development & Cluster Development preserves open spaces and natural preserves.

5.5 SUSTAINABILITY STRATEGIES

5.5A CLUSTERING & LOW IMPACT DEVELOPMENT



Utilize clustering and low impact development principles in new developments and subdivisions, where applicable.

In rural and suburban areas, new residential development may encroach on environmentally sensitive areas. Subdivision regulations and design review can be utilized at the local level to provide developers with the flexibility to cluster residential development in certain portions of an undeveloped site, thereby leaving larger contiguous areas of stream buffers, wetlands, tree, and other assets undisturbed. The overall housing density remains the same, but the site design allows for larger areas of common open space that can be used as neighborhood or community parkland.

This approach to development also provides for naturalized stormwater management while minimizing the amount of roadway and utility infrastructure needed to serve a given development.

Similarly, in more urban and suburban areas that are currently built-out, redevelopment of underutilized sites should carefully integrate any existing natural features into the new development, such as trees or streams.



Green home design, including usage of native landscaping, can reduce energy usage impacts on the environment.

5.5B GREEN HOME DESIGN



Work with communities and developers to encourage development in line with national/international standards on green building design.

The design of a home, including its orientation, location, and building materials, significantly impact its energy consumption and impact on the environment. The utilization of sustainable home design practices can help reduce energy usage and lessen negative externalities. Examples of green building design include:

- Daylighting, or siting the building to take advantage of natural light
- Locally-sourced materials, such as lumber
- Low-flow water fixtures
- Energy efficient appliances
- Native landscaping
- On-site stormwater management

Local communities should evaluate whether their codes and regulations are friendly towards green building design and consider altering ordinances to better accommodate sustainable practices for residential construction. Additionally, communities should assess whether incentives, such as tax breaks, grants or loans, and advantages in processing approvals, should be given that could encourage green design.



5.5C STORMWATER MANAGEMENT



Work with communities to evaluate local incentives or taxes to reduce the amount of impervious surface.

Impervious surfaces - including homes, apartment buildings, driveways, sidewalks, parking lots - are hard surfaces that cannot absorb rainwater and instead disperse it elsewhere. This can lead to flooding, reduced water quality, streamflow issues, and pollutant run-off into Long Island Sound. For example, surface water runoff from roofs, pavement, and lawns contain oils, grease, sediment, lawn chemicals, salt, and other pollutants that have a negative impact on water quality. Impervious surfaces can create stormwater management challenges not only at the site-level, but for public infrastructure in general, especially during major weather events.

Local governments should consider working with property owners (for both existing and proposed developments) to identify strategies to add detention and retention capacity to their existing sites, leveraging Stormwater Best Management Practices and Green Infrastructure techniques when appropriate and possible. In some cases, communities may decide to either require or incentivize usage of tools.

Examples include:

- Permeable pavement;
- Native and naturalized landscaping; and
- Bio-retention.



TRANSPORTATION & MOBILITY

IMPROVE EFFICIENCY • EXPAND OPTIONS



Photo: Susan Rubinsky



GOAL

Maintain and modernize the Region's established regional transportation network while improving access to all modes of transportation including transit users, bicyclists, and pedestrians.

The Region's health and competitiveness hinges on the provision of quality transportation options. Efficient roadways deliver drivers safely to their destination and act as arteries of commerce, linking local buyers and sellers together while also providing the infrastructure to distribute goods nationwide. Walkers and cyclists bring energy and vitality to a community, and pedestrian and bike amenities increase accessibility and the attractiveness of new investment. Convenient public transit reduces roadway congestion and transports riders at a low cost to important destinations. Air, rail, and water transportation transport both goods and passengers, and act as vital links to other cities, regions, states, and countries.

Taken together, a well-integrated network of quality transportation options—driving, biking, walking, riding the bus or train, flying, and boating—increases overall quality of life and the attractiveness of new investment. Easy access to school, to work, to home, and to entertainment are some of the most important factors in choosing where to live, and excellent transportation infrastructure is a critical piece in retaining, growing, and attracting businesses.

Highways, bus routes, railroads, and trails do not stop at municipal boundaries. Therefore, it is important for the region to work together in a coordinated fashion and to identify unified investments and priorities that can reduce congestion, improve access to public transportation, increase walkability, and strengthen roadway safety.

This chapter details many objectives and recommendations that can help the region maintain and modernize its established transportation network while improving access to all modes of transportation including transit users, bicyclists, and pedestrians. The chapter is organized into three main sections:

- *Key Influences* highlight some of the most important influences and challenges facing the region's transportation network and provide the necessary context for the chapter's recommendations.
- *Goals, Objectives, & Strategies* set the vision for the Region and provide planning direction and key policy actions, as well as supporting information integral to achieving the Plan's recommendations.
- The *Action Matrix* collates all of the Goals, Objectives, and Strategies into an actionable table and establishes priorities and actions by planning area type.

GUIDING PRINCIPLES

The policies and recommendations in this chapter align with "Reconnect One Region's" guiding principles of Reconnect, Revitalize, and Resiliency.



RECONNECT

New trails, better public transportation, and coordinated roadway investments will enhance connectivity between communities.



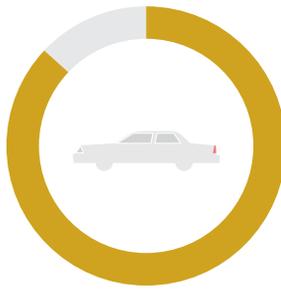
REVITALIZE

Targeted investments in existing infrastructure and a focus on transit oriented development can help spur economic growth in currently underutilized areas and increase economic activity.

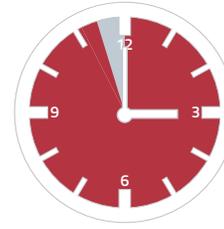


RESILIENCY

Smarter, transit-oriented land use patterns, enhanced public transportation services, and increased walkability and bikeability will create system redundancies and lessen negative environmental impacts.



87%
of the region's residents
drive to work



57 minutes
is the average daily commute
time for a METROCOG resident.

Between 2010 and 2040...



12.7%
increase in number of
daily vehicle trips

\$47.8 Billion

is the annual cost of traffic delays in the U.S.

KEY INFLUENCES

Several issues, influences, and challenges significantly shape regional transportation policy and planning within the METROCOG Region. While other issues and topics certainly play a role, these are deemed the most important and drive the heart of the plan and many of the recommendations presented later in this chapter. This section aims to provide background information and context for these issues; recommendations are included in the subsequent section.

CONGESTION

WHY IT MATTERS

Lower levels of roadway congestion can improve the quality of life and health of commuters and improve the movement of goods from Point A to Point B.

Over reliance on automobiles as the primary method of transportation, as well as land use patterns that encourage sprawl, are some of the greatest challenges facing the region.

Numerous studies show that long, congested commutes are one of the things that make Americans the unhappiest. Long commutes are associated with higher rates of obesity, divorce, stress, and dissatisfaction. While commute times are often a function of distance, in many cases, the sheer volume of cars on the road within Southwest Connecticut can make traveling even a short distance a very long trip.

Congestion also negatively impacts economic development. It can discourage businesses from locating within the region, knowing that it will take longer to move goods and provide services, as well as make it more difficult to attract and retain talented workers who would prefer to live in a less-congested Region. Key challenges include:

- **Spatial mismatch & sprawl.** Currently, the region's residents and workforce are spatially mismatched. This is extremely common in metropolitan areas, but can lead to heightened travel times and congestion. The majority of the region's employed residents work outside of the region and a majority of the region's jobs are filled by commuters from outside of the region. In both cases, roughly half travel more than 10 miles each way. Roughly 1 in 10 residents travels greater than 25 miles and 1 in 15 commutes greater than 50 miles.



- **Negative trend line.** Based on modeling conducted by the State, by 2040, the number of drivers and trips by automobile are expected to increase significantly, putting heavy strain on the region's already congested roadways. The State estimates that between 2010 and 2040, the number of vehicle trips will increase by 12.7%, from 1.86 million trips to 2.10 million trips daily. Additionally, the number of trips made by individuals driving alone is also projected to grow, from 65.5% of all trips in 2010 to 70.2% in 2040. By 2040, more than 10% of all of the Region's roadways will be in gridlock during rush hour.
 - **Automobile reliance.** Heavy reliance on the automobile as a primary means of transportation strains roadways and creates congestion. Only 1 in 20 of the region's residents uses public transportation to get to work, and only 3.1% walk or bike. It is estimated that 96.6% of all 1.86 million daily trips within the Region involve automobiles.
 - **Higher than average travel times.** The average commute time of a METROCOG resident is 28.3 minutes each way, totaling 56.6 minutes round-trip. This is higher than both national (50.8 minutes) and state (49.4) averages. Nearly 20% of the Region's residents spend 1.5 hours or more commuting each day, and collectively, the average Greater Bridgeport resident spends 10.2 days each year commuting to work.
- Solutions to reduce roadway congestion must be multi-faceted and comprehensive. The Plan supports targeted improvements to the existing roadway network that can increase efficiency, making public transportation a more reliable and attractive option for residents, and encouraging land use patterns that co-locate different uses and reduce commute times.



INFRASTRUCTURE & ECONOMIC COMPETITIVENESS

WHY IT MATTERS

A network of efficient, high-quality, and safe transportation infrastructure makes the Region more marketable and attractive for private investment and job growth.

Transportation infrastructure supports more than the movement of people from one point to another, it is intricately linked to a region's economic health and competitiveness, and it is important to view transportation investments through that lens as well. Infrastructure that is well-maintained and efficient is a boon for the region, while antiquated, deteriorating, or inefficient infrastructure can cost businesses both productivity and profit. For example, the Federal Highway Administration estimates that the country's highway congestion causes more than 243 million hours of delays each year, costing more than \$7.8 billion per year.

The region has many existing transportation assets, including more than 1,200 miles of roads, five commuter rail stations, passenger ferry service, freight rail lines, nineteen fixed-bus routes originating out of a centralized bus terminal in Bridgeport, the Sikorsky Memorial Airport, and Bridgeport Harbor. In addition to identifying new transportation options that can increase the economic vitality of the region, support must be given to continual maintenance and upgrades to existing infrastructure, both public and private, that can support growth moving forward.

TRANSIT USAGE

WHY IT MATTERS

Making public transit an attractive and reliable option for residents and workers can reduce congestion, lower household costs, and increase market support for transit-oriented development.

Over the past several years, public transit ridership has increased significantly. Both Amtrak, the Metro North New Haven Line, and Greater Bridgeport Transit (GBT) saw record ridership levels in 2013. The City of Bridgeport is currently working with partners to construct a new train station in East Bridgeport. At the same time, however, public transportation usage within the Region remains low on the whole. It is estimated by the U.S. Census Bureau that only 5.2% of the Region's residents (that are employed) use public transportation to get to work. Out of all trips taken within the Region, only 3.4% of trips do not use the automobile.



While public transportation usage is increasing, automobile reliance continues. The Connecticut Department of Transportation predicts that the total number of trips made using automobiles and the share of total vehicle trips made with an automobile will rise between 2010 and 2040. Increases in the utilization of public transportation are likely being outpaced by a simultaneous increase in new residents and workers in the region primarily using automobiles.

Growing ridership on public transportation is also adding strain to a system that, generally speaking, is already stressed. Service delivery delays and overcrowding have mixed with increased wear-and-tear on infrastructure for many providers. Limited federal, state, and local funding also presents challenges for service expansion and delivery.

The Region faces two interrelated challenges: (1) transit usage remains relatively low and is not seen as a viable option for many residents, and (2) transit infrastructure, in some cases, is increasingly strained with recent increases in ridership. If the Region is to increase transit usage, a variety of improvements must be made that can increase its desirability; in order to make infrastructure improvements more economically feasible, transit usage likely must increase. Moving forward, a balance between the two must be established that can create a critical mass of ridership and investment.

GOALS

Maintain and modernize the Region’s established regional transportation network while improving access to all modes of transportation including transit users, bicyclists, and pedestrians.

OBJECTIVES Priority

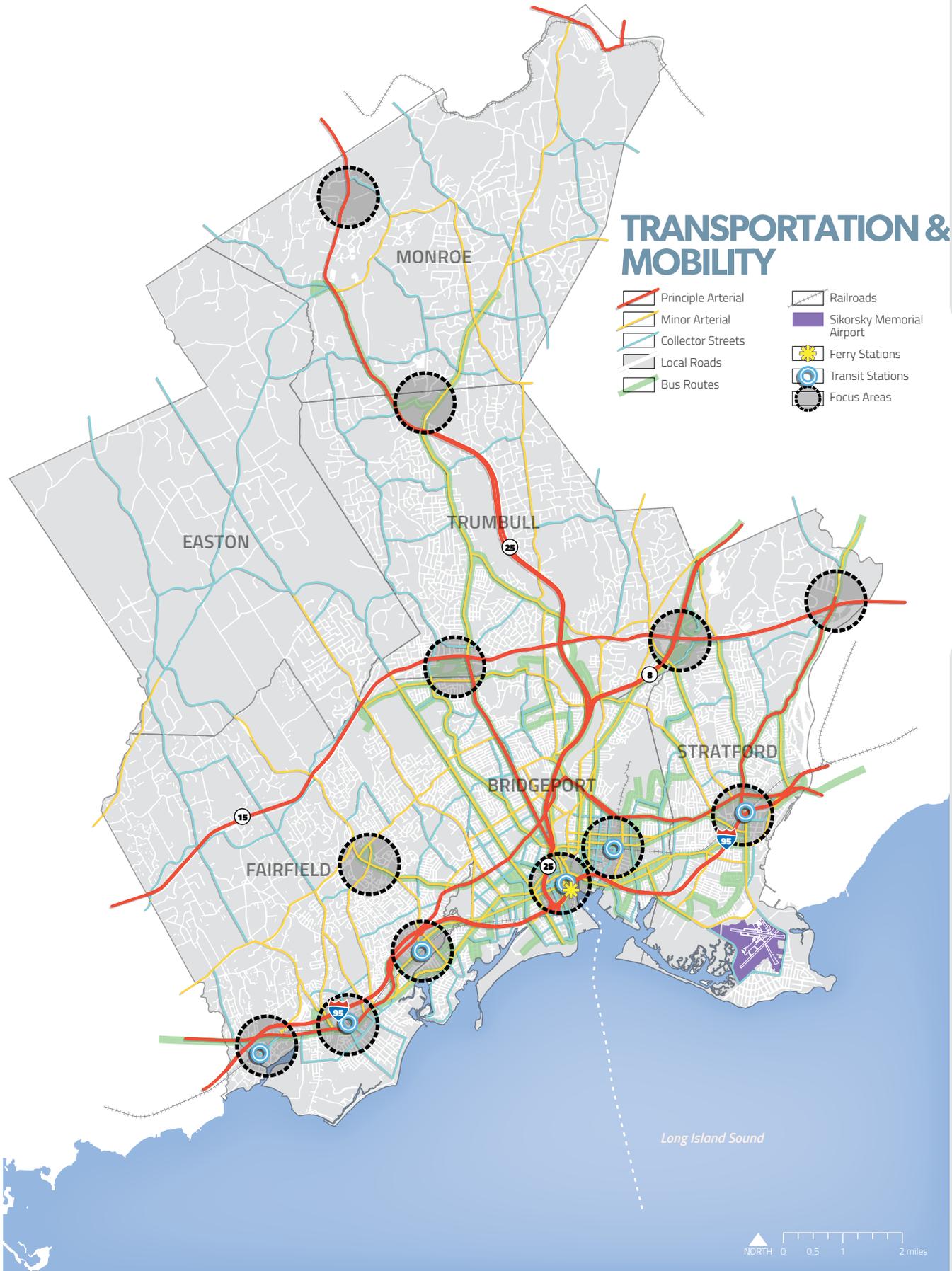
<p>6.1 CONGESTION MITIGATION</p> <p>Work to reduce roadway congestion, especially along I-95, Route 15, Route 8, Route 25, and other important regional roadways.</p>	<div style="background-color: #cccccc; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">1</div>
<p>6.2 TRANSIT USAGE</p> <p>Balance public transit ridership and coverage goals and increase transit usage by making it a safe, reliable, and efficient method of transportation for any need.</p>	<div style="background-color: #cccccc; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">1</div>
<p>6.3 ECONOMIC COMPETITIVENESS</p> <p>Recognize the connection between safe and efficient transportation infrastructure and economic growth, and support major investments that can strengthen the economic competitiveness of the Region.</p>	<div style="background-color: #cccccc; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">1</div>
<p>6.4 TRANSIT-ORIENTED DEVELOPMENT (TOD)</p> <p>Leverage key transit nodes in existing downtowns and town centers to create walkable, high-density, mixed-use districts that can serve as “transit hubs” for different transportation networks.</p>	<div style="background-color: #cccccc; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">2</div>
<p>6.5 EQUITY</p> <p>Ensure that transportation infrastructure provides access to essential services and is accessible to all, including low-income communities and those with disabilities.</p>	<div style="background-color: #cccccc; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">2</div>
<p>6.6 WALKABILITY & BIKEABILITY</p> <p>Leverage key transit nodes in existing downtowns and town centers to create walkable, high-density, mixed-use districts that can serve as “transit hubs” for different transportation networks.</p>	<div style="background-color: #cccccc; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;">2</div>

Applying Strategies to the Region

Strategies are identified for each objective in this Plan. While each strategy can be used to make progress in attaining the related object, a given strategy may not be applicable to all areas of the region.

A symbol representing each of the character areas of the Land Use and Development Framework has been provided to indicate where a given strategy could be meaningfully applied within the region. The implementation of a given strategy should also be tailored to the needs and unique context of the local community.

-  Regional Center
-  Urban
-  Suburban
-  Rural Conservation Area





The State of Connecticut is currently evaluating the usage of congestion pricing to reduce highway congestion.

6.1 CONGESTION MITIGATION STRATEGIES

6.1A CTDOT & I-95



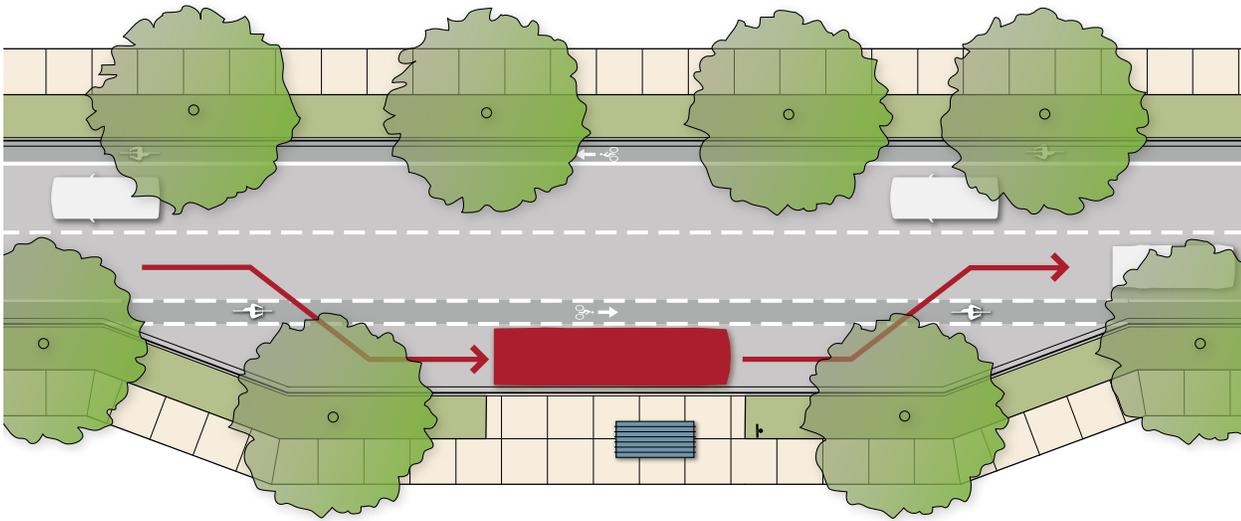
Coordinate and cooperate with CTDOT to evaluate the need for highway widening, congestion pricing, and/or the establishment HOV lanes to encourage carpooling on I-95.

The Connecticut Department of Transportation (CTDOT) estimates that 134,900 vehicles use the stretch of I-95 passing through the METROCOG Region daily. It is Connecticut's most congested corridor, with weekday morning and evening rush hour congestion lasting over four hours. Travel speed data shows that within the Bridgeport-Stamford area, the slowest speeds are between Darien and Bridgeport.

Based on existing trends, I-95 congestion is expected to get worse, as CTDOT estimates that daily traffic will increase to 182,000 vehicles, a 35% increase. While the road falls under the jurisdiction of the State of Connecticut, its flow and efficiency have significant system-wide transportation impacts on the region's six local communities.

The State is currently conducting a study to evaluate options for improving traffic flow on I-95. Some of the policy options the study is evaluating include highway infrastructure improvements, congestion pricing, and electronic tolling. Congestion pricing includes the establishment of an electronically-tolled, special lane for drivers opting to pay for express service, allowing drivers a choice. Studies show that managed lanes are effective at reducing congestion on the highways where they are used – both in the express lanes and in the regular or free lanes.

The METROCOG Region should continue to provide input to the State of Connecticut throughout the duration of the study to communicate any local concerns that may arise. The region should support any reasonable option deemed appropriate by the study, recognizing that the best policy for reducing road congestion is to increase the usage and reliability of the region's public transportation options.



Bus turn-outs can reduce the potential for rear-end collisions and increase the efficiency of traffic flow.

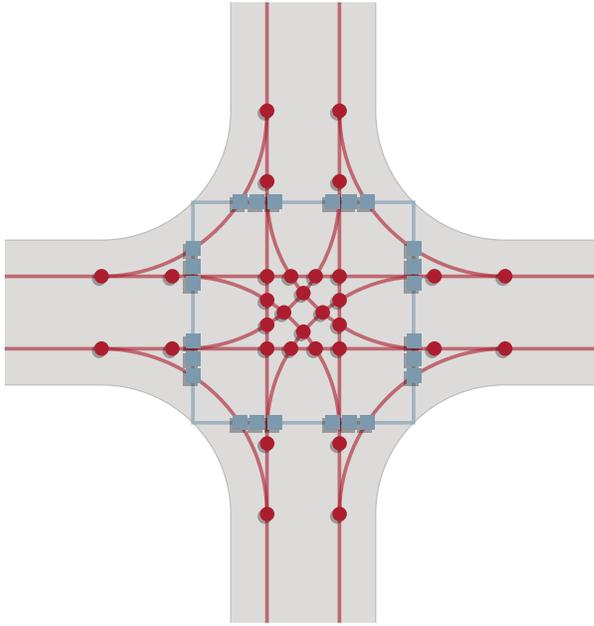
6.1B CIRCULATION IMPROVEMENTS



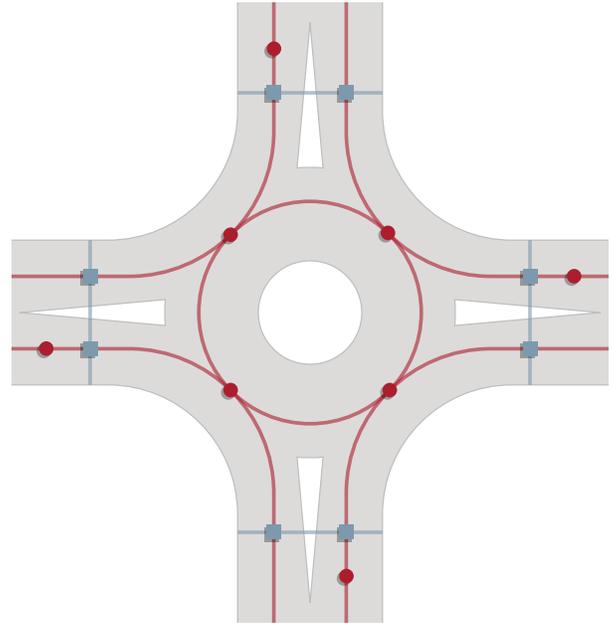
Encourage and support strategic circulation improvements that can reduce local roadway inefficiencies, such as providing cross access easements, adding bus turnouts, implementing roundabouts, and adding/consolidating turn lanes.

Strategic circulation improvements to both public right-of-ways and private properties can help improve traffic flow along local roadways and reduce incidences of traffic accidents. Examples of improvements that can be made at the local level are detailed below. While these improvements can appear relatively small, they can have a significant impact on problematic roadways when combined with other improvements.

- Bus Turnouts.** Bus turn-outs are special pull-off areas for buses adjacent to bus stops. They require the curb to be setback to bring the bus vehicle out of the flow of traffic and should only be used at mid-block. Bus turnouts do not block a travel lane during passenger loading/unloading and reduce the potential for rear-end collisions by allowing buses to turn out of the travel lane before decelerating ahead of the bus stop. However, bus turnouts typically have higher construction costs and they rely on otherwise un-utilized pavement space for deceleration and acceleration. Working with Greater Bridgeport Transit (GBT) and local communities, METROCOG should evaluate opportunities for bus turnouts along bus routes traveling on important regional roadways.
- Intersection Alignment Reconfiguration.** Unaligned intersections can result in potentially hazardous movements for vehicles, pedestrians, and cyclists. Opportunities for alignment or reconfiguration should be identified in order to accomplish one or more of the following goals: (1) directly align side streets that intersect a collector or arterial; (2) create perpendicular intersections that enhance visibility and safety; (3) consolidate the number of roadway segments intersecting at or near one location; (4) consolidate the number of roadway segments intersecting at or near one location; and (5) increase the spacing between intersections that cannot be consolidated.



Traditional Intersection Conflict Points
32 vehicle-to-vehicle, 24 vehicle-to-pedestrian



Traffic Circle Conflict Points
8 vehicle-to-vehicle, 8 vehicle-to-pedestrian

- **Cross-Access Easements.**

Developments are often separated from one another by fencing or landscaping, requiring each development to have its own curb cut. Providing cross-access between adjacent parking areas allows motorists to avoid entering street traffic in order to access nearby destinations. This results in safer roadway operations and enhanced access to local uses. It is also an important strategy in implementing curb cut consolidations. Where applicable, cross-access agreements should be facilitated and communities should consider requiring or incentivizing them in new development.

- **Traffic Circles/Roundabouts.**

Traffic circles are an effective way of managing traffic flow and improving safety at street intersections. Traffic circles can improve intersection traffic capacity by up to 30 percent and reduce injuries and crashes by up to 90 percent by lowering conflict points. They also reduce noise, emissions, and maintenance, and allow for the removal of signals and related technologies. Several communities within the Region are evaluating the opportunity for roundabouts. For example, METROCOG and Monroe are working on constructing a roundabout at the intersection of Route 110 and Route 111 to replace the current T-intersection.

Traffic circles should be considered at major intersections, though detailed analysis is needed to determine the viability at each location. Important considerations regarding the installation of traffic circles include: (1) traffic volumes of intersecting streets and the number of lanes necessary to accommodate that flow; (2) availability of land to accommodate the traffic circle; (3) education as traffic circles are introduced for the first time; (4) adjacent land uses and the types of traffic they generate (i.e. large trucks serving an industrial area); (5) coordination of signals in other areas of the network to manage flow into the traffic circle; and (6) bike lane access through use of ramps on to the sidewalk.



Your Commuter Connection

Free commuter services from the Connecticut DOT

- 1 [Research commuting options](#) and resources that work best for you on CTRides.com
- 2 [Register for commuter rewards](#) to start tracking your commuting
- 3 [Start tracking green trips and get rewards](#) to enjoy the benefits of the NuRide program



The CT Rides Program encourages shared transportation and can help reduce roadway congestion.

6.1C CT RIDES



Encourage business and resident participation in the “CT Rides” program.

The Connecticut Department of Transportation (CTDOT)’s CT Rides program encourages “greener” commuting options and helps commuters identify the best way to get to work or school, including through carpooling, vanpooling, transit, biking/walking, and telecommuting. Tools include a user-friendly comprehensive website, customer service assistance on schedules and routes, customized trip planning, and trial ride passes. Users are able to develop a free personalized plan to guide them in their commuting.

The CT Rides’ “NuRide” rewards program tracks a user’s commuting progress and awards points, redeemable for restaurant coupons, retailer discounts, and tickets to shows and attractions. Other incentives and programming may exist in the private sector to support employees in their daily commuting.

METROCOG should promote the usage of the CTRides program to local businesses and governments through an outreach campaign and literature that can educate residents and workers on the economic benefits of commuting.

6.1D PUBLIC TRANSPORTATION



Increase the attractiveness of utilizing public transportation, including bus, ferry, and rail, for daily commuting.

The utilization of public transportation is integral to reducing roadway congestion. Please see section Objective 6.2 and strategies 6.2A, 6.2B, 6.2C, 6.2D, 6.2E for detailed recommendations.

6.2 TRANSIT USAGE STRATEGIES

6.2A BUS RAPID TRANSIT



Support bus rapid transit or a similar service within the east-west corridor between (a) the Stratford rail station and Fairfield Metro Center rail station, (b) the Route 8 corridor between Shelton-Derby rail station and Downtown Bridgeport, and (c) the Route 25 corridor between Danbury and Downtown Bridgeport.

METROCOG is currently conducting an “Alternative Modes Study” to develop recommendations and concepts for a public transit connection between the region’s rail stations and TOD districts. The study is evaluating existing routes and services to determine possibilities for new transportation options that optimize connectivity and efficiency. Corridors currently being evaluated by this special study include the east-west corridor between the Stratford rail station and Fairfield Metro Center rail station, the Route 8 corridor between the Shelton-Derby rail station and Downtown Bridgeport, and the Route 25 corridor between Danbury and Downtown Bridgeport.

One transportation option that is being studied is bus rapid transit (BRT). BRT is a highly efficient form of transit that provides many of the service characteristics of rail transit, but with much less cost and greater flexibility. Some key aspects of BRT include:

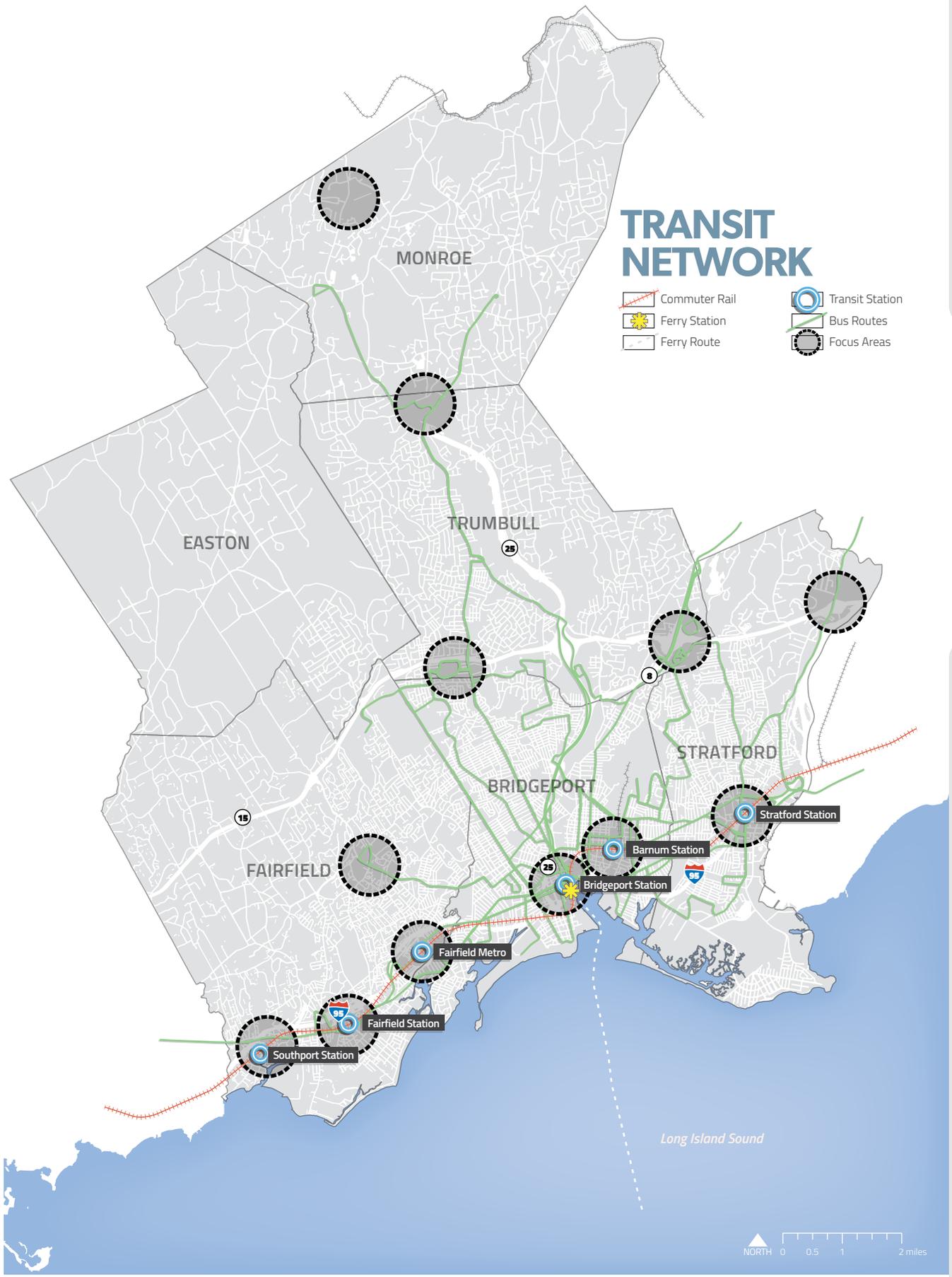
- Stations spaced roughly every 0.5 miles or more
- Dedicated bus lanes
- Bus stations with raised platforms and distinctive, quality shelters
- Signal technologies that support high speed transit services, such as transit signal prioritization
- Advanced real-time rider information and fare collection

BRT would increase the reliability and speed of public transportation and reduce reliance on the automobile by making public transportation more attractive. The study is currently evaluating the feasibility of BRT, however, it is possible that the concept may not be practical within the Region due to right-of-way constraints, existing traffic patterns, or other local factors.

Another option may be the usage of Arterial Rapid Transit (ART), which is a less-intensive version of BRT. ART does not operate within its own dedicated lane but instead flows with traffic, assisted by traffic light control and special bypass lanes at intersections to cut in front of queued traffic.

Because the feasibility study is ongoing, the Regional Comprehensive Plan cannot recommend the feasibility of either transportation option within the region at this time, although the Plan does support the principles of BRT/ART as well as the concept of increased efficiency, speed, and reliability of bus service. As BRT/ART are considered within the region, some key principles that should be considered and kept in mind include:

- BRT/ART infrastructure improvements should be implemented with other capital projects that can complement the new service, such as utility upgrades and traffic signal upgrades.
- Land uses around BRT/ART stations should include higher density mixed use development that benefits from greater transit access and supports ridership.
- Local bus routes should be aligned with BRT/ART to provide a link between local destinations and BRT/ART service.





Public and private incentives can make utilization of public transit, such as the MTA Metro North line, more appealing and affordable.

6.2B EMPLOYER INCENTIVES



Work with major employers in downtowns and town centers to maximize participation in pre-tax transportation plans and encourage development of further incentives for employees to utilize public transportation to commute to work.

Incentives are one policy option to encourage public transportation usage by making it cheaper. The most common incentive is the federal Transportation Spending Account (TSA). US Internal Revenue Service allows employers to provide tax exempt transit and van pooling expenses to employees up to \$130 a per month; funds are put into a TSA. Enrollment in MTA's "Mail & Ride" program offers subscribers the convenience of automatically receiving their monthly Metro-North Railroad commutation ticket by mail with payments from a TSA.

Employers can also offer their own programs that incentivize the usage of public transportation or non-motorized options. The Menlo Park City School District in California reimburses employees \$75 per month for vanpooling or using public transportation; they also offer employees free helmets and safety vests for bicycle commuters. The private investment firm Calvert Investments, based in Bethesda, MD, offers employees a 100% reimbursement for any public transportation costs, as well as \$500 towards the purchase of a new bike (for bicycle commuters) and \$120 for a new pair of walking shoes annually (for those who walk to work).

METROCOG should work with local governments and major regional employers to increase awareness and utilization of Transportation Spending Accounts, as well as support the development of private incentive programs, where appropriate.



Traffic signal prioritization can help increase the efficiency and reliability of bus transportation.

6.2C ITS COMMUNICATION



Identify opportunities to integrate ITS communication systems into transit operations to increase the reliability and attractiveness of usage.

Intelligent Transportation Systems (ITS) are used to improve the efficiency of a transportation network through investments in technology rather than (or in conjunction with) roadway infrastructure improvements. There are several forms of ITS that could be implemented within the region along bus routes that could make public transportation more attractive, including:

- **Real-Time Transit Updates.** The development of a smart-phone application providing GBT users with real-time updates on bus arrival and departure times would greatly assist in the desirability of public transit. Currently, users are unable to easily monitor the status of buses on their phones, making it very difficult to coordinate connections with other buses or trains as well as other plans that may occur after the bus ride. Real-time updates through a user-friendly interface would create greater predictability and help users more predictably map out their transit needs.
- **Transit Signal Priority.** Transit Signal Priority (TSP) provides an extended green or shortened red as a transit vehicle approaches an intersection. It does not entirely preempt the signal phasing, but modifies to enable more efficient movement for buses. TSP improvements would require both signal upgrades and vehicle technology upgrades, and may only be applicable on primary regional routes.
- **Vehicle Detection Systems.** Vehicle detection systems modify signal phasing based on the current traffic. At intersections with low traffic counts, this would minimize wait time for vehicles standing when there is no cross traffic.
- **Synchronization.** Synchronization involves the coordination of signal phasing at multiple locations throughout a network. The intent is to allow for the platooning of vehicles, or the efficient movement of groups of vehicles along a corridor. Synchronization can be modified to provide priority to major arterials with higher traffic volumes, and can vary throughout the day or week to respond to peak volumes.



Parking permits at the region's train stations, such as Fairfield, are in high demand. A holistic solution should be developed to address the issue.

6.2D TRAIN STATION PARKING



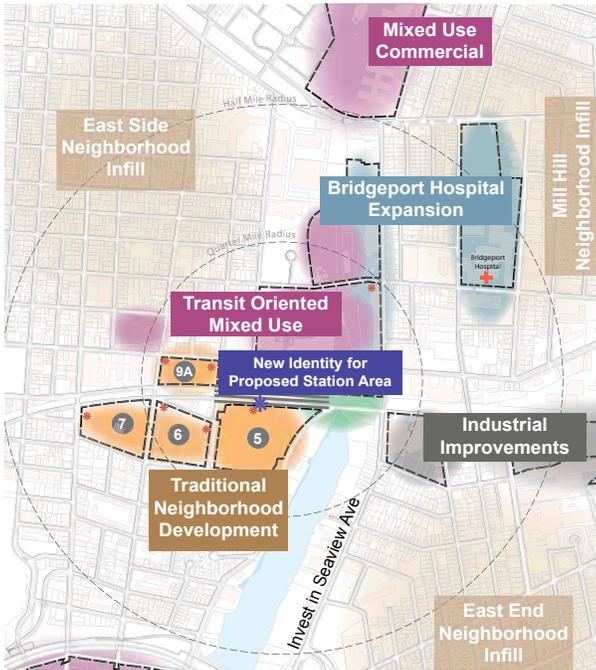
Implement station-area parking enhancements to increase the attractiveness of commuting by rail.

Many commuters within the Region use a multi-modal approach: drive from home to a Metro North rail station and then commute via rail to the final work destination. However, most of the permitted parking at existing rail stations is either near or at capacity. One community within the region, for example, reported having a waiting list of more than 600 people. Without adequate parking at commuter rail stations, commuters are forced to drive the entire distance of their commute, often times utilizing I-95 and increasing congestion on an already heavily congested corridor.

Ownership of the commuter rail stations and adjacent parking lots and structure varies by community. However, a coordinated approach to parking is integral – all five existing rail stations are located within a range of roughly 10 miles, east to west – and the customer base for parking permits within each community is not limited to residents from that community, drawing a wide geographic range of customers. In some cases, commuters drive to stations farther than the closest station to their residence because it was the only station that a permit was available. This spatial mismatch further exacerbates local road congestion in the morning and evenings.

METROCOG should work with localities to establish a comprehensive parking strategy that would seek to develop a holistic solution to the parking supply problem within Bridgeport, Fairfield, and Stratford. The study could include a comprehensive analysis of:

- Identifying catalyst sites for redevelopment near existing and proposed stations that could support additional parking
- Reducing spatial mismatch by better aligning station permitting with the travel origins of commuters.
- Investigation opportunities for “park and ride” locations that could shuttle commuters from their vehicle at a nearby lot to the rail station.



Plan Diagram: Barnum Station Feasibility Study (Jun. 2013), City of Bridgeport, CT
 Site Plan: Barnum Transit Center Master Plan (Oct. 2008), City of Bridgeport, CT

The Regional Comprehensive Plan supports Bridgeport's vision for a new Barnum Station on the east side that could stimulate new investment.

6.2E BARNUM STATION



Support the development of a new commuter rail station in East Bridgeport.

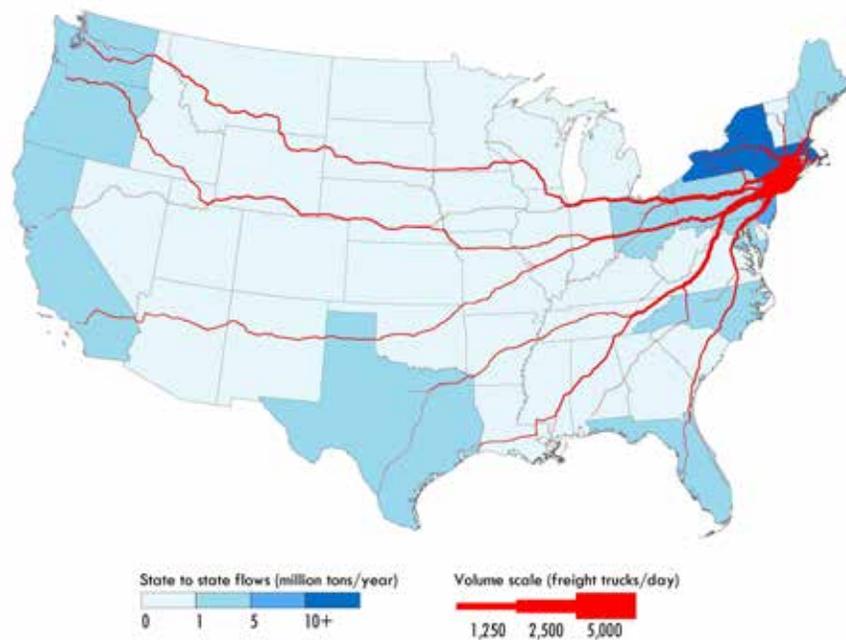
The City of Bridgeport has been working closely with METROCOG and various State agencies over the last several years to construct a new train station called Barnum Station in the east side of Bridgeport. The proposed train station will improve passenger rail service and enhance economic development opportunities by unlocking development potential of hundreds of acres of underutilized land in the vicinity of the new train station.

The new station will be located on the site of the former Remington Arms Factory and will feature two center island platforms to provide the flexibility to serve both local and express MNR trains. To fit the new center island platforms, the railroad tracks will be reconfigured and approximately 1,000 parking spaces will be constructed.

In 2014, the state granted \$2.75 million to the City of Bridgeport to further the engineering and permitting for the station and \$450,000 to develop a transit-oriented development (TOD) district in the area. In 2015, CTDOT secured \$10 million in TIGER VII federal grant funding to complete design and move the project to the construction phase of a new transformative commuter rail station and associated track improvements. The total cost for the Barnum Station project is estimated to be \$146,100,000 including environmental review, design, and construction.

The new station is envisioned as being a hub for transit oriented development including a mix of new residential, commercial, and industrial development that capitalizes on nearby investments at Steelpointe Harbor. A feasibility study was completed in July 2013, estimated that near- and medium-term market demand exists within the development area for 950 new residential units, 100,000-175,000 square feet of flex/office space, and 40,000 square foot of retail.

The Regional Comprehensive Plan supports this vision, as an additional station will increase transit ridership as well as encourage transit-oriented development patterns around the new station.



This map shows the national reach of Connecticut's export freight flows from 2012.

Illustration: Connecticut Export Freight Flows, CTDOT (2012)

6.3 ECONOMIC DEVELOPMENT STRATEGIES

6.3A FREIGHT



Support transportation infrastructure improvements that can ensure the safe and efficient movement of multi-modal freight throughout the region.

Located between Boston and New York City, the region sits in a strategic location for serving freight traffic and supporting a variety of jobs associated with distribution and logistics. Based on recommendations issued in the region's Long Range Transportation Plan, efforts should be focused on improving the efficiency of truck freight, with improvements to rail, air, and port freight secondary.

TRUCK FREIGHT

Trucks are the primary mode of moving freight into and from the region. 74.4% of all freight shipments are moved by trucks, with a total value of about \$78.8 billion. Most of the truck traffic is domestic (95.0%), and the average distance traveled by these trucks is relatively short. Within Connecticut, the average distance of a truck shipment is only about 116 miles.

The Federal Highway Administration (FHWA) estimates that 25,100 trucks traverse daily on the region's main interstates and expressways: 19,800 trucks on I-95, 3,300 trucks on Route 8, and 2,000 trucks on Route 25. The FHA also projects that truck volumes will continue to increase at a faster rate than passenger vehicles.

Due to infrastructure limitations in air, rail, and water freight capacities within the region, trucks are expected to continue playing a leading role in freight. The Region's Long Range Transportation Plan recommends focusing resources on improvements to the surface road network. The reduction of congestion and improvements to major roadways should assist in the flow and reliability of freight truck distribution.

AIR FREIGHT

Bradley International Airport in Windsor Locks, just north of Hartford, is the only Connecticut airport with regularly scheduled air freight service. While other smaller regional airports such as Sikorsky Memorial Airport receive some air freight, it is primarily on an occasional basis and delivered for local uses. METROCOG's Long Range Transportation Plan states that "because of [Sikorsky's] size and function, it is unlikely that air cargo services will expand greatly and account for a larger portion of freight movement within the region." That said, several infrastructure improvements, including runway enhancements, are planned or underway which will help increase the attractiveness of the airport. For more information, please see 6.3B.

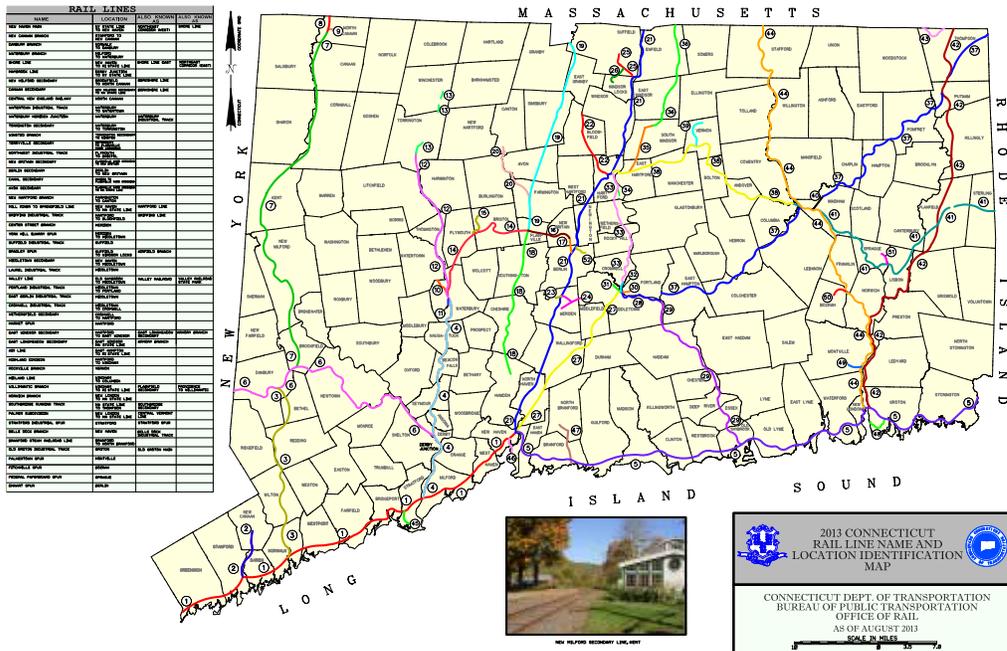


Illustration: Connecticut State Rail Plan, CTDOT (2013)

The State of Connecticut's Rail Transportation Plan highlights several challenges facing the region's rail freight.

RAIL FREIGHT

The region's three rail tracks are used primarily for transporting bulk materials such as waste, stone, gravel, sand, lumber, iron, and steel. Users include CSX, the Housatonic Railroad, and the Providence and Worcester Railroad. Opportunities to expand freight services within the region are fairly limited. First, the high volume of passenger rail along the New Haven Main Line (NHL-ML) slows down the ability to reliably and efficiently move goods. Secondly, the State's only Class 1 railroad, CSX, does not own the NHL-ML. Usary costs make it more affordable for CSX to use company-owned rail lines to the north of the region. Lastly, limited vertical clearances along the NHL-ML make it difficult to move "double-stacked" containers, which are increasingly used in the rail freight industry.

WATER FREIGHT

Over the past several decades, total tonnage passing through the Port of Bridgeport has declined significantly due to globalization and deindustrialization. Recent relocations or closures, such as the Turbana Corporation and Derecktor Shipyards, have led to immense challenges. In 2012, the State of Connecticut released a "Deep Water Port Strategy Study," providing a series of recommendations aimed at reviving trade and economic development at the Ports of New Haven, New London, and Bridgeport.

The report essentially concluded that under existing and projected future market conditions, the Port of Bridgeport was no longer an attractive location for water-borne freight and that efforts should be focused on other key areas, highlighted in 6.3C.

One opportunity to reverse that trend would be to continue evaluating the development of a feeder barge operation. More information is included in 6.3C.



6.3B SIKORSKY MEMORIAL AIRPORT



Support and help identify funding for investments that can help Sikorsky Airport fulfill its role as a regional corporate and general aviation airport for the New England region.

Sikorsky Memorial Airport is located in southern Stratford but is owned by the City of Bridgeport. The airport's service area, as defined by the State's Airport Master Plan (2008), includes Norwalk, Wilton, Weston, Westport, Easton, Fairfield, Monroe, Trumbull, Shelton, Bridgeport, Stratford, and Milford. The airport is primarily used for corporate and regional charter flights; scheduled commercial flights ended in 1999. The 800 acre airport consists of two runways, a terminal, control tower, tie-down areas, hangars, aprons, and a number of related private businesses and operations.

Sikorsky Memorial Airport is an underutilized asset within the Greater Bridgeport Region, and has been challenged by infrastructure deficiencies. METROCOG's Long Range Transportation Plan envisions upgrading Sikorsky Memorial Airport to a high quality, regional facility capable of supporting commuter airline services and meeting corporate needs, while enhancing safety. The Regional Comprehensive Plan supports this vision and believes a well-maintained and positioned airport could increase the attractiveness of new investment in the region, from charter air traffic to niche air freight.

Projects are currently underway to increase the safety and attractiveness of using the airport. An \$18 million project to extend the runway to include a runway safety area, as well as remove superfund waste located on airport property, began in fall 2014 and is expected to be completed in 2016. A historic partnership between the City of Bridgeport and the Town of Stratford was integral to initiating this major project. However, other infrastructure improvements such as improvements to the hangar facilities and deteriorating pavement are still needed.

METROCOG should continue to support infrastructure investments and enhancements to Sikorsky Memorial Airport in upcoming Long Range Transportation Plans, continue to facilitate policy discussions between the City of Bridgeport and Town of Stratford, and provide technical expertise and support to the City of Bridgeport as they seek state or federal funds for infrastructure improvements.

SEA PLANE SERVICE

As an example of services that can be expanded at Sikorsky Memorial Airport, Tailwind, located at Volo Aviation, recently announced a new sea plane service connecting Bridgeport with Manhattan, Boston, and Philadelphia.



6.3C RAIL INFRASTRUCTURE



Support major improvements that can increase speed and efficiency along the Metro North rail line, such as bridge repair/replacement and fleet upgrades.

The New Haven Main Line is owned by the Connecticut Department of Transportation and runs between the state line and New Haven. The rail line originates in New York City and travels through Fairfield, Bridgeport, and Stratford near the coast, connecting with several other lines at New Haven. Its four lanes are used by MTA's Metro-North commuter train service, Amtrak, Shore Line East, and freight transporters such as CSX and the Providence & Worcester Rail Road. Overhead catenary wires provide electricity for service. The New Haven Main Line is the region's most used rail infrastructure.

MTA Metro North is currently in the process of making several infrastructure investments for service along the New Haven Line, including replacement of its rolling stock of cars, updating signalization and rail communications, expanding the East Bridgeport rail yard, and making annual track repairs. Other issues of concern include antiquated bridges that malfunction and delay trains.

MTA Metro North is also exploring the possibility of extending the New Haven Line's service in New York City from Grand Central Station westward to Penn Station. By utilizing an existing Amtrak right-of-way, this additional service route would reduce trips to Manhattan's west side by 20 minutes, add four new train stops in the East Bronx, and build redundancy into the system by providing an additional route through New York City. Federal reviews and environmental analyses are set to be complete by 2017, with construction to follow.

Additionally, the State of Connecticut is evaluating opportunities to upgrade signaling for the Waterbury Branch line and bring it in line with the Centralized Traffic Control (CTC) used on the New Haven Main Line.

Support for and investment in the region's rail infrastructure is common sense policy that all six communities have expressed support for throughout the planning process. It is the backbone of transportation throughout the region and an integral part of transporting residents, workers, and goods. METROCOG should continue to work with the State of Connecticut, MTA, and other relevant partners to support infrastructure investments that increase its operational efficiency and safety.



6.3D BRIDGEPORT HARBOR



Support the implementation of the State's "Deep Water Port Strategy Study" and identify investments that can help Bridgeport Harbor increase its competitiveness for liquid bulk and energy related uses, private ferry services, and shipyard and ship repair services, as well as build redundancy into the regional freight distribution system.

Bridgeport Harbor provides access to Long Island Sound and the Atlantic Ocean, and is split into two main areas: Outer Harbor, encompassing one mile from the mouth of Long Island Sound and safeguarded by two breakwaters, and Inner Harbor, a one-mile wide stretch of water including parts of the Pequonnock River, Yellow Mill Channel, Johnson's Creek, and extending inward from Tongue Point and Pleasure Beach. The Port of Bridgeport sits in Bridgeport Harbor, and is one of three deep water ports in Connecticut. The Port is comprised of a variety of waterfront infrastructure spread across the several facilities.

In 2012, the State of Connecticut released a "Deep Water Port Strategy Study," providing a series of recommendations aimed at reviving trade and economic development at the Ports of New Haven, New London, and Bridgeport. The report noted that "globally integrated supply chains... have largely bypassed the Connecticut deep water ports, in all likelihood irreversibly. This situation is a consequence of economic, geographic, and other factors well beyond the reach of any individual port authority or state government."

Over the past few decades, economies of scale efficiencies in ocean carrier, rail, trucking, warehousing, and distribution have led to a consolidation of all importing and exporting at a few select ports. For example, between 2002 and 2012, the top 15 container ports accounted for 93%-96% of all container imports. This "consolidation" has left Connecticut's ports behind.

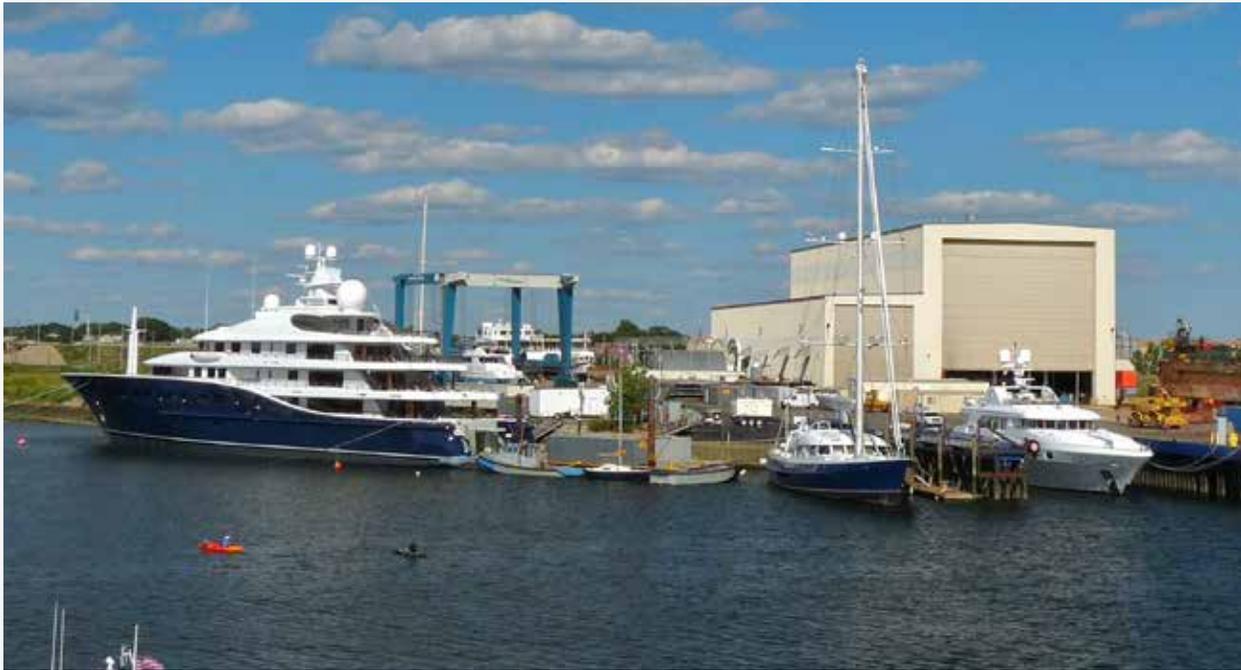


Photo: John Murphy

The State recommends that Bridgeport Harbor serve as a hub for energy uses, ship repair, and commuter ferry services.

The Study argues that Bridgeport cannot compete, in a traditional sense, with the infrastructure and market access provided by the nation's largest ports. Instead, the Port of Bridgeport should focus efforts on developing, retaining, and enhancing services and industries in three targeted areas: (1) liquid bulk storage and related energy uses; (2) private ferry services, and (3) shipyard and ship repair. Private ferry infrastructure within the Bridgeport region is already relatively strong. The Bridgeport & Port Jefferson Ferry (operated by the Bridgeport & Port Jefferson Steamboat Company) is a passenger and vehicle ferry linking the Water Street Dock in Downtown Bridgeport with Port Jefferson, NY on Long Island. Annual ridership totals more than 800,000 passengers and 400,000 vehicles.

METROCOG should continue to work with major industrial employers, Bridgeport Port Authority, the City of Bridgeport, federal and state partners, and more to identify and support investments, programming, and incentives that can help increase Bridgeport Harbor's competitiveness for these sectors. This includes dredging of the harbor. At present, the depth of the harbor has shrunk to between 28 and 31 feet (vs. the authorized 35 feet) due to shoaling. This increases shipping costs, risks ships running aground, and decreases the overall attractiveness of investment in the port. METROCOG should continue to work with the City of Bridgeport to dredge the harbor back to authorized depths.

Additionally, one strategy that has been proposed is to develop a feeder barge operation as a method of stimulating economic growth in Bridgeport, increasing travel efficiency, and reducing congestion on I-95. Essentially, national and international cargo would be delivered to the Port of New York & New Jersey, loaded onto new ships, and then transported to Bridgeport where they would be unloaded onto semi-trucks for distribution in New England. It is estimated that this operation could remove 33,000 trucks from I-95 through Fairfield County annually. Implementation of the operation would require a variety of land-based infrastructure upgrades, including bulkheads, improvement to existing terminals (e.g. utilities, ramps, paving, etc.), security fencing, storage areas, and other equipment.



An example of a mixed-use transit-oriented development project in Downers Grove, IL, a suburb of Chicago.

6.4 TRANSIT-ORIENTED DEVELOPMENT (TOD) STRATEGIES

6.4A ZONING & DEVELOPMENT REGULATIONS



Support development of transit-oriented development ordinances that facilitate higher-density, mixed-use development in targeted areas based on existing or proposed transportation networks.

Transit-oriented development (TOD) is a development pattern consisting of housing, office, retail, civic, and entertainment uses within a walkable environment near quality public transportation. TOD areas can support diverse housing options for residents, reduce commutes, and facilitate healthy and walkable neighborhoods.

A special zoning overlay or planned development TOD district would create a regulatory environment conducive to a mixed-use, transit-oriented environment. The ideal locations of a TOD district or overlay would be proximate to the Region's five existing rail stations (Southport, Fairfield, Fairfield Metro, Bridgeport, and Stratford), as well as the proposed Barnum East Station. The exact size or radius of such a district depends on a variety of local factors, although best practices generally suggest a 15-minute walk, or a 1/4- to 1/2-mile distance.

Some of the core regulatory elements of a TOD overlay or planned development district include:

- Greater density (e.g. a higher floor-area ratio)
- Permitting of multi-family units, townhomes, cottage homes, or rowhouses
- Permitting a mix of uses within the area as well as mixed-use buildings
- Higher building heights

- Reduced or eliminated set-backs
- Reduced parking requirements
- Stronger design guidelines or requirements
- Pedestrian-oriented design
- Incorporation of public spaces, such as benches, plazas, and/or parklets

Several communities within the METROCOG Region are currently evaluating TOD overlays or planned development districts, and METROCOG has drafted a Model TOD Ordinance. Each community with commuter rail access should assess opportunities to make their zoning more TOD-friendly, adapting the ordinance to reflect local priorities and concerns. While the development of bus rapid transit (BRT) is not expected within the region at this point, zoning for transit oriented development proximate to future BRT stops may be appropriate.



Pedestrian-oriented building and site design can facilitate activity, vibrancy, and an attractive physical environment.

6.4B PEDESTRIAN-ORIENTED BUILDING & SITE DESIGN



Encourage or require building design that is pedestrian oriented and has a relationship to the street and existing transportation network.

Within transit oriented development (TOD) areas, building designs should be pedestrian-oriented and create a unique sense of place within a walkable environment. This type of environment increases the utilization of public transportation and the desirability of living and working in such an area. Key elements of TOD-area building and site design include:

- Properties should be built at or near the property line to create a consistent streetwall and visual connection to transportation infrastructure.
- Properties should provide a direct and continuous sidewalk connection between the sidewalk in the public right-of-way and entry on the front building façade.
- Properties, where appropriate, should incorporate open spaces that can create activity near transit stops.
- Buildings should be designed to include a prominent and attractive building entrance that is as close to the street and/or transit service as possible. Architectural massing, design details, signage, lighting, and landscaping should be used to articulate the primary pedestrian entrance.
- Buildings should use massing and scale to create comfortable, pedestrian-scale places. Interesting corner elements, set-back upper façades, variations in rooflines, and other design techniques make the street environment more attractive for pedestrians.
- Façades can create a comfortable pedestrian environment by incorporating design elements that break up blank walls and reflect traditional design characteristics. Best practices suggest ground floor façades should include between 40% and 60% of window area.
- Design details and materials should be used to create an interesting and attractive environment that makes transit and pedestrian mobility a desirable alternative.
- Buildings should include lighting and signage that reflects the scale and travel speeds of pedestrians. Lighting should be integrated into the building façades to provide adequate illumination for a safe sidewalk environment.

These recommendations could either be incorporated as part of a transit-oriented development ordinance (binding) or complementary design guidelines (suggested).



Photo: Susan Rubinsky

Cross jurisdictional partnerships can help assist in identifying new TOD projects.

6.4C COOPERATION & COORDINATION



Partner with the State of Connecticut, MTA Metro North, Greater Bridgeport Transit, and the Bridgeport-Port Jefferson Steamboat Company to identify opportunities for new transit-oriented developments and increased synergies between transportation infrastructure and neighborhoods.

As METROCOG and its local partners continue to prioritize funding and staff efforts on facilitating TOD in targeted areas, it is important to ensure that major transit providers are included in this conversation. In some cases, efforts may focus on adding/extending service to an existing dense area that could easily transition into a TOD area; in others it may be facilitating TODs on underutilized properties around the existing service area. As there is a symbiotic relationship, it is important to partner and engage with the providers to ensure the most appropriate locations and types of development are developed.

In some cases, transit providers may own properties suitable for redevelopment or be able to facilitate or assist in redevelopment through existing relationships or extension of support to projects.

Additionally, as new developments occur, it is important to ensure they are properly connected, both physically (e.g. sidewalks, lights, etc.) and visually (e.g. consistent streetwall and development pattern), with the transit service. Examples on how to achieve both are articulated in 6.4B.



Photo: Susan Rubinsky

Stand Up 4 Transportation advocates for transportation funding that can meet Connecticut's social, economic, and environmental transportation needs.

6.5 EQUITY STRATEGIES & ENVIRONMENTAL JUSTICE

6.5A ADA COMPLIANCE



Preemptively implement Americans with Disabilities Act (ADA) compliant infrastructure at key nodes and multi-modal connections within the transportation network.

The Region's pedestrian network should allow mobility for all residents of all abilities. Regular maintenance or new construction of sidewalks, curb cuts, sidewalks, sidewalk ramps, crossing signals, and other technology should be implemented in compliance with the Americans with Disabilities Act Accessibility Guidelines. This will help all individuals connect seamlessly from their home to the closest public transportation stop, as well as between a variety of other destinations.

6.5B AFFORDABLE TOD HOUSING



Encourage or incentivize the construction of affordable housing units within identified transit-oriented development target areas.

Because of access to mixed-use amenities and public transportation, TOD areas are ideal sites for incorporation of some element of affordable housing. Numerous academic studies show that for the best possible social and economic outcomes, affordable housing units should be blended in seamlessly with market rate units, creating a mixed-income environment.

The creation of TOD overlays or planned development districts (Housing & Neighborhoods Plan - 5.3A) and Incentive Housing Zones (Housing & Neighborhoods Plan - 5.1A), could help facilitate the integration of some affordable housing within transit-oriented development areas by permitting increased density, positively affecting the development economics.

In many cases, while regulations may be conducive to higher-density development and market demand may exist for affordable housing, the development economics do not work for the private sector due to high land costs. METROCOG should work with local communities and developers to identify gap-funding and creative financing opportunities that could support the creation of affordable units.



Photo: Susan Rubinsky

Greater Bridgeport Transit added Route 20 in 2014, linking the Westfield Trumbull Mall with Upper Stepney in Monroe.

6.5C SERVICE EXPANSION



Partner with Greater Bridgeport Transit (GBT) to evaluate extending service areas and hours of operation.

Greater Bridgeport Transit (GBT) operates 19 fixed-routes that provide service to Bridgeport, Fairfield, Monroe, Stratford, and Trumbull, as well as Norwalk, Westport, Shelton, Derby, and Milford. Routes do not extend into Easton. Its busiest routes include Route 8, along Bridgeport's Main Street, and the Coastal Link, which runs east/west and connects the Norwalk Transit Hub (the western-most point) to the Westfield Connecticut Post Mall (the eastern-most point).

All routes operate in a radial fashion, with Downtown Bridgeport serving as the hub from which all routes start, end, or pass-through. GBT routes intersect with several other regional transit systems, including Amtrak, the MTA Metro-North New Haven rail line, Shoreline East rail line, CT Transit New Haven, Norwalk Transit, Milford Transit, Housatonic Area Transit, and Valley Transit. Demand response service in compliance with the Americans with Disabilities Act is also provided by GBT under its "GBT Access" program. Disabled individuals can request door-to-door service to any destination that is within a three-quarter mile radius of a fixed bus route.

While the coverage and frequency of existing service is fairly good, METROCOG should work with GBT to (a) evaluate route changes that can better connect low-income urban residents to jobs within suburban job centers, and (c) evaluate opportunities to extend bus hours of operation along key routes into the late evening or early morning, recognizing that many low-income individuals work evening shifts and would benefit from additional transit access. METROCOG is currently working with GBT to develop a Long Range Transit Plan for the agency.



Photo: Susan Rubinsky

The Pequonnock River Trail is a regional recreational destination that will link from Downtown Bridgeport through Trumbull into Monroe and Newton.

6.6 WALKABILITY & BIKEABILITY STRATEGIES

6.6A MULTI-USE TRAIL NETWORK

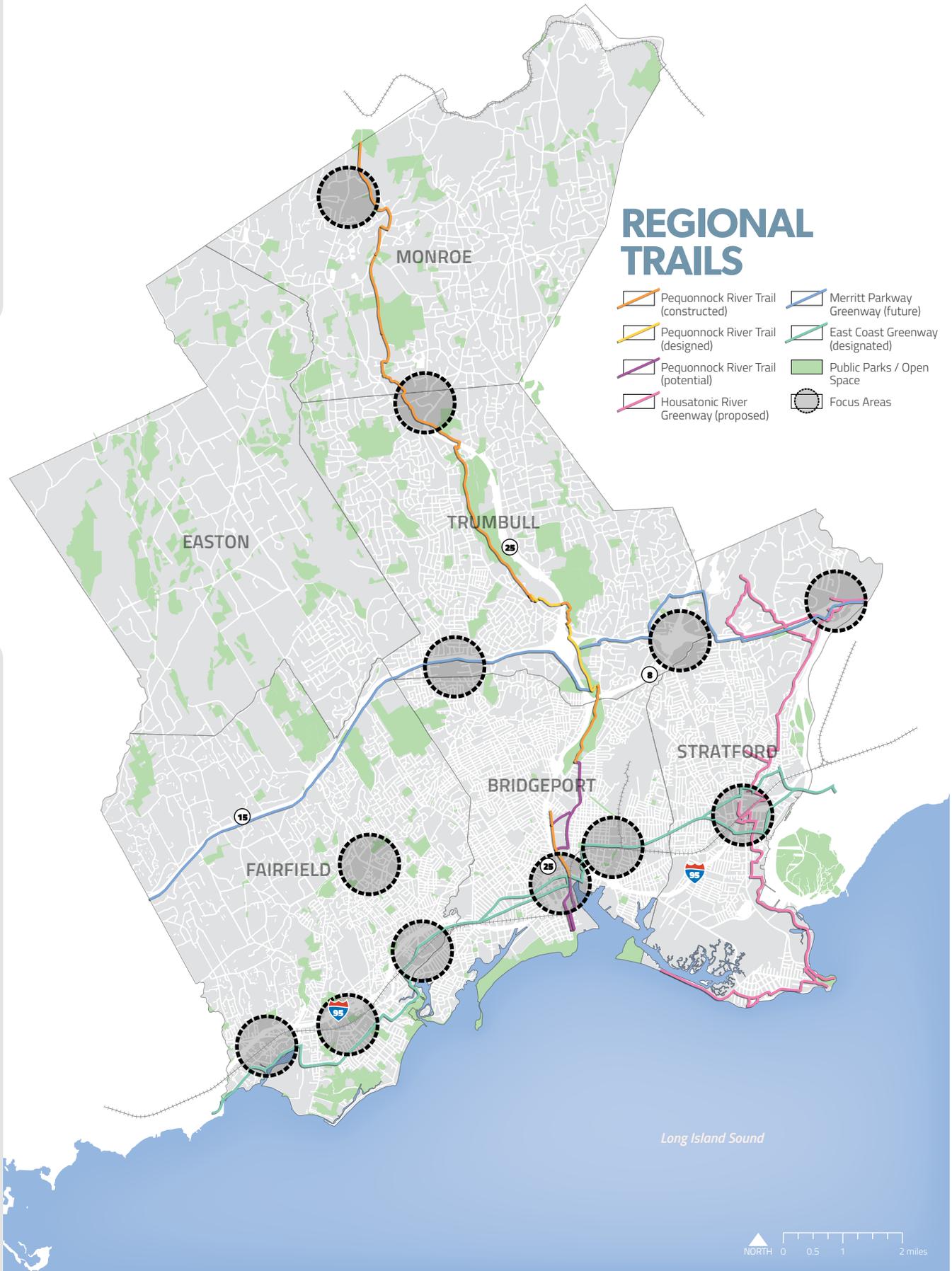


Continue development of a comprehensive regional multi-use trail network, including the Pequonnock River Trail, Merritt Parkway Trail, and Housatonic River Greenway, which connects to a broader state trail and greenway system, as well as a network of local trails that link parks, open spaces, and the regional trail network to one another.

Multi-use trails are paths that follow an independent right-of-way and are physically separate from roadways. They are utilized by a range of users, including cyclists, walkers, joggers, skaters, and more. Amenities such as benches, trashcans, areas for observing nature, wayfinding signage, maps, and restrooms are commonly found on many trails. Bike routes often intersect with recreational trails to provide access points to a variety of destinations.

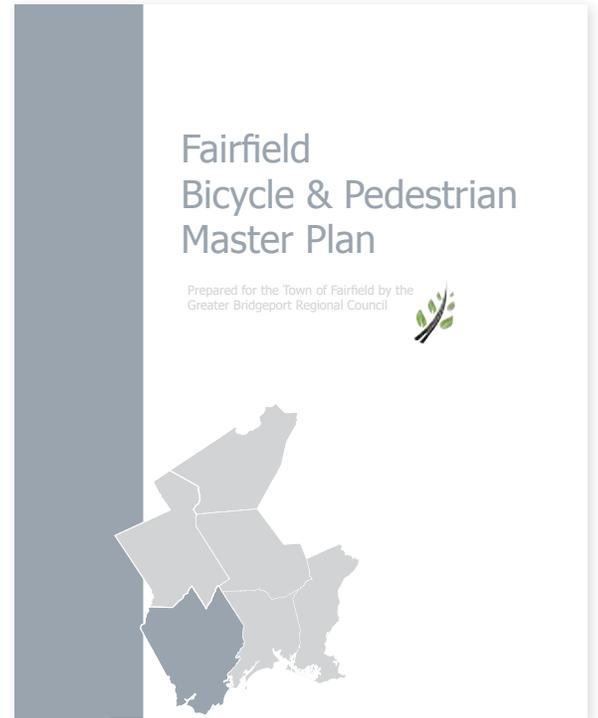
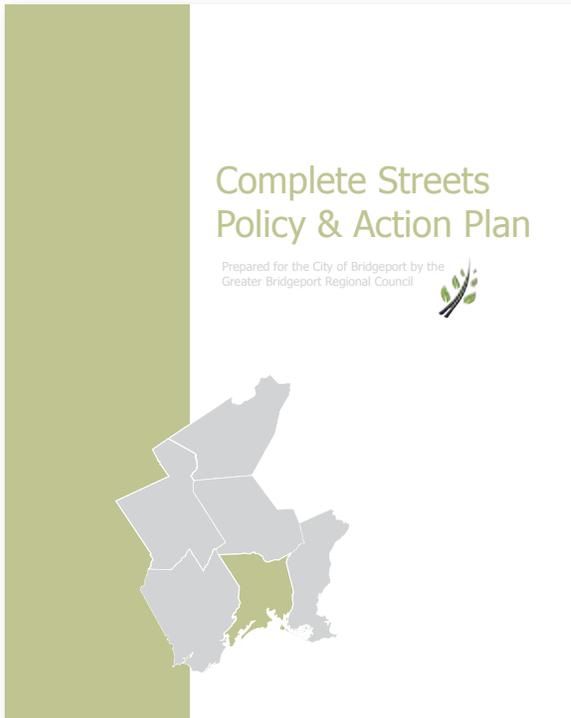
METROCOG is currently working with the City of Bridgeport and the Towns of Monroe, Stratford, and Trumbull to develop or enhance trail offerings throughout the Region. The Region's future multi-use trail network is comprised of three trails: (1) Pequonnock River Trail, (2) Housatonic River Greenway, and (3) Merritt Parkway Greenway. All are at various stages of development.

- Pequonnock River Trail.** The Pequonnock River Trail, formerly referred to as the Housatonic Rail Trail, is a proposed north-south trail/greenway from the Long Island Sound waterfront in Downtown Bridgeport through Trumbull to the town line of Monroe and Newtown. The majority of the northern half of the trail (from Monroe to the heart of Trumbull) is continuous and operable, however, the middle and southern sections remain mostly incomplete, outside of a finished portion through Downtown Bridgeport, just north of I-95. In total, about 12.75 miles of the proposed 16 mile trail are available for use.



- **Housatonic River Greenway.** The Housatonic River Greenway is a proposed multi-use greenway in Stratford that would stretch from Stratford Point in the south to Roosevelt Forest in the north end of town. It would consist of a mixture of off-road trails and on-road bike routes, and would intersect with the Merritt Parkway Greenway and the Pequonnock River Trail to facilitate non-motorized movement throughout the Region. Phase 1 of the multi-phased project is complete, but several additional stages remain incomplete.
- **Merritt Parkway Greenway.** Merritt Parkway (CT Route 15) is a four-lane limited-access parkway that runs east-west from the New York State line at Greenwich to the southern edge of the Sikorsky Bridge in Stratford. The proposed 37.5 mile Merritt Parkway Greenway/ multi-use trail would parallel the entire length of the Parkway, cutting through Fairfield, Trumbull, and Stratford. The State of Connecticut began a greenway feasibility study in 2011, assessing associated costs, environmental impacts, design, and pedestrian safety. The project remains ongoing and is not under construction at present.

All three projects are well-aligned with the Regional Comprehensive Plan's core principles of reconnect, resilient, and revitalize. METROCOG should continue to work with both the State of Connecticut and local governments to assist in the piecemeal completion of these projects, emphasizing connectivity with other modes of transportation and key facilities and destination. METROCOG should provide both financial assistance through its role as the regional MPO, technical planning and development assistance to localities, and letters of support or joint-programming with/for localities seeking to obtain grant funding from either the state or federal government.



6.6B COMPLETE STREETS



Continue to work with partnering communities in the establishment of a “complete streets” policy that can safely accommodate motorists, pedestrians, and cyclists equally on appropriate roadways.

Most of the region’s roadways are designed to move automobiles, and do not provide adequate bike, pedestrian, or transit infrastructure. Complete Streets are roads designed and operated to be safe for all users. On a Complete Street, pedestrians, bicyclists, motorists, and transit riders of all ages and abilities should be able to safely move along and across the road. Complete Streets often ease congestion while supporting economic growth, improving safety, encouraging walking and biking, improving air quality, and enhancing mobility for children.

However, a “Complete Streets” policy or approach is not appropriate everywhere, such as in more rural communities or along principal arterial roads.

METROCOG has worked with the City of Bridgeport and the Town of Fairfield to develop Complete Streets policies, and other communities within the region mention the application of Complete Street principles and policies in their respective Plans of Conservation and Development. METROCOG should continue to support local communities in establishing “Complete Streets” policies or investments in appropriate areas, such as within TOD areas or other dense development patterns.



Photo: Susan Rubinsky

6.6C SIDEWALK NETWORK



Work with local municipalities and businesses to fill gaps in the sidewalk network and ensure that neighborhoods are adequately connected to parks, civic uses, commercial areas, transit stops, and schools.

Unlike trails, most pedestrian infrastructure (e.g. sidewalks and crosswalks) is implemented at the local level with little regional coordination, although technical assistance may be provided by METROCOG. The presence of such infrastructure also varies widely throughout the region, as it is typically associated with population size, community character, and local attitudes.

METROCOG's Long Range Transportation Plan identifies several key issues and priorities affecting pedestrians within the region. Short-term concerns include filling gaps in the local sidewalk network, improving crosswalks, upgrading traffic and pedestrian signaling. Long-term priorities include applying traffic calming measures to certain roadways, consolidating curb cuts, and enhancing traffic signals. Particular emphasis should be given to connecting transit stops with existing neighborhoods and commercial areas.

METROCOG should provide technical expertise to localities, such as GIS mapping of sidewalk infrastructure, to identify gaps, and work with communities to obtain state or federal funding for the filling of sidewalk or pathway gaps that can increase safety and connectivity.



ECONOMIC DEVELOPMENT

EDUCATE • INVEST • INNOVATE





GOAL

Promote investments in human capital and infrastructure and foster partnerships that build on the region's industrial legacy and position the region to attract quality employers.

A thriving and diversified economy is vital to the success of any region. Many factors contribute to the creation of a vibrant economy, from a well-trained, versatile workforce to transportation infrastructure that can support the movement of workers and goods, from quality neighborhoods that can attract high-demand workers to business-friendly government regulations and policies. In a sense, the entire Plan – and not just this chapter – is an economic development document because so many multi-disciplinary variables impact job creation and economic growth.

It is easy to continue the status quo of localities pitted against one another in the quest to attract and retain businesses. This mentality is common in metropolitan areas across the country, but the movement of workers, goods, and services do not adhere to municipal boundaries. It is more important than ever to move away from a zero sum mentality and start thinking regionally.

This chapter details many objectives and recommendations that can help promote investments in human capital and infrastructure, foster partnerships that build on the region's industrial legacy, and position the region to attract quality employers. The chapter is organized into three main sections:

- **Key Influences** highlight some of the most important influences and challenges facing the region's economy and provide the necessary context for the chapter's recommendations.
- **Goals, Objectives, & Strategies** set the vision for the region and provide planning direction and key policy actions, as well as supporting information integral to achieving the Plan's recommendations.
- The **Action Matrix** collates all of the Goals, Objectives, and Strategies into an actionable table and establishes priorities and actions by planning area type.

GUIDING PRINCIPLES

The policies and recommendations in this chapter align with “Reconnect One Region’s” guiding principles of Reconnect, Revitalize, and Resiliency.



RECONNECT

By developing a more regional perspective to economic development and education/training, and working across jurisdictional boundaries to attract and retain businesses, the economy can become more integrated and prosperous.



REVITALIZE

An emphasis on investing in downtowns and town centers can revitalize underutilized areas, create economies of scale and critical mass, and stimulate new economic opportunity.



RESILIENCY

Remediating and repurposing brown-field sites will both clean up environmentally hazardous areas and create jobs.



Photo: Stan Gorzelany

KEY INFLUENCES

Several issues, influences, and challenges significantly shape regional housing policy and planning within the METROCOG Region. While other issues and topics certainly play a role, these four are deemed the most important and drive the heart of the plan and many of the recommendations presented later in this chapter. This section aims to provide background information and context for these issues; recommendations are included in the subsequent section.

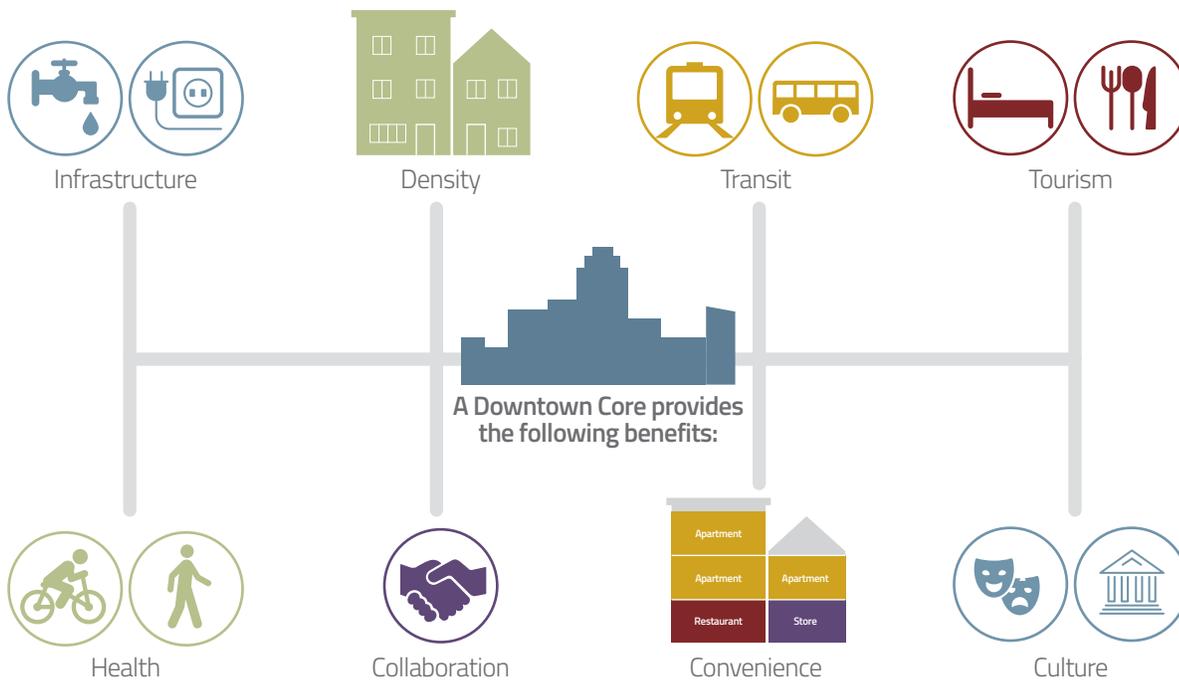
DOWNTOWNS & TOWN CENTERS

WHY IT MATTERS

Downtowns and Town Centers are the social and cultural heart of any community, and they provide spaces for creativity, economies of scale, and access to hard and soft infrastructure necessary for growing a business.

A downtown or town center is typically the symbolic “heart” of a community, although not always located within its geographic center. Often, downtowns and town centers are the historic center of commerce for a community, developed more intensely on smaller lots and composed of a mixture of uses, rich in commerce and cultural identity. Examples include those found in Bridgeport, Stratford, and Fairfield. In other cases, some growing communities that are more suburban in nature may not have a traditional historic downtown or town center. Instead, they may seek to create a contemporary downtown or town center utilizing traditional design principles. Examples include areas identified by Trumbull and Monroe in the recent planning efforts.

Successful downtowns and town centers are vibrant, active, pedestrian-oriented places that contain a significant amount of activity, integrated land uses, and strong street level connectivity. They often have many property owners and a large number of stakeholders, compared to newer shopping centers and business parks. A successful downtown or town center depends on cooperation between property owners, tenants, institutions, governmental bodies, and more.



From the middle to the end of the 20th century, traditional American downtowns and town centers declined as growth moved outward from city cores to new suburban and exurban areas. Blight, crime, and vacancy were pervasive. However, over the past decade, traditional downtowns and city centers have experienced increased investment and attention as cultural and economic attitudes have shifted. More and more, traditional downtown and town center areas are perceived as sound investments and desirable locations for living, working, and playing. In more suburban or exurban areas lacking a downtown or town center, many communities are embracing urban design and working with developers to manufacture a traditional downtown experience.

Some of the economic benefits unique to a downtown or town center include:

- Transit.** Downtowns and town centers are often situated at the nexus of multiple transportation networks, including rail and bus. Transit makes it easy for workers to get to the office and provides easy transportation for business meetings.
- Infrastructure.** Sewer, water, high-speed fiber, electricity, and more are often already provided and more reliable than less developed areas.
- Density.** Downtowns and town centers are often zoned for greater densities than other areas, facilitating business expansion and new investment opportunities.
- Tourism.** An exciting, interesting downtown or town center can draw tourists for shopping, dining, or staying overnight.
- Health.** The density and layout of a downtown or town center environment supports and encourages walking and biking.
- Convenience.** Downtowns and town centers offer a range of commercial uses within close proximity, making it efficient and convenient to complete multiple errands or tasks within a short trip.
- Culture.** Movie theatres, coffee shops, art galleries, colleges, and more can create a unique and interesting culture that attracts shoppers and businesses seeking to locate in a creative area.
- Collaboration.** Concentrating many different types of businesses within a single area can lead to new partnerships and ventures between businesses, reducing inefficiencies while creating new technologies, products, and services.

BROWNFIELDS & CONTAMINATED SITES

WHY IT MATTERS

Cleaning up and revitalizing brownfields can bring vacant and underutilized properties back onto the tax roll while creating jobs and improving public health.

The US Environmental Protection Agency (EPA) defines brownfields as any property in which “expansion, redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.” Brownfields consist of former industrial plants, military bases, oil/petroleum facilities, dry cleaning facilities, and more. A special category of brownfields are those with a “superfund” designation. These properties are more severely contaminated and are typically larger in size and controlled by a single property owner.

Brownfields and other contaminated sites can range in size between small commercial parcels and sprawling industrial complexes. The majority are found within Bridgeport, Stratford, and Fairfield, although a few are located in Trumbull and Monroe. Easton has no known commercial or industrial brownfields or contaminated sites.

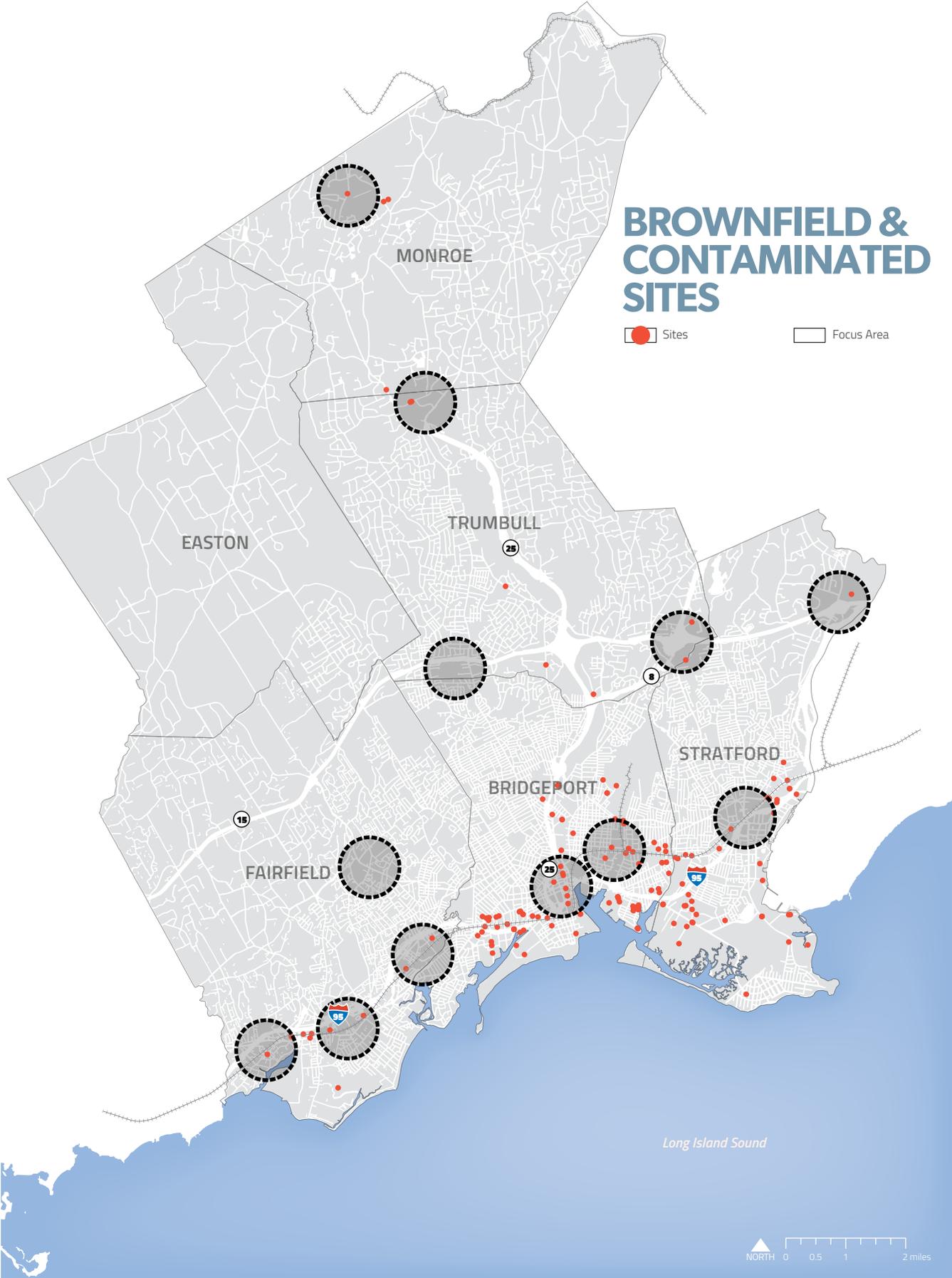
There are numerous benefits towards remediating and repurposing brownfield and contaminated properties, including:

- Address an environmental justice concern
- Job creation
- Neighborhood revitalization
- Improvement in neighborhood appearance
- Increased tax revenues
- Pollutant removal
- Increased public health
- Healthier ecosystems
- Historic preservation

Any brownfield or contaminated site must go through a multi-stage process, including a site visit and historical review, contamination testing, review of cleanup options, development of a plan for site cleanup, and actual site cleanup.

BROWNFIELD & CONTAMINATED SITES

● Sites □ Focus Area





METROCOG has worked with member communities to create redevelopment concepts for several brownfields including three parcels adjacent to the new Knowlton Park that was recently constructed along the Pequonnock River.



Several major brownfield or contaminated site remediation efforts are underway within the region, at various stages. Prominent examples include Raymark Industries (Stratford), Exide Battery (Fairfield), properties within Steelpointe Harbor (Bridgeport), the Stratford Army Engine Plant (Stratford), and Remington Arms/RemGrit Plant (Bridgeport). Two of the sites are profiled in the following paragraphs to provide context and background information on how properties are able to be remediated and repositioned.

- **Raymark Industries site.** The Raymark Site in Stratford, CT is a superfund site that previously manufactured brakes and clutch parts. During operation, Raymark used a retention system to capture its waste, which was contaminated with volatile compounds, lead, PCBs and asbestos. As these lagoons filled, they were dredged and waste material was used on and off-site as fill material. This material tested positive for contamination. After the US EPA capped the retention lagoons and removed super-sacs of contaminated fill, the Raymark site was readied for redevelopment. The 34-acre former manufacturing facility at 75 East Main Street has been demolished, capped, and redeveloped into what is now known as the Stratford Crossing Shopping Center - which includes a Home Depot, Shoprite, and Walmart.
- **AGI Rubber Company site.** In 2015, the EPA announced an award of \$200,000 for Bridgeport to cleanup the abandoned AGI Rubber Company, which has sat vacant for the past decade along Stratford Avenue. The property sits blocks away from the Steelpointe Harbor and future Barnum Train Station. After the abandoned building caught fire in 2014, the City has been eager to redevelop the dangerous, foreclosed property and return it back to the tax rolls. The current redevelopment concept includes office space for a Texas-based communications services center. In addition to benefits of economic development, redeveloping the site will have many coastal benefits. The cleanup of the site will involve capping the site with uncontaminated fill, bringing it to roughly 15' above sea level; this is necessary as the site sits along a sensitive habitat close to the Long Island Sound.



FOCUS AREA INNOVATION DISTRICTS

WHY IT MATTERS

Establishing physical and social connections between different institutions and major employers can help stimulate innovation and grow the economy.

An Innovation District is a designated area that encompasses some combination of private sector industries (often in science or technology), higher education institutions, research facilities, and other civic or cultural institutions. In a knowledge-based economy, the goal is to encourage cross-disciplinary partnerships. The thought is that bringing people and ideas together to spur entrepreneurial creativity, will result in job growth and strengthen the economy.

The concept of an Innovation District has been applied both nationally and internationally, including the North American cities of Pittsburgh, Boston, Toronto, and Portland.

Some of the integral components of an Innovation District include: a focus on entrepreneurship; presence of at least one university; philanthropy; infrastructure investment; quality affordable housing and live-work space; and green space. It is not the mere presence of these facilities that makes it a district; instead, a focused campaign among the district's stakeholders must be undertaken to better integrate assets, programming, investments, and more, and create a desirable environment for entrepreneurship.

Within the region, there are several focus areas (as identified on the Future Land Use Map on page 31) suitable for development as an Innovation District, and several more that could evolve into such a district over time, with the proper investments. Local communities and stakeholders should work with METROCOG to determine feasibility and attractiveness of doing so.

Some possible examples include:

- Downtown Bridgeport/University of Bridgeport/Housatonic Community College/Bridgeport Hospital/Steelpointe Harbor area
- Fairfield Town Center/Fairfield University area
- Route 8 & 15 Interchange/Trumbull Corporate Park area

Additionally, efforts could be undertaken to create a more regional innovation district that could bring together several local districts together into a broader regional cooperative.

GOALS

Promote investments in human capital and infrastructure and foster partnerships that build on the region's industrial legacy and position the region to attract quality employers.

OBJECTIVES

Priority

7.1

DOWNTOWN & TOWN CENTER STRATEGIES

Position downtowns and town centers as the cores of the region and support local revitalization efforts that can strengthen the Region.

1

7.2

BROWNFIELDS & CONTAMINATED SITES STRATEGIES

Remediate and repurpose brownfield and contaminated sites and reposition them as unique opportunities for infill development that can create jobs, generate new tax revenue, and support areas served by transit.

1

7.3

INNOVATION STRATEGIES

Encourage co-location of major employers, employee housing, educational institutions, and transit access in targeted areas that can spur new growth and investment and establish a critical mass of activity and investment.

1

7.4

EDUCATION & WORKFORCE PREPAREDNESS STRATEGIES

Provide all of the Region's children with access to quality education and ensure they are equally and fully prepared for the 21st century workforce.

2

7.5

REGIONAL APPROACH STRATEGIES

Establish a regional approach to attracting new businesses, investors, and professionals.

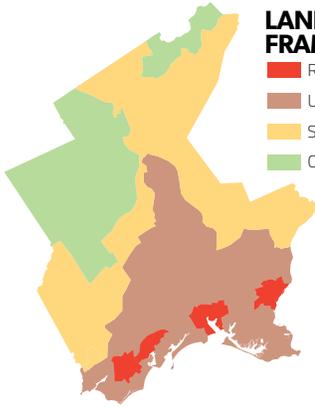
2

Applying Strategies to the Region

Strategies are identified for each objective in this Plan. While each strategy can be used to make progress in attaining the related object, a given strategy may not be applicable to all areas of the region.

A symbol representing each of the character areas of the Land Use and Development Framework has been provided to indicate where a given strategy could be meaningfully applied within the region. The implementation of a given strategy should also be tailored to the needs and unique context of the local community.

-  Regional Center
-  Urban
-  Suburban
-  Rural Conservation Area

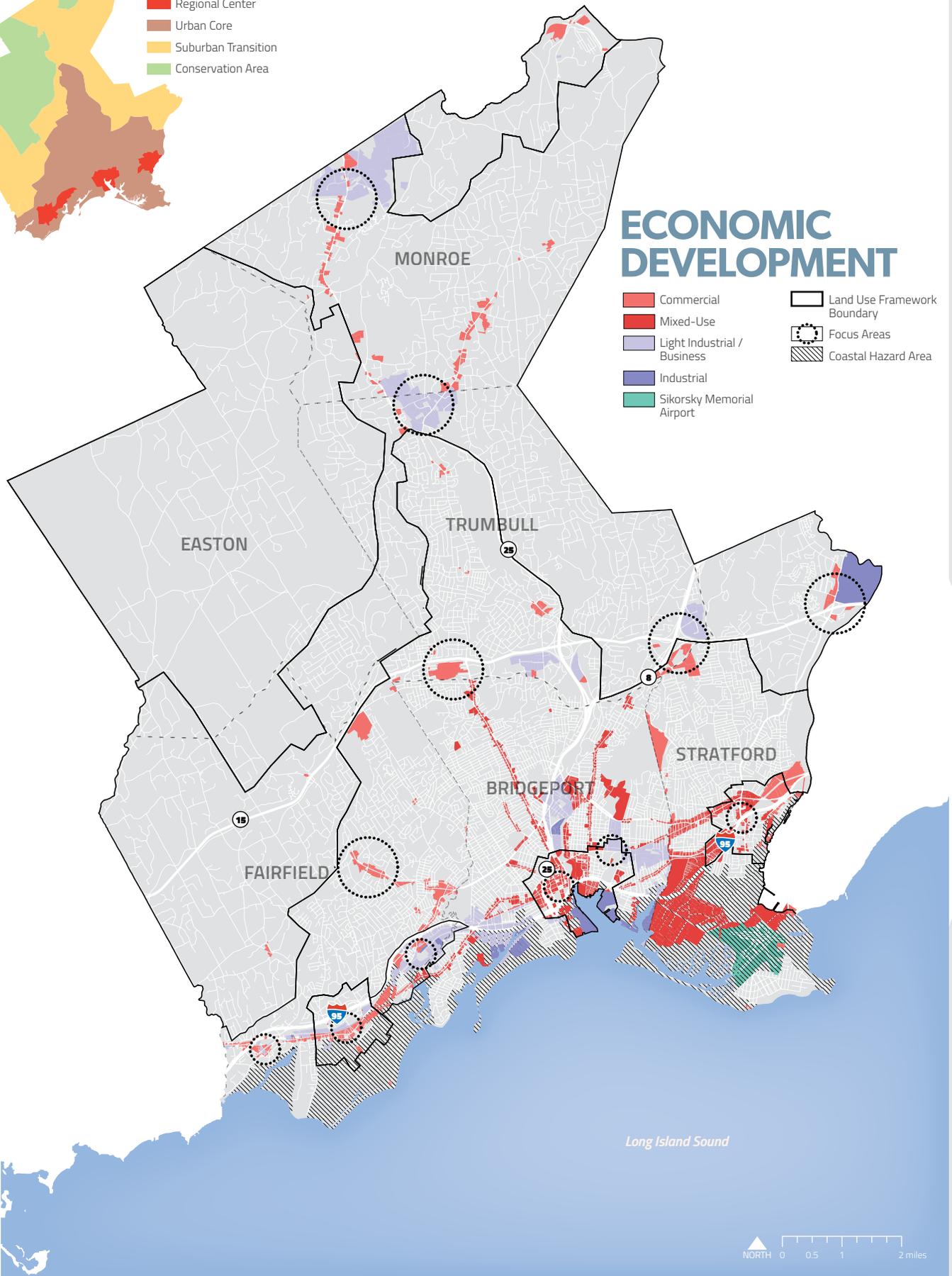


LAND USE FRAMEWORK

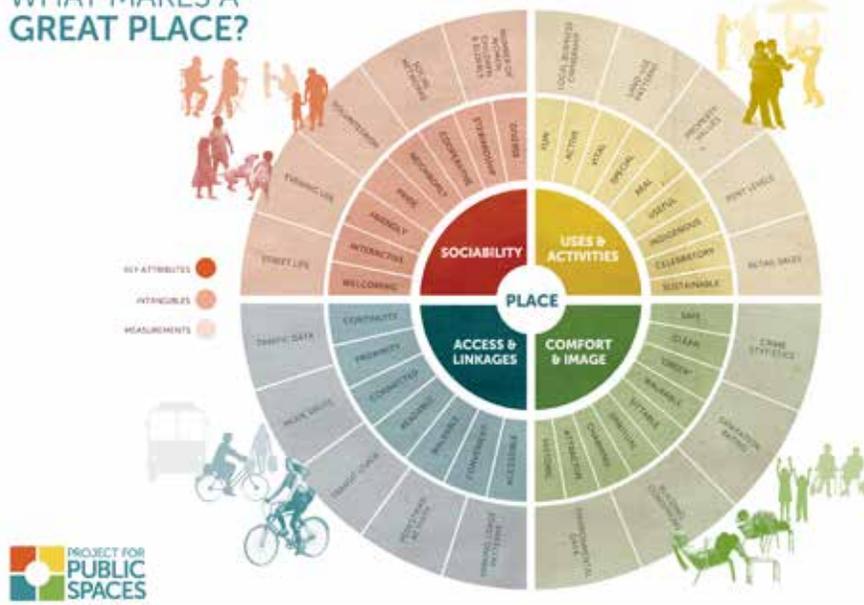
- Regional Center
- Urban Core
- Suburban Transition
- Conservation Area

ECONOMIC DEVELOPMENT

- Commercial
- Mixed-Use
- Light Industrial / Business
- Industrial
- Sikorsky Memorial Airport
- Land Use Framework Boundary
- Focus Areas
- Coastal Hazard Area



WHAT MAKES A GREAT PLACE?



Utilizing placemaking strategies can increase the vibrancy and attractiveness of a Downtown or Town Center.

7.1 DOWNTOWNS & TOWN CENTERS STRATEGIES

7.1A PLACEMAKING

Support “placemaking” strategies that increase the visual appeal and unique character of the region’s downtowns and town centers and make it a safe and attractive mixed-use environment to live, work, invest, and play.



A core component of the resurgence in downtowns and town centers is an emphasis on “placemaking.” Placemaking is an active effort to create dynamic, vibrant, and interesting public spaces that “people care about” and are drawn to. This includes everything from utilizing food trucks, street festivals, and public art to providing quality public transportation, pedestrian oriented streets, and a diversity of businesses in a downtown district. Emphasis is placed on strategies that can enhance urban design and public spaces.

The Project for Public Spaces (PPS) has identified four key qualities of successful places. They are:

- **Access and linkages.** Is the place well-connected, visible, and easy to access?
- **Comfort and image.** Is the place safe, clean, and welcoming?
- **Uses & Activities.** Does the place have a variety of activities and uses and is it activated throughout the day and week?
- **Sociability.** Does the place encourage social interaction and bring together people from different backgrounds?

Communities within the METROCOG Region should evaluate their downtowns, town centers, and public spaces for opportunities to use placemaking strategies within their public spaces. This may include conducting stand-alone studies or initiatives, or including them within local Plans of Conservation and Development. PPS offers a step-by-step guide to improve public spaces within communities:

- **Step 1:** Assess public spaces challenges
- **Step 2:** Select a site
- **Step 3:** Identify key stakeholders
- **Step 4:** Collect data
- **Step 5:** Conduct a place evaluation workshop
- **Step 6:** Translate the ideas into action with a working group
- **Step 7:** Develop a visual concept plan
- **Step 8:** Create a summary report and presentation
- **Step 9:** Implement short-term actions
- **Step 10:** Develop long-term design and management plans
- **Step 11:** Assess results and replicate

7.1B MULTI-FAMILY HOUSING

Support development of multi-family housing that can capitalize on proximity to major employers, institutions, and transit access to New York City, Stamford, and New Haven, and provide the “rooftop density” necessary to support retail and restaurant uses.



Quality housing proximate to major employers, institutions, and transit is integral to competing for and attracting well-trained and highly-skilled workforce. Young professionals and empty nesters, for example, are increasingly drawn to housing units closer to shopping, entertainment, amenities, their workplace, and other destinations. Multi-family housing units, at a variety of sizes and price points, are becoming increasingly necessary to capture skilled workers that would prefer to not commute long distances, do not require a home with a larger footprint, and would prefer not to be responsible for maintenance of a single family detached home.

As noted in greater detail in the Housing & Neighborhoods Plan, accommodation of quality multi-family units may require alterations to existing development regulations or exploration of gap financing that can assist developers in making the numbers work within certain communities. Partnerships could also be explored with major regional employers to identify multi-family development opportunities that could support their existing workforce or planned expansion.

Increased residential density within key areas identified in the Land Use Plan can help create critical masses of activity as well as provide the rooftops needed to support additional retail, dining, entertainment, and consumer services.

smile, bridgeport! you're beautiful.



Illustration: Bridgeport Downtown Special Services District

The Downtown Bridgeport Special Service District markets the downtown, makes infrastructure improvements, and hosts events and festivals

7.1C DOWNTOWN/ TOWN CENTER PARTNERSHIPS

Facilitate creation of a Downtown or Town Center Partnership (comprised of local government officials, businesses, colleges and universities, hospitals, and other major employers) that can meet regularly to align investments, establish partnerships, identify joint-application opportunities for grants, and work collectively to solve common problems and increase activity and investment.



Stakeholder partnerships within downtowns and town centers are integral to ensure that a common vision is established within the defined area, investments are coordinated, regular communication is established between different organizations, and that programming is aligned and synchronized with other efforts. It is important that all downtown or town center stakeholders are “bought in” to working together and strengthening the area’s vitality and economic competitiveness. Partners could include local officials, small businesses, major employers, colleges, universities, hospitals, and religious institutions.

Such a partnership could take many forms. More informal measures could include monthly meetings of stakeholders to discuss common issues. Formal measures could include incorporation as a not-for-profit organization or establishment of a formal municipal government position, as well as utilization of a business improvement district (BID) designation or special service district (SSD). Each community should assess what is appropriate for their own local conditions. The role and responsibility of a downtown or town center partnership will vary based on the charter of the organization, however, it could include façade improvement programs, business assistance grants, streetscaping investments, branding and marketing, civic events, cultural programming, and more. For example, the Bridgeport Downtown Special Services District (DSSD) hosts concerts at McLevy Green, organizes the Bridgeport Arts Fest, and acts as a business advocacy organization for Downtown Bridgeport, among other things.

The International Downtown Association recognizes successful downtown organizations. Examples of projects undertaken by downtown associations include:

- The **Pittsburgh Downtown Partnership** initiated a full building façade renovations program, which has led to completion of more than 40 projects over the past six years.
- The **Downtown Dayton Partnership** helped create a Pop-Up Project that matched business owners and entrepreneurs with vacant downtown property owners with vacant first-floor space, allowing them to hold “pop up shops” in these spaces. In 2010, only 62% of first floor space within downtown was occupied; by 2013, that number jumped to 79%.
- The **Indianapolis Downtown Inc.** helped connect Downtown’s major destinations with a regional greenway system via a new eight mile Cultural Trail.
- **Downtown Fort Worth Inc.** worked with the federal government to change US Fish and Wildlife Service regulations regarding falconry, thus reducing the problem of unwanted birds within the area.



Photo: Susan Rubinsky

Excellent and efficient public transportation is a cornerstone to a successful Downtown or Town Center.

7.1D TRANSIT UPGRADES

Support public transportation upgrades and investments at MTA Metro North and Greater Bridgeport Transit that can increase the efficiency, accessibility, and attractiveness of transit within downtowns and town centers.



Growing ridership on public transportation is adding strain to a system that, generally speaking, is already stressed. Service delivery delays and overcrowding have mixed with increase wear-and-tear on infrastructure for many providers. Limited federal, state, and local funding also presents challenges for service expansion and delivery.

Both the MTA Metro North line and Greater Bridgeport Transit (GBT) are integral to facilitating transit-oriented development within downtowns and town centers and growing these areas as centers of culture and commerce. Simply put, the reliability and desirability of using public transit is directly tied to the economic health of these areas.

METROCOG should continue to work with both the MTA and GBT to identify, support, and fund infrastructure improvements that can enhance the attractiveness of public transportation within the region. Specific public transit infrastructure projects are identified in METROCOG's Long-Range Regional Transportation Plan.



Photo: Susan Rubinsky

The EPA awarded Stratford \$400,000 in 2013 to help clean-up, remediate, and reposition brownfield sites for redevelopment.

7.2 BROWNFIELDS & CONTAMINATED SITES STRATEGIES

7.2A FEDERAL & STATE GRANTS

Pursue all available federal and state grant opportunities for the study, remediation, and redevelopment of brownfield sites.



With dozens of large properties throughout the region identified as brownfield sites, METROCOG should continue to assist its communities in pursuing grants from state and federal programs that can help remediate these properties and transition them back into productive uses.

The State of Connecticut, for example, funds a municipal grant program to assist with brownfield redevelopment projects. It also administers the Targeted Brownfield Development Loan Program, which provides low-interest loans to develop contaminated properties. Other funding sources of which brownfield sites may be eligible include historic tax credits, urban renewal tax credits, and other state administered grant programs marked for economic and community development. METROCOG also provides several grant opportunities to communities, in addition to partnering with local communities in the pursuit of federal and state grants.

METROCOG should continue to provide technical assistance to communities applying for brownfield remediation grants and tax credits (e.g. identification of grants, provision of necessary data, letters of support, etc.), apply jointly with local communities for grants, assist in complex planning issues involving brownfield sites, and/or disburse federal transportation funds, where possible, for projects that can assist in brownfield remediation and redevelopment (e.g. Barnum Station project).



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Increasing Municipal Efficiency with GIS

In Spring 2013, GBRC began a Geographic Information System (GIS) project that will unite disparate data within each town and city in our region.

A region-wide system insures data consistency and aids in planning and response efforts that cross municipal boundaries, such as emergency management efforts due to natural hazards like hurricanes and blizzards. In addition, there is a cost savings for each municipality by creating a region-wide GIS system, rather than implementing town by town.

METROCOG's centralization of GIS data allows for economies of scale and lower administrative costs, as well as ease in developing regional strategies grounded in data.

7.2B GIS

Utilize the GIS infrastructure to foster better prioritization of brownfield development and continue ongoing efforts to develop a comprehensive Brownfields Redevelopment Strategy.



METROCOG is currently conducting a comprehensive study to identify and track all properties that maintain official brownfield status with the United States Environmental Protection Agency (US EPA) and/or State of Connecticut Department of Energy and Environmental Protection (CT DEEP). All properties are to be identified within a GIS database.

Identifying and mapping all properties within a region allows for the ability to identify spatial challenges and trends, including providing a better understanding of land use challenges and opportunities and how properties intersect with the regional transportation network. This data can also be overlaid with other spatial variables to identify relationships between different data points to establish remediation priorities.

Moving forward, METROCOG should take GIS data and develop a comprehensive plan for prioritizing remediation and redevelopment, taking into account environmental justice, transportation access, ownership, size, redevelopment potential, and health and ecological risks, as well as contribution to regional priorities such as transit-oriented development and sustainability.

THE THREE TYPES OF INNOVATION DISTRICTS

Their location varies within a metropolis

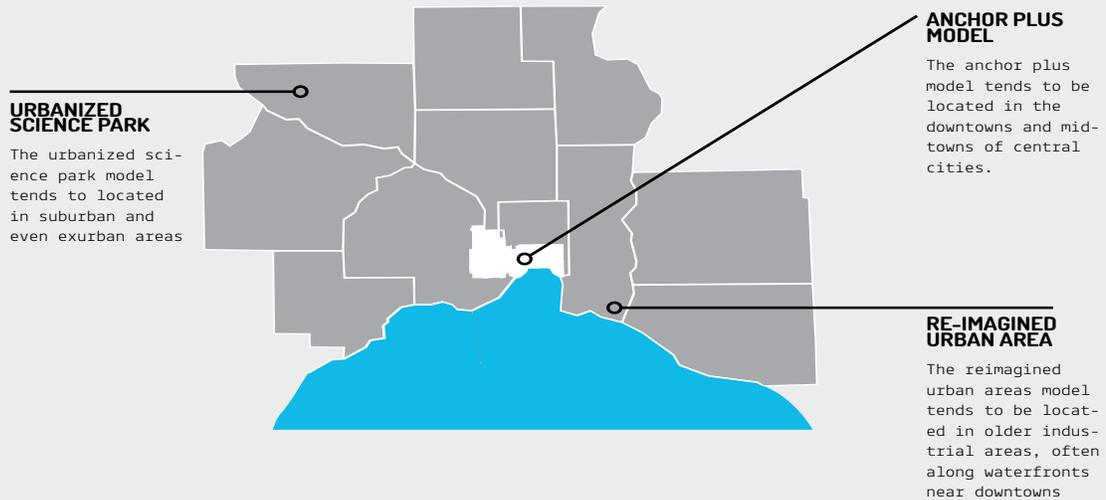


Illustration: Brookings Institute

7.3 INNOVATION STRATEGIES

7.3A BRANDED INNOVATION DISTRICTS



Evaluate the potential for establishing branded "innovation districts" within each community (as desired and appropriate) that can capitalize on local anchors/institutions, established business incubators, and growth in key industries such as education, healthcare, tech and the environmental sector.

Innovation districts can take a variety of forms, however, they are typically geographically discrete areas in which a number of businesses, ranging from small incubators and startups to large anchor corporations, form to create a unique business environment optimal for economic growth. These districts are typically transit-oriented and feature a pedestrian friendly transportation layout, as well as modern, mixed-use design principles that cater to the needs of business professionals. Innovation districts can function as an engine for economic growth in a region by attracting a skilled workforce, partnering with local universities and institutions, and fostering a sense of community-wide creativity and innovation.

A number of models exist for best practices related to cultivating an innovation districts, perhaps the most cited of which is the three basic types of innovation district:

- **Anchor Plus Model:** Typically located in a downtown or town center, most often proximate to a university or other "anchor" institution that, with the help of increased investment to the area, is able to provide the impetus for local economic growth.
- **Re-imagined Urban Area:** Located in an urban area historically used for warehousing or industrial uses with a large abandoned building stock. Corrective measures for remediating obsolete uses and improved transit access to and from more robust economic urban areas can lead to revitalization.
- **Urban Science Park:** Most often located in a suburban or exurban area featuring high-density mixed use development as a corrective measure to sprawling suburban development. Raleigh-Durham's Research Triangle Park is perhaps the most well-known of this type of innovation district.

CASE STUDY

“ST. LOUIS CORTEX DISTRICT”

Formed in 2002 by several major private institutions, including St. Louis University, Washington University Medical School, and Barnes Jewish Hospital, the Cortex Innovation District seeks to position St. Louis’ core as a hub for entrepreneurship and livability. Similar to Bridgeport, St. Louis was hit hard by de-industrialization and suburbanization, experiencing a significant population decline (856,796 people in 1950 vs. 319,294 in 2010). The district’s public and private partners are focusing efforts on plant and life science research, and are working to attract and retain companies in those fields. BioGenerator was recently launched as a privately funded nonprofit incubator that creates, grows, and invests in promising companies. The area has seen an addition of 1.5 million square feet of office and research space as well as the creation of 2,850 direct jobs. At full build-out, more than 10,000 jobs are expected.



The Brookings Institution suggests five steps to develop and grow an innovation district:

- **Step One.** Build a collaborative leadership network, a collection of leaders from key institutions, firms and sectors who regularly and formally cooperate on the design, delivery, marketing and governance of the district.
- **Step Two.** Set a vision for growth by providing actionable guidance for how an innovation district should grow and develop in the short-, medium- and long-term along economic, physical and social dimensions.
- **Step Three.** Pursue talent and technology given that educated and skilled workers and sophisticated infrastructure and systems are the twin drivers of innovation.
- **Step Four.** Promote inclusive growth by using the innovation district as a platform to regenerate adjoining distressed neighborhoods as well as creating educational, employment and other opportunities for low-income residents of the city.
- **Step Five.** Enhance access to capital to support basic science and applied research; the commercialization of innovation; entrepreneurial start-ups and expansion (including business incubators and accelerators); urban residential, industrial and commercial real estate (including new collaborative spaces); place-based infrastructure (e.g., energy, utilities, broadband, and transportation); education and training facilities; and intermediaries to steward the innovation ecosystem.



Photo: Michigan Municipal League

Interactive public spaces, such as a pop-up beach in one of Downtown Detroit's plazas, can help foster a culture of creativity and interaction..

7.3B CONNECTIVITY

Strengthen physical (e.g. streetscaping, pedestrian connections), social (e.g. shared events, public spaces), and economic (business-to-business purchasing, product collaboration) linkages between institutions and partners in employment hubs, districts, and clusters.



The physical and social connections within a community and a region play a crucial role in bringing people together. Creating physical connections such as an attractive streetscape encourage residents and visitors to engage with their surroundings, creating deeper community ties and connection between residents and their community.

At the neighborhood scale, connectivity may refer to redesigned pedestrian infrastructure (i.e. shorter blocks, development of a network of pedestrian trails and footpaths, and tree or shrub plantings to increase pedestrian comfort). Similarly, hubs which could take the form of a small pocket park, garden, or outdoor furniture area, function as meeting points with an urban network's connectivity and offer a setting for community members to connect socially.

Improved connection in a local business community, whether through improvements to the physical environment, or through policies, helps to create a climate that helps to attract and retain jobs and a skilled workers. More specific strategies on connectivity can be found in the Land Use & Development Plan and the Transportation & Mobility Plan.



Workforce housing proximate to employment hubs is integral to resident quality of life and can also lead to healthier lifestyles and reduced congestion.

7.3C WORKFORCE HOUSING

Support the development of workforce housing within walking distance of employment hubs, where appropriate.



Lower-middle and middle class workers often encounter difficulty securing affordable (yet market rate) housing near employment centers, resulting in a reliance on long car commutes to and from work, which impose a range of societal costs. Workforce housing, more specifically more affordable housing units within walking distance from large employment centers, can combat this trend.

Encouraging higher density residential development closer to employment hubs presents a range of benefits to residents, businesses, and the region as a whole. Employment within walking distance from residential neighborhoods decreases reliance on personal automobiles which offers co-benefits like reducing vehicle emissions due to decreased congestion and vehicle use, time savings to workers who can enjoy leisure time and time in the home with family and children instead of waiting in traffic, and fewer long-term costs for street repair as a result of reduced vehicle use. Walking to work can also be part of an active lifestyle, which presents health benefits for those who do so.

As noted in the Land Use & Development Plan, the Transportation & Mobility Plan, and the Housing & Neighborhoods Plan, the creation of workforce housing may not be market feasible due to existing regulations and gaps in financing. METROCOG should work with local communities to identify gap financing methods and measures and locally-sensitive alterations to existing development regulations.



7.3D PROMOTION OF MIXED-USE ENVIRONMENTS



Reevaluate existing zoning regulations within employment hubs and innovation districts to ensure they facilitate, where appropriate, a mixed-use environment conducive to innovation.

Mixed-use environments within regional centers and urban areas provide an alternative to conventional single-use landscapes which require reliance on automobiles to travel between destinations. Conversely, mixed-use communities provide an opportunity for residents to live, work, socialize, and shop within a single neighborhood.

Accommodating successful mixed-use development often requires revisions to zoning ordinances and building codes to accommodate shared residential and commercial areas, increased residential densities, and modern parking requirements that promote higher densities.

Benefits of a mixed-use approach to development include:

- Supports affordable housing by lowering transportation costs
- Facilitates economic collaboration and innovation
- Places retailers and customers in the same place
- Produces higher returns on property and sales taxes to local governments
- Saves funds through lower per unit infrastructure and public-service costs
- Creates greater neighborhood cohesion
- Reduces reliance on personal automobiles



7.4 EDUCATION & WORKFORCE PREPAREDNESS STRATEGIES

7.4A MAGNET SCHOOLS

Support continued development of “inter-jurisdictional” magnet schools.



Public education is provided mostly within city/town borders, and it is each city/town’s greatest general fund budget expenditure. According to a 2012 study issued by the Connecticut Conference of Municipalities, Connecticut is the most reliant state on property taxes to fund public education. Given the wide income disparity within the region, this means that the quality of public education within each community is closely tied to the level of prosperity within that community.

An effort is underway in Bridgeport and in some neighboring communities to develop “inter-jurisdictional” magnet schools that can offer a higher quality education as well as specialization within certain academic areas. These schools draw from a pool of communities, thus encouraging integration of different populations and supporting racial and economic diversity. Examples include:

- **Fairchild Wheeler Interdistrict Magnet Campus (Bridgeport)** contains three separate high schools, focusing on (1) aerospace/hydrospace engineering and physical sciences, (2) biotechnology, research, and zoological sciences, and (3) information technologies.
- **Regional Center for the Arts (Trumbull)** is a part-time performing arts magnet school. Studies include dance, theatre, musical theatre, film/video production, and creative writing.

METROCOG and its communities should continue to support the development of interdistrict magnet schools as a policy option to strengthen workforce development and support diversity, and provide continued technical expertise on any planning and transportation issues that may arise as new schools are developed that draw from students within multiple communities.

CASE STUDY

“CHICAGO PUBLIC SCHOOLS & BAXTER”

Baxter International Inc. (NYSE: BAX) is a healthcare company specializing in medical devices, pharmaceuticals, and biotechnology, with more than 65,000 employees and \$16.7 billion in sales in 2014. In the summer of 2014, Baxter partnered with the Chicago Public Schools (CPS) to provide real-life career networking opportunities and leadership skill development. Rising seniors from CPS participated in a week long summer internship program at Baxter, learning about business strategy, current healthcare trends, and the roles necessary in a large organization. They also toured the facilities and took part in research and development, and were coached on resume development and networking. Students were able to gain valuable insight into emerging technological and scientific fields, as well as the opportunity to develop relationships with leaders in the field.



7.4B VOCATIONAL TRAINING

Partner with The WorkPlace to increase access to vocational training and other technical skills programs.



Georgetown University's Center on Education and the Workforce estimates that roughly two-thirds of all jobs will require some level of post-secondary training or training by 2020. Vocational training – within high schools, community colleges, and other training programs – can provide non-college bound students with success in the workforce by training them in a variety of skills. Examples include carpentry, cosmetology, office administration, computer programming, and more. Training is especially important for at-risk youth and those re-entering the workforce after incarceration. Increased investment in vocational training will manifest itself into a more skilled, effective labor pool.

The WorkPlace is one of five Regional Workforce Development Boards in Connecticut and prepares people for careers while strengthening the workforce for employers. They administer workforce development funds and coordinate providers of job training and education programs. Some of the services they administer include:

- **YouthWorks**, which connects out-of-school youth aged 14 and 21 to workforce development services such as occupational skills training, education remediation, and job placement.
- **Jobs First Employment Services**, which is a collaborative initiative that helps people gain and maintain independence from state financial assistance. It is a balanced work first model which offers intensive, short-term occupational training and job readiness, as well as support services to assist in securing employment.

METROCOG should serve as a coordinating and facilitating body between the region's six communities and the WorkPlace, identifying opportunities for collaboration and support, as well as access to major employers and other regional/state/federal initiatives. As the region's workforce is regional and geographically fluid in nature, even more affluent communities benefit from the training of workers in other communities from which they draw their workers.



7.4C INTERNSHIPS

Encourage internship and summer employment opportunities for teenage youth within the region, showcasing future career opportunities.



Internships allow young students to become familiar with the challenges of emerging employment opportunities within the Region, and allow employers the chance to train the next generation of employees in the best practices of emerging industries. METROCOG should assist local communities, public schools, major employers, the Fairfield County Business Council, Bridgeport Regional Business Council, and other key stakeholders in enhancing internship and summer employment opportunities for the region’s youth, particularly those who are at-risk. Other possible initiatives that could increase connections between youth and major employers include job shadowing days, career fairs, career days, field trips to companies, and more.

7.4D HIGHER EDUCATION

Work with the region’s numerous colleges and universities to identify partnership opportunities with established employers and growing startups to develop innovative projects and spur job growth.



The region is in a strong position to encourage partnerships between universities, employers, and startups to develop innovative projects and spur job growth. The Region is home to a diverse array of colleges and universities educating more than 17,000 students, including the University of Bridgeport, Housatonic Community College, St. Vincent’s College, Bridgeport Hospital School of Nursing, Fairfield University, and Sacred Heart University. Post-secondary educational opportunities are important to the health of a local economy as they act as regional anchors, employ residents, and educate the future workforce.

Partnerships between the Region and its colleges and universities offer a range of potential opportunities. Universities, in conjunction with local businesses, can (1) adapt curricula to respond to the needs of the region’s employers, (2) function as crucial research institutions, and (3) function as anchors in innovation clusters that serve a dual role as economic engines.

Jobs in the health care industry are particularly conducive to partnerships between universities and local governments, and major institutions include St. Vincent’s Medical Center and Bridgeport Hospitals. METROCOG and the region’s local communities should work collaboratively to establish partnerships between schools and major employers that can lead to enhanced research and employment opportunities.



7.5 REGIONAL APPROACH STRATEGIES

7.5A ECONOMIC DEVELOPMENT STRATEGY

Consider expanding METROCOG's mission to include regional economic development planning, such as ongoing development of a Comprehensive Economic Development Strategy (CEDS), either alone or in partnership with neighboring regional planning organizations.



A Comprehensive Economic Development Strategy (CEDS) is a regional plan that brings together the public and private sectors to establish a regional vision for economic development. The CEDS analyzes the regional economy, addresses regional economic problems, and serves as a guide for establishing regional goals and objectives, developing and implementing a regional plan of action, identifying investment priorities and funding sources, and assigning lead organizations responsibilities for execution of the strategy. CEDS are required for several types of federal funding assistance.

The existing CEDS for the METROCOG Region, "One Coast, One Future" was developed in September 2009 and includes a consortium of communities in lower Fairfield County, including all six METROCOG communities as well as Darien, Greenwich, New Canaan, Norwalk, Stamford, Weston, Westport, and Wilton. While METROCOG participated in the development of the study, they did not have a lead authorship role.

As communities within lower Fairfield County evaluate the need for an update of the CEDS, METROCOG should evaluate whether it makes logical sense to internally author a CEDS for the region's six communities, or whether it would be better to develop it in partnership with neighboring regional planning organizations.

7.5B PRIVATE SECTOR PARTICIPATION IN PLANNING

Promote private sector participation in local and regional planning efforts, and encourage cooperation and communication between member towns, the Fairfield County Business Council, and Bridgeport Regional Business Council.



As METROCOG's governments engage in local planning and development, it is integral to keep the business community engaged and informed. Land use planning and regulations have a direct bearing on the health and success of the private sector, and businesses should be regularly involved and consulted in major planning and development decisions, including the drafting of local Plans of Conservation and Development and changes to the zoning code. Routine engagement can lead to identification of policies and procedures that can help better grow businesses, identification of land uses that can complement growing local industries, and establishment of a "business friendly" culture that can attract and retain a diversity of industries.



Examples of engagement with the business community include:

- Hosting monthly, biannual, or annual breakfasts with local officials to build rapport
- Issuing a business newsletter to update the business community on key projects and initiatives
- Hosting business workshops during the development of a local Plan of Conservation and Development
- Proactively reaching out to employers on a regular basis to listen to concerns and assist them in any governmental issues they may have
- Working with businesses as they seek to expand or remodel, assisting them through the permitting and approval process

7.5C: ECONOMIC DATA

Compile and share regional economic data with local communities to ensure better planning, development, and marketing efforts.



Access to reliable demographic, economic, and market data allows local communities to lobby developers and businesses as well as identify trends that may affect local programming and land use. Data sources can include the decennial U.S. Census, the American Community Survey, Multiple Listing Service (MLS), CoStar, ESRI Business Analyst, and more.

Similar to METROCOG’s role in acting as a clearinghouse for GIS Data, METROCOG should consider also serving as the region’s “one-stop-shop” for economic data, providing local communities with annual information. This would reduce the need for multiple private data subscriptions across the different communities, as well as provide a central location for important information for both regional and local planning. It would also allow for shared data of local market conditions across borders to identify trends occurring on one side of a border which may eventually spill-over into the neighboring community.



8

NATURAL RESOURCES

PRESERVE • CONSERVE • PLAY





GOAL

Preserve sensitive natural areas and protect regional assets, such as local watersheds, riparian zones, regional water supplies, and wetlands, while promoting an integrated network of park and recreation areas throughout the region.

The METROCOG region's natural areas and open space assets contribute significantly to quality of life in the region. In addition to providing needed opportunities for recreation and access to nature, natural areas play a vital role in regional stormwater management and providing quality drinking water to residents. Green infrastructure including undeveloped floodplains and riparian areas, wetlands, and woodlands function collectively to naturally permeate and filter stormwater into the soil, naturally limiting the needs for investments in man-made infrastructure and impacts to Long Island Sound.

The Natural Resources Plan promotes a regional approach to natural resource and open space preservation that respects the regional scale of natural systems. This includes a focus on watershed planning to coordinate conservation and preservation efforts between adjacent communities. It also promotes coordination in coastal areas where increased threats due to sea level rise and increased severe weather requires coordination among METROCOG communities as well as with neighboring regions along the Long Island Sound.

While the Natural Resources Plan underscores the need for unique roles and priorities regarding local park needs among METROCOG municipalities, a regional approach is needed to establish a linked network of greenways that maximizes the collective impact of individual parkland assets. This also reflects the fact that every community within the METROCOG region has a Local Plan of Conservation and Development or other policy document that highlights community desires to expand regional trails and greenspace, including encouraging preservation along area waterways.

In addition to parks, recreation, and hazard mitigation needs, the Natural Resources Plan encourages development in accordance with the regional Land Use Plan, to ensure appropriate land use and intensity adjacent to natural areas. This regional approach will address environmental justice concerns; reduce land use conflicts; prioritize the conservation, preservation and maintenance of the area's natural resources; and promote strategies to restore the water quality of Long Island Sound.

GUIDING PRINCIPLES

The policies and recommendations in this chapter align with "Reconnect One Region's" guiding principles of Reconnected, Revitalized, and Resilient.



RECONNECTED

A regional approach to protecting natural resources and coordinating assembly and development of a regional green network will improve parks and recreation access within each METROCOG community while improving the ecologic health of the region.



REVITALIZED

Parks, waterways, and green space are a vital contributor to quality of life and are proven assets that serve to raise property values and enhance neighborhood stability.



RESILIENT

Hazard mitigation and coastal area strategies are key measures in making the METROCOG region a more flood resilient and ecologically resilient region.



Long Island Sound Coast

80% of region's population
Home to more than **4 million**



Regional Greenways & Trails

- Benefits include:
- Connectivity
 - Green Space
 - Recreation

+1,400

types of species in Long Island Sound.

\$542 Billion

amount of assets at risk in Connecticut during coastal storms.

KEY INFLUENCES

Waterways and coastal areas form the backbone of a complex network of greenways and natural areas that weaves through each of the METROCOG region's communities. These areas are home to parks, beaches, sensitive wildlife habitat, and the region's drinking water supply. These open spaces areas are assets to the communities they serve, but they are also regularly threatened by natural hazards including severe storms and flooding. The topics of waterfront open space, regional greenways and trails, and hazard mitigation have been identified as the highest priorities in developing the Regional Land Use Plan. This section identifies how these issues impact other aspects of development and why addressing them is of key importance to the region moving forward.

COASTAL MANAGEMENT & WATER QUALITY

WHY IT MATTERS

The coastal communities of Long Island Sound are home to more than four million people including more than 80% (255,000+) of the METROCOG region's population. For generations, the Sound has formed the backdrop of an industrial complex and vacation destination for a rapidly growing region. The Sound is also a diverse ecosystems home to more than 1,200 species of invertebrates, 170 species of fish, and dozens of species of migratory birds.

While the area remains a destination for sunbathers and outdoor enthusiasts, industry has declined. This industrial legacy resulted in depleted oxygen levels, mostly attributed to nitrogen pollution, and natural systems suffered with numerous fish kills in the 1970s and 1980s. Improved land use policies and coastal management and conservation have improved the health of the Long Island Sound, but considerable environmental concerns remain. For example, the composition of the Long Island Sound's coastal habitat is now changing due to sea level rise. This same issue is also increasing flood risk for coastal communities.

The region's coastal communities of Fairfield, Bridgeport, and Stratford are more greatly impacted, but all communities in the region are located in the Long Island Sound's 16,000 square mile watershed and contribute to the water body's health. A coordinated approach is needed to leverage state and federal programs and improve health of coastal areas while improving resiliency and protecting communities from increased flooding related to sea level rise.



REGIONAL GREENWAYS & TRAILS

WHY IT MATTERS

Within all member communities, park inventories meet basic standards of 10 acres of open space per 1,000 residents, however local parkland is typically concentrated in larger parks and natural areas.

There is a need for improved access to neighborhood parkland throughout the region. Regional greenway development can play a key role in creating needed opportunities for parks and recreation while preserving open space for public use and protecting the quality of the region's waterways.

Existing areas of open space could help meet demand for parks and recreation, but steps must be taken to improve these areas as part of a larger publicly-owned network.

While extensive natural areas exist in the Suburban and Conservation areas of the region, these areas will face the threat of development if not properly protected through easements, restrictions, or public ownership. It is also important that undeveloped areas of open space associated with floodplains and wetlands remain undeveloped to maximize the regional landscape's ability to capture and filter storm water.

HAZARD MITIGATION

WHY IT MATTERS

Coastal communities in Connecticut are home to 60% of the state's population and more than 32,000 homes lie within the 100-year floodplain. Connecticut is second only to Florida with more than \$542 billion in assets at risk to coastal storms. In 2012, Hurricane Sandy damaged 2,853 single family homes in Fairfield County

and heightened awareness of the significant need for improved hazard mitigation throughout the region. This need is only anticipated to grow as sea levels in the region will likely rise between two and four feet over the next 100 years and flooding and storm surges related to severe storms will only worsen.

This chapter provides strategies that complement the continued implementation of METROCOG's 2014 Natural Hazard Mitigation Plan. These include updating the plan when appropriate and undertaking initiatives to prevent damage from natural hazards, protecting property and infrastructure, and improving emergency preparedness within the region's communities.

GOALS

Preserve sensitive natural areas and protect regional assets, such as local watersheds, riparian zones, regional water supplies, and wetlands, while promoting an integrated network of park and recreation areas throughout the region.

OBJECTIVES

Priority

8.1

COASTAL MANAGEMENT & WATER QUALITY

Support continued preservation and enhancement of open space along the region's waterways, especially the Long Island Sound, and within public drinking supply watersheds.

1

8.2

REGIONAL GREENWAYS & TRAILS

Provide regional greenways and trails that link local and regional parks and natural areas to one another, forming an interconnected network of parks and open space.

1

8.3

HAZARD MITIGATION

Continue to implement the 2014 Natural Hazard Mitigation Plan, updating the plan when appropriate, and undertaking initiatives to prevent damage from natural hazards, protect property and infrastructure, and improve emergency preparedness within the region's communities.

1

8.4

LAND USE & TRANSPORTATION

Promote compact land use and development patterns that conserve environmentally sensitive areas and prevent the premature development of farmland, while maintaining resilient, man-made systems.

2

Applying Strategies to the Region

Strategies are identified for each objective in this Plan. While each strategy can be used to make progress in attaining the related object, a given strategy may not be applicable to all areas of the region.

A symbol representing each of the character areas of the Land Use and Development Framework has been provided to indicate where a given strategy could be meaningfully applied within the region. The implementation of a given strategy should also be tailored to the needs and unique context of the local community.

Regional Center – 

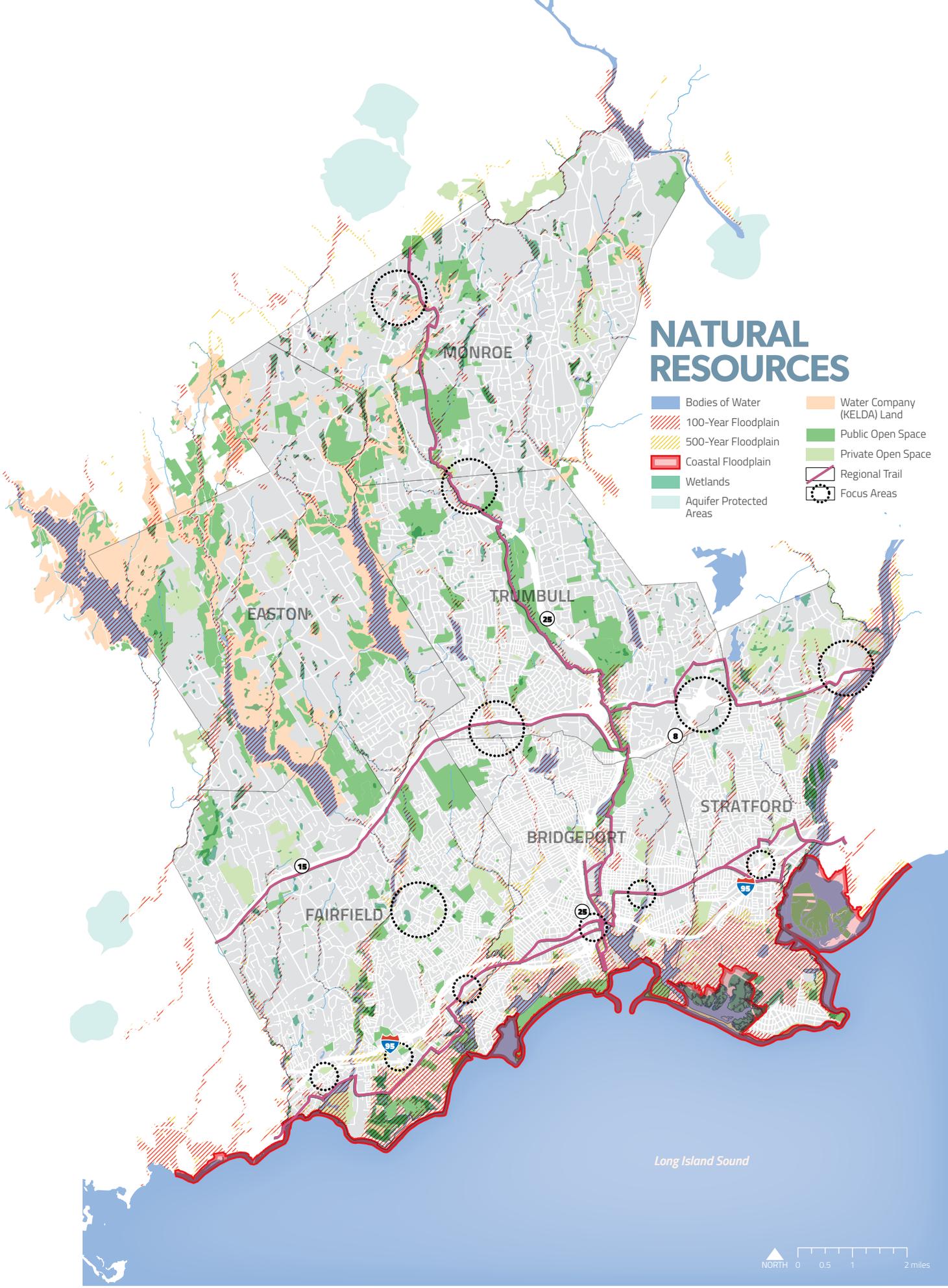
Urban – 

Suburban – 

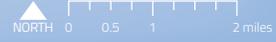
Rural Conservation Area – 

NATURAL RESOURCES

-  Bodies of Water
-  100-Year Floodplain
-  500-Year Floodplain
-  Coastal Floodplain
-  Wetlands
-  Aquifer Protected Areas
-  Water Company (KELDA) Land
-  Public Open Space
-  Private Open Space
-  Regional Trail
-  Focus Areas



Long Island Sound



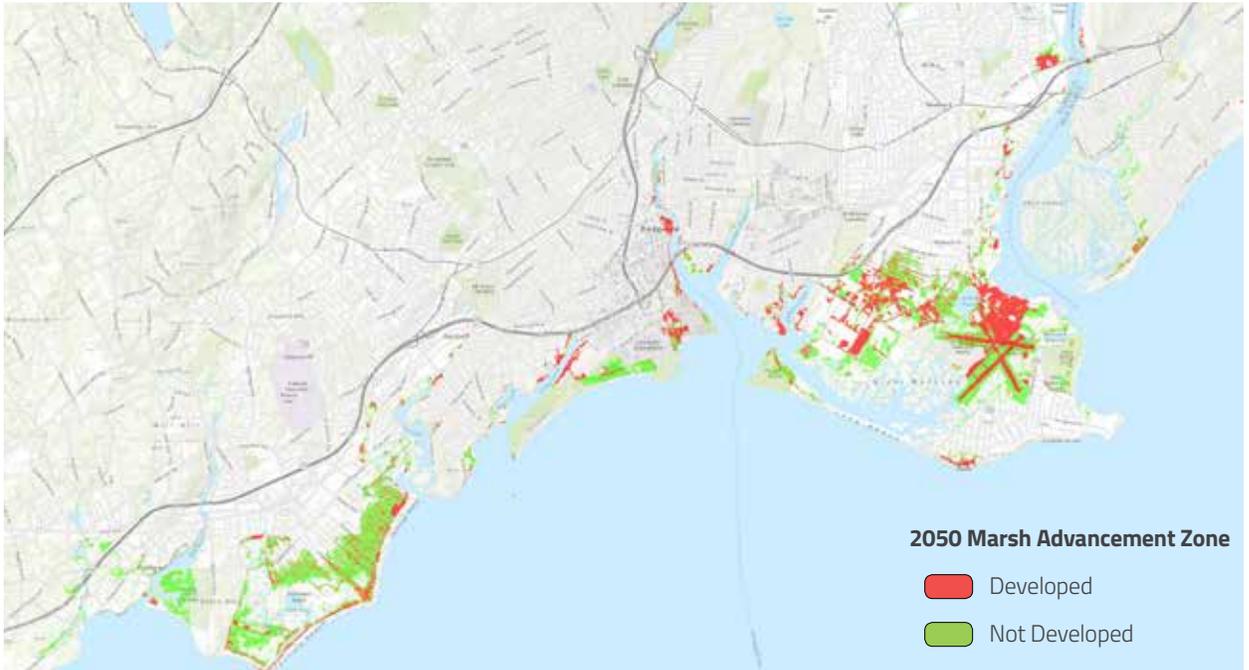


Image: The Nature Conservancy

The map depicts salt marsh advancement along Connecticut's coast.

8.1 COASTAL MANAGEMENT & WATER QUALITY STRATEGIES

8.1A DEVELOPMENT OF A LIVING SHORELINE PLAN

Implement the Living Shoreline Plan to restore waterfront habitats, support tidal wetland vegetation, and improve coastal resiliency.



The sensitive habitats along the coast provide unique and important ecosystem services to the region. Long Island Sound is home to more than 1,300 species and generates approximately \$8.5 billion annually for the regional economy. Continued preservation of sensitive coastal ecosystems is critical to the health of the coastal environment as well as the economic vitality of the region.

A coordinated approach is needed to leverage state and federal programs and improve the environmental health of coastal areas while improving resiliency. Coastal municipalities should coordinate to develop a multi-region coastal area preservation plan and create an implementation agenda with projects to improve the coast as a critical regional resource.

In accordance with the National Oceanic and Atmospheric Association (NOAA), METROCOG should conduct a site analysis to determine whether living shoreline stabilization is appropriate in coastal areas; this analysis should include an evaluation of the bank erosion rate and elevation, wave energy, prevailing wind and wave direction, vegetation, habitat and soil type. Utilization of the Coastal Resilience for Long Island Sound planning tool, created by The Nature Conservancy, METROCOG and other regional planning agencies, can also better help cities and towns predict and plan for coastal flooding and management along the Long Island Sound.



8.1B WATER QUALITY MONITORING

Develop metrics to monitor water quality and inform watershed management plans.



Maintaining good water quality within the region's watershed and along the coast is a key priority in maintaining, preserving and protecting METRO-COG's natural resources. With multiple watersheds and coastal territory, including 16,000 square miles that comprise the Long Island Sound watershed, the quality of local water is the foundation of a safe and healthy drinking system.

The region should use a spatially-based approach to water quality monitoring. Partnerships with local colleges and universities to monitor water quality and act as the clearinghouse of GIS water information to local, regional, and state governments can be beneficial for all parties. Academic institutions have access to testing and laboratory equipment, as well as GIS technology.

Leveraging such resources will save the region money, reinforce ties between communities and institutions, and provide timely data on regional water quality.

Making information and content accessible and suitable for all will help generate a stronger push for environmental sustainability within the region. In addition to providing transparent, regularly updated information to partner agencies, the information will also enable local interest groups to undertake meaningful research projects and grassroots initiatives that would have not otherwise happened without such distribution of information. Such projects could include short-term and ongoing activities such as invasive plant removals, clean-ups, streambank buffer plantings, and community-building/appreciation river festivals and events.

CASE STUDY: SAVE THE SOUND

Mamaroneck, NY

The Connecticut Fund for the Environment has a bi-state Save the Sound program that works with dozens of coastal towns and volunteers along the Long Island Sound to use water quality monitoring data to identify and help mitigate sources of pollution. Through water quality monitoring in Mamaroneck, the Save the Sound program was able to locate, report and repair two large open waste sources, one of which was located near a public beach. After just one summer of the beach pipe being fixed, water quality monitoring in the Mamaroneck Harbor showed a noticeable improvement.



8.1C BUFFERS & RIPARIAN ZONES

Ensure that adequate natural buffers are provided along rivers and streams to filter and reduce stormwater runoff and reduce the potential impacts of flooding.



Natural buffers serve to protect and restore natural systems and environmental features, such as vegetation, dunes, salt marshes, riverbanks, wetlands, tree canopies, and beaches. Buffers also mitigate the impact of natural hazards and help to safeguard urbanized areas from flooding. Adequate natural buffers should be present along rivers and streams to filter and reduce stormwater runoff and reduce the potential impacts of flooding, such as erosion and water contamination.

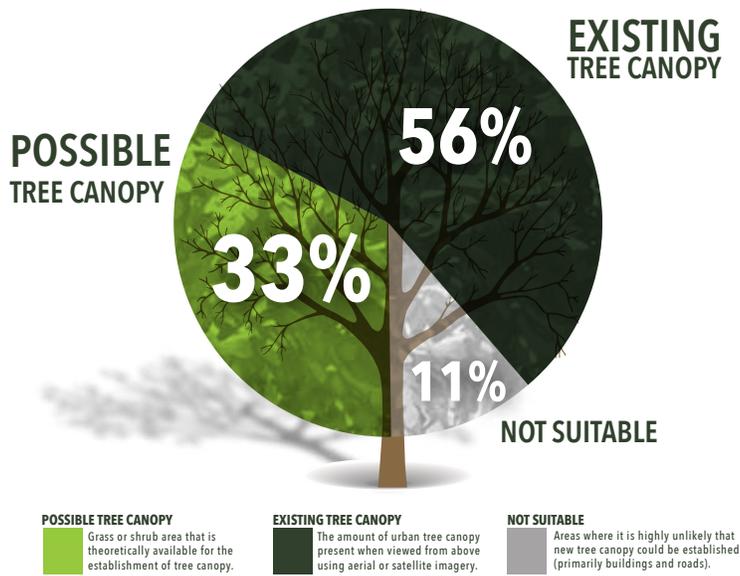
METROCOG should offer assistance to local communities seeking to identify appropriate policies for riparian and waterway buffer areas, which can include a variety of classifications and context-sensitive design principles. The adoption of a standardized policy among local jurisdictions across the region should also be encouraged. By providing a unified approach to riparian conservation, METROCOG can help increase the likely success rate in pursuing state and federal grant funding for implementing buffer improvements and green infrastructure.

To assist local efforts, METROCOG can also build upon existing GIS data to establish a detailed, region-wide inventory of riparian areas including potential opportunities and priorities for conservation based on factors such as ownership, proximity to established residential areas, and connections to existing or future trails.

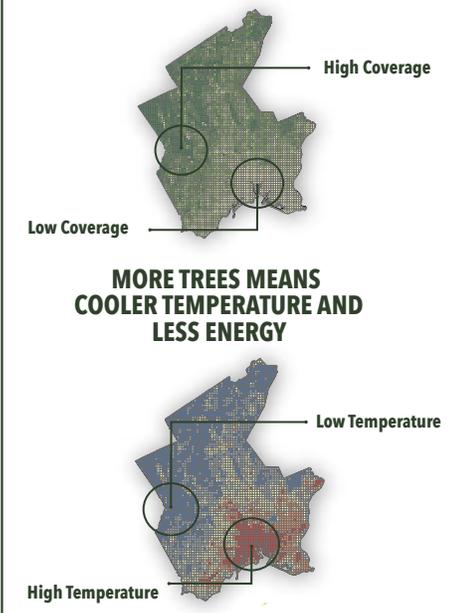
TREE CANOPY ASSESSMENT OVERVIEW

GREATER BRIDGEPORT, CT

HOW MUCH TREE CANOPY DO WE HAVE?

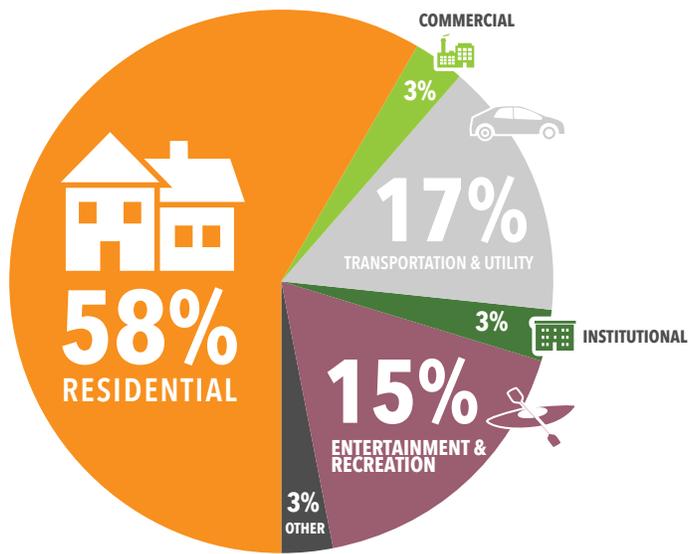


URBAN HEAT ISLAND



WHO OWNS THE TREES AND WHERE CAN WE IMPROVE?

MAJORITY OF TREES ARE ON RESIDENTIAL LAND



RESIDENTIAL HAS THE MOST AREA FOR ESTABLISHING NEW TREE CANOPY

An assessment of the region's tree canopy was conducted by METROCOG in 2014. The tree canopy plays an important role in maintaining a healthy ecosystem, including within buffers and riparian zones.



Photo: Susan Rubinsky

8.2 REGIONAL GREENWAYS & TRAILS STRATEGIES

8.2A REGIONAL TRAILS & GREENWAYS PLAN

Create a regional greenways and trails plan, in direct coordination with local government, key stakeholders, and the public, that encourages connections both within the region and to larger trail systems.



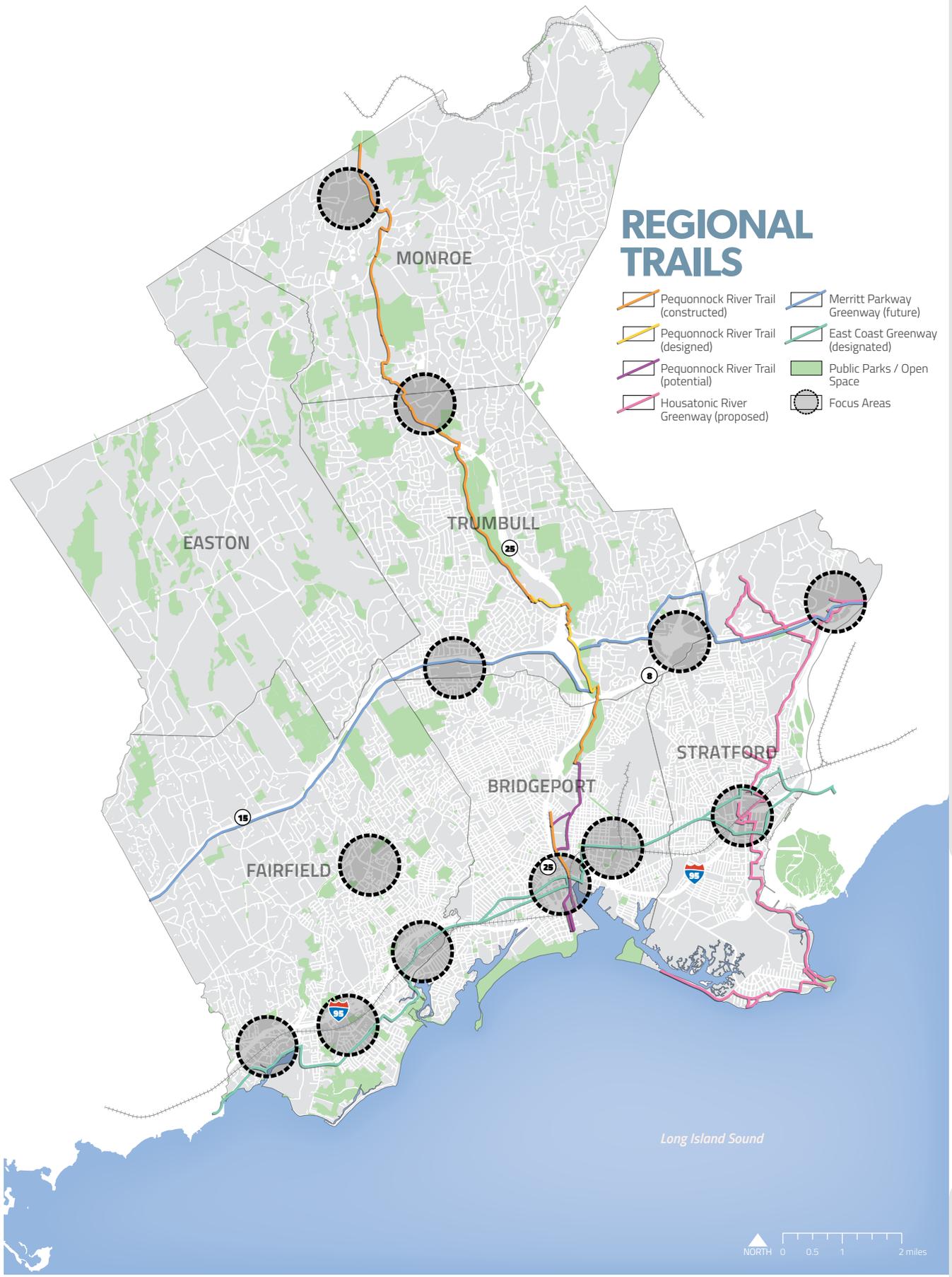
Regional trail systems serve as recreation and transportation corridors that link residential neighborhoods to parks, open space, commercial, and employment areas across jurisdictional boundaries. With the State's passing of the Complete Streets Policy (2014), METROCOG can plan linkages between different types of transit, trail, bicycle and pedestrian facilities in the region using State roadways to support a regional network of multi-modal transportation for all users.

In addition to the region's multi-modal trail network, natural areas and open spaces are also accessible via hiking trails. The Saugatuck-Aspetuck Trail is located in the Town of Easton, as well as Newtown, Redding and Weston. The Paugusset Trail runs through Monroe and Shelton.

METROCOG should undertake the development of a Regional Trails and Greenways Plan, including an update of the existing Bicycle and Pedestrian Plan that incorporates regional parks and open space planning and identifies opportunities for the colocation of regional trails and greenway features.

The Regional Trails and Greenways Plan could indicate undeveloped lands to be prioritized for conservation, target areas for increased management and ecosystem restoration and identify buffer areas for protected natural areas, and provide greenway and trail connections between protected areas. This initiative should include an assessment of how regional and long-distance trails connect to multi-modal planning in urbanized areas and the incorporation and the development of a regional Complete Streets policy.

METROCOG should continue to provide planning services, grant administration, and technical assistance to help local municipalities implement local improvements that advance the goals of the regional trails and greenways plan. METROCOG should also evaluate the potential creation of a regional trail district to provide for the funding and maintenance of regional trails and greenways planning activities and infrastructure.



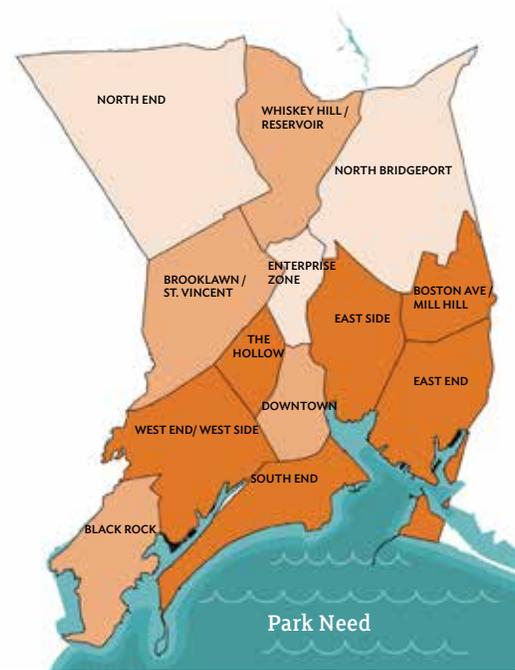
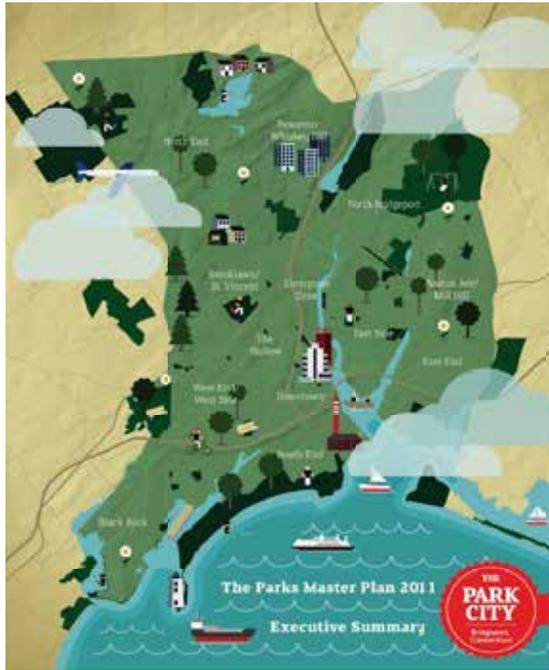


Image: City of Bridgeport/Sasaki

Bridgeport completed an assessment of their park system in 2012 and recommended improvements based on different neighborhood needs.

8.2B PARKS & OPEN SPACE ASSESSMENT

In partnership with local municipalities, conduct a park and open space allocation assessment and identify populations underserved by these recreational opportunities.



As identified in the Bicycle and Pedestrian Plan for the METROCOG region, parks and open space provide much needed respite from the urban landscape, and help to manage stormwater and air pollution of the surrounding environment. Serving as important cultural gathering spaces at little or no cost to residents, parks and open space should be ample and made accessible to all throughout the region.

All member communities in the METROCOG region contain park inventories that meet basic standards of 10 acres of open space per 1,000 residents; however, local parkland is typically concentrated in larger parks and natural areas, creating a need for improved access to neighborhood parkland throughout the region.

A coordinated effort, led by METROCOG with assistance from local governments, should be undertaken to identify park and open space deficiencies. A successful assessment will require developing metrics for analysis that suit the region's context, including the creation of a park classification system, park service area standards, and identification of significant physical barriers to park access. To the extent possible, the parks and open space assessment should also provide information regarding ownership and management of areas of private open space as these areas may represent long term targets for acquisition and transition to public open space assets.

The results of a parks and open space assessment should be added to the regional GIS clearinghouse maintained by METROCOG and should be used to help shape future land use decisions and mitigate park and open space gaps.



8.2C WATERFRONT OPEN SPACE

Coordinate with local communities and private property owners to preserve and expand a regional system of greenways along the area's waterways.



Access to open space plays an important role in public health by supporting outdoor activity, providing interaction with nature and serving as cultural gathering spaces. Recreation in parks and open space is one of few activities that are of little to no cost for residents. Connecticut's Coastal Management Program, adopted in 1980, includes mandatory requirements for public access at waterfront parcels.

To encourage additional points of access, METROCOG should offer technical assistance on waterfront open space preservation and expansion strategies to its member communities. This initiative should be in addition to requiring public access points within new development projects.

Examples of potential strategies to be considered include:

- **Fee-simple Acquisition** – A fee-simple acquisition transfers full rights of the property, including the underlying title, to another party.
- **Transfer of Development Rights** – TDR is emerging as a prominent conservation tool in coastal communities. TDR preserves a landowner's asset value by moving the right to develop from a location where development is prohibited, such as in sensitive coastal waterfront areas, to where development is encouraged, such as the Regional Center or Urban Core.
- **Tax Credits** – Tax credits can be used to incentivize landowners to donate a portion of their waterfront land as part of a conservation easement.

Once established, waterfront public access points should be clearly labeled with wayfinding signage leading up to the access points. Signage should also identify sensitive areas, which should be labeled with protective, enforcement language that limits access to such important resource areas.

CASE STUDY: HOUSATONIC RIVER GREENWAY

The Housatonic River Greenway project in Stratford serves as an excellent example of multi-entity waterfront open space preservation. This project entailed the town acquiring waterfront open space along different areas of the Housatonic River to connect from Stratford Point at the mouth of the river and extending to the north past several destinations and beachfront areas. It required coordination with the US Army (owner of the nearby US Army Engine Plant) and Sporting Goods Properties (a subsidiary of DuPont) to obtain waterfront access points along the trail. It also required consideration of materials such as a boardwalk in some areas to protect the sensitive habitat through which the greenway travels.



8.2D GREENWAYS & TRAILS LAND ACQUISITION

Evaluate policies for greenway and trail acquisition that may include conservation easements, open space dedication ordinances, and contribution of conservation properties to land trusts in exchange for locally-controlled development incentives and bonuses as part of future projects.



In addition to the benefits of regional trail networks listed previously, greenways serve to provide alternative transportation routes, help protect sensitive habitats, and create contiguous, linear forms of open space conducive to wildlife migration patterns. Existing areas of open space provide potential greenway connections; however, if not properly protected through easements, restrictions, or public ownership, face the threat of development.

Strategies to acquire land for the use of trails and greenways include public and nonprofit acquisition through market-rate purchase, CT DEEP Open Space Grant awards, and other funding sources. Local municipalities can require open space dedication or fee-in-lieu of dedication for new subdivision developments as well as work with private property owners to secure right-of-way or conservation easements. Partnerships with local land trusts and other non-profit organizations will be a key component of region-wide preservation efforts and METROCOG can assist in coordinating efforts between local municipalities and open space preservation groups.

CASE STUDY: PEQUONNOCK RIVER TRAIL

The Pequonnock River Trail System is an excellent example of utilizing existing utility, or in this case, railroad rights-of-way to create a 10-mile greenway from the Monroe-Newtown town line through Trumbull along the abandoned Housatonic Railway corridor and Pequonnock River. While plans are in place to extend the trail south to Bridgeport, additional opportunities should be identified and planned to create a network of regional greenways.

CASE STUDY: GSI BRIDGEPORT

As part of the Green Stormwater Infrastructure (GSI) in Bridgeport, local institutions have already begun to implement green infrastructure projects. Bridgeport Central High School planted a rain garden that infiltrates runoff from 5,500 square feet of the school's impervious driveway surface. Projects such as these can be applied throughout the METROCOG region, with varying degrees of size and scale to collectively contribute to increased drainage capacity.



8.3 HAZARD MITIGATION STRATEGIES

The 2014 Hazard Mitigation Plan provides strategies to prevent loss of life and reduce damage to property, infrastructure, and economic, natural, and cultural resources within the METROCOG region. The Plan identifies potential natural disasters that may affect the region and appropriate mitigation measures. Such hazards and disasters facing the region include inland flooding, coastal flooding, hurricanes, sea level rise, summer storms, winter storms (ice and blizzards), tornadoes, earthquakes and dam failure. Given the destruction caused by Hurricane Sandy in 2012, the Plan is a timely document that seeks to prepare the Region for future storms within the North Atlantic Ocean Basin, as well as other natural hazards and disasters.

The following discussion of hazard mitigation strategies is intended to complement the current Natural Hazard Mitigation Plan (2014). Implementation of regional hazard mitigation should be based on the more detailed recommendations provided in the Natural Hazard Mitigation Plan.

8.3A DRAINAGE CAPACITY

Increase the capacity of drainage systems, including the separation of combined sewer systems, utilization of low impact development techniques, and construction of green infrastructure.



Inland and coastal flooding are the most common natural hazard affecting the METROCOG region. Many areas within the Region are prone to flooding, with storms having the potential to develop flood-producing rain at a rate of once per year. Urbanization has channelized many water courses, putting added pressure on municipal drainage systems. In addition, rising sea levels render drainage systems less effective.

Increased drainage capacity can serve to mitigate stormwater overflow. In addition to major infrastructure projects that separate sewer and wastewater streams, natural buffers can provide a catchment during high levels of water. Greenways are the next line of defense, protecting floodplains from filling with water. Wetlands and other forms of green infrastructure decrease the amount of impervious surface area, which then utilize drainage systems to take on any overflow. Green infrastructure such as rain gardens, bioswales, and subsurface infiltration projects offer an effective approach to increasing drainage capacity on a community-wide level that also allows for phased implementation.



8.3B DISASTER PLANNING

Foster interagency cooperation and natural disaster contingency planning between local governments, public safety providers, state and federal agencies, and residents to ensure coordinated and efficient responses to natural disasters.



Natural disasters and hazards are not limited to municipal boundaries. They cross governmental jurisdictions to affect neighboring communities and have regional economic impacts. Cooperative pre-disaster mitigation planning can serve to assess areas likely to be most at risk and determine the most effective entities, access routes, and strategies for affected areas.

This cooperation should include a decision making process for minimizing competition for resources and duplication of efforts in times of disaster response. Creating a regional framework for disaster planning can help improve processes regarding loaning resources to neighboring communities during times of need to ensure regional resiliency.

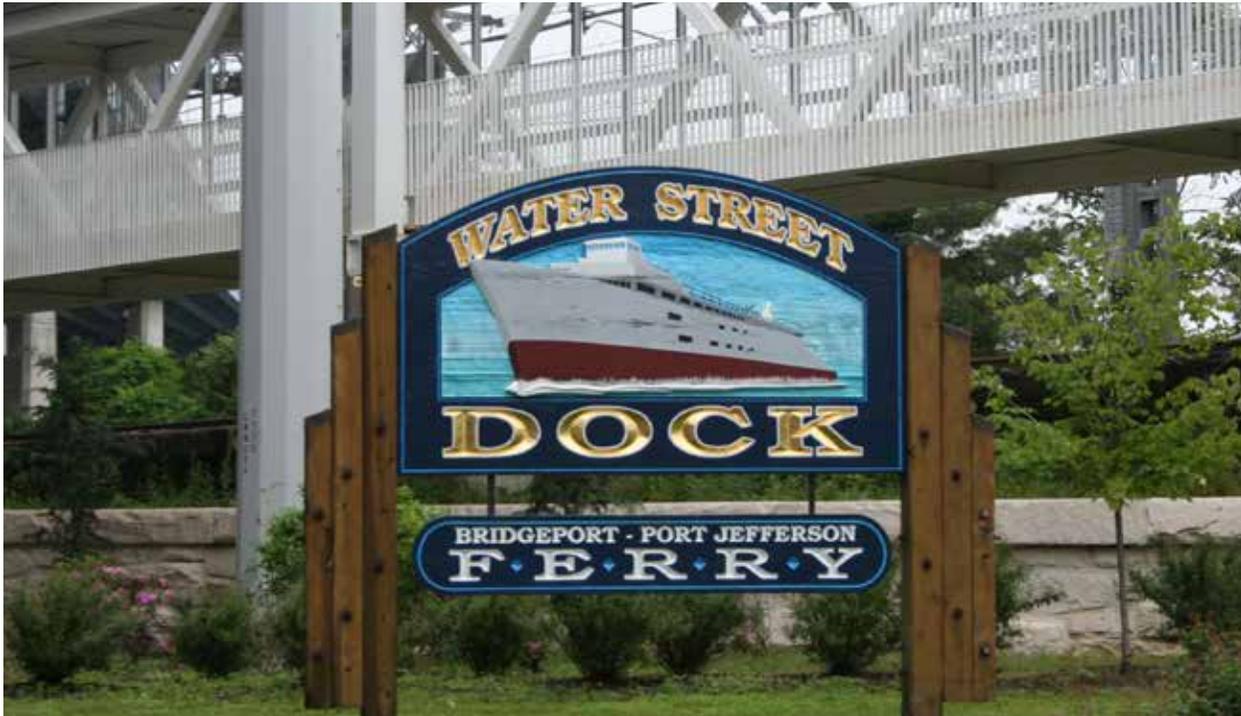
The disaster planning process should also include region-wide implementation of the FEMA Community Rating System as well as a coastal flooding risk assessment and mapping of all affected communities.

CASE STUDY: REBUILD BY DESIGN PROJECT

Bridgeport

Following Hurricane Sandy in 2012, Housing and Urban Development (HUD) launched a planning and design competition called Rebuild by Design to encourage coastal resiliency in the Sandy impacted areas. Hurricane Sandy caused significant damage in Bridgeport and more than 1,500 buildings were damaged because of rising flood waters. The Rebuild by Design competition brought teams from around the world and matched them with the local communities.

In response to the initial competition, the City of Bridgeport worked with the team of consultants to create a plan to increase coastal resiliency while reconnecting the urban core to the city's waterfront. In August 2013, the plan – entitled 'Resilient Bridgeport' – was selected from a pool of 148 applicants as one of ten finalists. In 2014, HUD announced funding for 7 teams out of the 10 finalists, including \$10 million dollars in CDBG-DR funds to the State of Connecticut to be spent in Bridgeport to mitigate the flood risk for the most vulnerable public housing stock in the city's South End/ Black Rock harbor area.



8.3C PROTECTING ROADWAYS

Work with the State Department of Transportation to identify infrastructure enhancements that can reduce the impact of natural disasters along the Region's busiest roadways.



Roadways serve as critical infrastructure that carry life-saving services and supplies. Proper roadway maintenance and upkeep ensures effective delivery of emergency services. As such, regional routes such as I-95, Route 15, Route 8, Route 25, and other regional highways should be clear of debris and be resistant to floods and other hazards.

Elevating roadway structures above base flood elevations provides a means for increased resiliency. Roadways that may not be feasible to elevate should be equipped with well-maintained drainage systems that are clear of sediment and debris. The use of bioswales and vegetated buffers adjacent to the roadway can also serve to increase drainage capacity, reducing potential flood risks. Building stormwater management capacity through green infrastructure can help position METROCOG for storm readiness.

In addition to infrastructure improvements, transportation must accommodate disaster relief. Expanding the capacity of the ferry system and improving access to accommodate excess demand during emergency events is important for enabling crisis and recovery management. Temporary transit services to minimize the need for individuals to travel by car can alleviate traffic congestion during times of evacuation. Additionally, repairing and improving roadways and transit corridors damaged during storm events in a timely fashion will maintain resiliency along roadways and prevent over-stressing undamaged areas. Real-time reporting ensures that damage caused to any component of the system can be detected and appropriately reported in timely fashion.

ConnDOT received a Hurricane Sandy Coastal Resiliency Competitive Grant in 2014 and is working to replace the aged and deteriorated Norwalk River Railroad Walk Bridge in Norwalk, CT, which is critical to Amtrak and MTA Metro-North Railroad service in the Northeast Corridor, and is vulnerable to damage from a storm surge. The new bridge will feature twin bascule bridges that enhance the safety and reliability of commuter and intercity passenger rail service as well as the reliability for waterway users.



8.3D PROTECTING COMMUNITY FACILITIES

Develop infrastructure that can protect critical community facilities, such as hospitals, wastewater facilities or power generators, from natural disasters and relocate facilities susceptible to repetitive loss.



Effective disaster response and relief is a function of local and regional community facilities. Not only must emergency services effectively reach affected disaster areas, but key infrastructure such as power and water must have resiliency to maintain their functions. In 2011, Tropical Storm Irene downed between 1–2% of trees in Connecticut, resulting in more than 800,000 power outages. It took up to 12 days to fully restore power, indicating a need for more resilient community facilities.

Resilient design of community facilities and services should be a focus of hazard mitigation planning, as these facilities play a primary role in administering disaster relief to residents. Numerous community facilities and critical infrastructure assets in the METROCOG region are at risk due to their location in low lying areas.

For example, Bridgeport, Fairfield, and Stratford each have wastewater treatment facilities within flood hazard areas. Furthermore, power outages also pose a risk to residents in Easton who predominantly rely on well and septic systems.

Recommended hazard mitigation actions related to community facilities include:

- Relocating emergency operation centers, police and fire stations, and emergency shelters to areas outside of floodplains and areas prone to exposure from future sea level rise.
- Relocating back-up power systems to upper floors if relocation of the entire facility is not feasible in the near term.
- Burying power lines should be in conjunction with planned roadway and right-of-way improvements.
- Retrofitting/constructing structures to withstand winds of up to 125 mph.
- Constructing protective berms.
- Implementing “storm-proof” design alterations such as glazed-glass to help protect windows.

CASE STUDY: MICROGRID GRANTS

Fairfield & Bridgeport

In conjunction with the State Agencies for Resilience, the State of Connecticut has dedicated an additional \$15 million to the Microgrid Pilot Program to help establish microgrids to power critical community facilities during flooding and violent storms. Two of the initial projects will benefit Bridgeport and Fairfield, communities heavily impacted by Sandy. The Bridgeport project will help prevent critical infrastructure (City Hall, Police Headquarters, Senior Center) from going offline during major events. The Fairfield Public Safety Microgrid project will benefit the town’s emergency operations center, fire department headquarters, police station, a cell tower and the homeless shelter at Operation Hope.



8.E CITIZEN EDUCATION

Educate residents, businesses, and stakeholders throughout the region about natural hazards and disasters, and ensure they are fully informed about shelter locations, evacuation routes, and flood insurance, and technical assistance programs.



Public education is a powerful tool to prevent and reduce loss of life and property during natural disaster events and hazards. Educational campaigns should touch upon the issues of sea level rise, flood risk, safety, and the importance of flood insurance to decrease risks to life, health, safety, and property. Educational efforts should also make the public aware of emergency facility locations, evacuation procedures, and post-recovery programs.

Citizen education on coastal management has proven to be cost-effective for METROCOG communities. METROCOG's update of the Natural Hazard Mitigation Plan (NHMP) in 2013-14 spurred an interest in application for FEMA's Community Rating System Program (CRS). The program is voluntary and offers discounts on flood insurance premiums to communities that undertake and document certain activities that go beyond the minimum standards of the National Flood Insurance Program. Activities include public outreach and information on flood protection, open space protection, stormwater management, and floodplain mitigation. In providing the GIS webviewer online and making the data accessible to citizens, residents are able to attain discounts on their flood insurance if their community was accepted into the program.

Communities within the METROCOG region have implemented different approaches to citizen education. Stratford and Bridgeport utilize informal education to inform residents about emergency preparedness. This includes access to more than 20 informational pamphlets available on the municipal websites. Alternatively, Fairfield formed the Fairfield Citizen Corps Council and Bridgeport created the Bridgeport Emergency Reserve Corp Program to increase citizen involvement and awareness for disaster preparedness and response.



8.4 LAND USE & TRANSPORTATION STRATEGIES

8.4A CONSERVATION DESIGN

Develop a best practice manual that includes model ordinances, policies, and regulations to promote conservation design development in the region.



Conservation design, also known as a cluster development, is a type of Planned Unit Development (PUD) in which zoning is adjusted so development such as single family homes can be closely sited, allowing for the remainder of the site to serve as open space. With conservation design, the same number of units are built as conventional zoning allows, but they are simply more concentrated into one area. This design strategy not only creates open space areas, but also serves to reduce the amount of required infrastructure and future maintenance costs.

While conservation design should be encouraged in rural growth areas experiencing development, this approach should also be used as a tool for repositioning the region's coastal areas. Open space areas preserved or reestablished through conservation design can be used to buffer residential development from coastal flooding and provides valuable habitat.

To assist in the application of desirable conservation development, the Conservation Technical Advisory Committee (CTAC) of METROCOG can develop and publish a toolkit that identifies various aspects and best practices for conservation design. METROCOG could also assist in the development of a model ordinance that promotes or requires the use of conservation design in the Conservation area.

8.4B BEST MANAGEMENT PRACTICES & LOW IMPACT DEVELOPMENT

Integrate low impact development and best management practices as trails are designed, constructed and, maintained.



METROCOG should encourage the implementation of Best Management Practices (BMPs) as new development occurs. BMPs aim to address two key challenges the region is facing: 1) capacity issues related to increasing volumes of stormwater runoff, and 2) water quality issues related to pollutants contained in stormwater runoff. BMPs are a combination of conservation measures and management practices designed to minimize negative impacts on surface and groundwater flow, and serve to minimize adverse impacts on neighboring land or water systems.

In encouraging the use BMPs, METROCOG should also promote the use of low impact development (LID). Simply put, the goal of LID is to make a developed site (complete with buildings, sidewalks, parking lots and driveways) function like the natural environment by using low-cost, simple techniques to contain and use stormwater close to where it falls.

Essentially, development should allow the ground to absorb water and filter pollution as it would if development hadn't occurred. Rather than disposing of stormwater by transmitting it and processing it off-site, LID advances the principle that stormwater is a natural resource that should be used to recharge natural systems at the site level. Allowing the natural processes of infiltration, the filtering, storage and evaporation to occur onsite can reduce or eliminate the need for stormwater detention areas and drainage piping while improving overall water quality.

Examples of LID include the use of:

- Pervious pavers and rain gardens that allow rainwater to infiltrate the ground surface;
- Native plantings and vegetated buffers that minimize runoff and prevent erosion along waterways; and,
- Bioswales that convey water to a naturalized channel where it can be treated and allowed to infiltrate the ground surface.

While BMPs and LID strategies can be applied to all forms of development, these strategies dovetail well with the application of a conservation design approach to residential development, and can be used to host naturalized stormwater facilities. Collectively, such policies can help address stormwater management and quality to minimize stress on municipal infrastructure, minimize erosion, flooding and water pollution, and maintain healthy natural groundwater resources.

8.4C EDUCATION

Educate residents about sustainable practices and the environment in order to foster a culture of environmental stewardship.



When protecting natural resources, a low-cost, yet important step to achieving community buy-in for land conservation, acquisition, and transit-focused development is education. Public education is a tool that can be utilized through several different methods to preserve the region's natural resources. In doing so, less effort may be needed when moving to implement more cost-intensive retrofits to existing infrastructure such as stormwater treatment facilities and acquiring additional right-of-way for green infrastructure improvements.

METROCOG can encourage local environmental stewardship by supplying educational material and regular training to support and promote locally-led programming. For example, METROCOG could host a symposium to provide conference materials, training, and cross-community interaction on emerging best practices and recent case studies of relevant sustainability and conservation efforts. METROCOG could also assist with scheduling hands-on training and field demonstration in conservation areas to be hosted by local officials, staff, and environmental champions to help facilitate meaningful relationships throughout the region that can aid in the increase of regional coordination and planning.



MOVING FORWARD



In many ways, the planning process for the METROCOG Region has just begun. Formal adoption of the Regional Comprehensive Plan is only the first step, not the last. Without continuing action to implement and update the Plan, efforts up to this point will have minimal lasting impact.

The Regional Comprehensive Plan sets forth an agreed-upon “regional road map” for the next ten to fifteen years, with an aim on revitalization, resiliency, and reconnection. It is the product of considerable effort on the part of METROCOG, the six participating communities, local staff and officials, business leaders, residents, and more.

NEXT STEPS

This section briefly highlights the next steps that should be undertaken to begin the process of implementation. These include:

- Regular use of the Plan at both the regional and local level;
- Encourage the reviewing and updating of local development controls to reflect policies presented in the Plan, where appropriate;
- Align the Long Range Transportation Plan, Transportation Improvement Program (TIP), and local Capital Improvement Plans (CIP) with policies and investments identified in the Plan where appropriate;
- Update of the Plan at regular intervals;
- Enhancement of public communication regarding regional planning and decision-making;
- Promote cooperation with municipalities and key stakeholders;
- Preparation of an Implementation Action Agenda; and
- Exploration of possible funding sources and implementation techniques.

REGULAR USE OF THE PLAN

The Regional Comprehensive Plan should be METROCOG’s official policy guide for land use, development, and investment. It is essential that the Plan be adopted then used on a regular basis at both the regional and local level to guide investments and coordinate land use. While it is not legally binding on localities, the Plan should help guide cities and towns in the updating of their local Plans of Conservation and Development.

To further educate the community about the Plan, METROCOG should:

- Make copies of the Plan available online for free, provide hard copies at METROCOG headquarters for purchase, and have a copy on file at public libraries for reference;
- Provide assistance to the public in explaining the Plan and its relationship to private and public development projects and other proposals, as appropriate;
- Assist localities in the day-to-day administration, interpretation, and application of the Plan and other regional planning efforts;
- Maintain a list of current possible amendments, issues, or needs which may be a subject of change, addition, or deletion from the Plan.

ENCOURAGE REVIEW & UPDATING OF LOCAL DEVELOPMENT CONTROLS

The Regional Comprehensive Plan is not a regulatory document and its recommendations are not binding on any participating municipality. However, it should be used to inform decisions related to development regulations. Zoning is an important tool for implementing planning policy. It establishes the types of uses allowed on specific properties, and prescribes the overall character and intensity of development to be permitted. The implementation of several recommendations included in the Plan, such as the adoption of transit-oriented development ordinances, for example, would require local regulatory changes. Adoption of the Regional Comprehensive Plan should be followed by a local review and update of local development controls, where appropriate and consistent with local objectives.

ALIGNING THE PLAN WITH LOCAL & REGIONAL INVESTMENTS

Governmental resources will always be limited, and public dollars must be spent wisely. Following approval of the Regional Comprehensive Plan, MET-ROCOG should work to identify specific projects from the Plan that should be included in the Long Range Transportation Plan and Transportation Improvement Program (TIP), as well as that may be better addressed through local Capital Improvement Plans (CIP) and local grant applications. Regarding the latter, this would be a purely advisory and non-binding technical assistance.

UPDATE THE PLAN ON A REGULAR BASIS

It is important to emphasize that the Regional Comprehensive Plan is not a static document. If community attitudes change or new issues arise which are beyond the scope of the current Plan, the Plan should be revised and updated accordingly.

Although an annual review is desirable, a review should be initiated at least every several years. Ideally, this review should coincide with the preparation of the Transportation Improvement Program and Long Range Transportation Plan. In this manner, recommendations or changes relating to capital improvements or other programs can be considered as part of the upcoming commitments for the fiscal year. Routine examination of the Plan will help ensure that the planning program remains relevant to community needs and aspirations.

ENHANCE PUBLIC COMMUNICATION

The process undertaken to create the Regional Comprehensive Plan was, in and of itself, an important step in educating the community about the relevance of regional planning and METROCOG's role in defining the future of the region. A variety of different community outreach efforts were conducted through the duration of the planning process – questionnaires, online mapping tools, and public community workshops. In order to build on this foundation, METROCOG should ensure that the Plan's major recommendations and "vision" for the future are conveyed to the entire community, as well as local staff, appointed and elected officials, and key local stakeholders.

Such an outreach effort may include newsletter articles, a frequently asked questions summary on the METROCOG's homepage, brochures, public presentations, social media, and more. This Plan represents the beginning of a much larger conversation on regional cooperation.

PROMOTE COOPERATION WITH MUNICIPALITIES & KEY STAKEHOLDERS

The Comprehensive Plan identifies many policy areas where coordination is necessary between the Region and its six municipalities. Regional staff should regularly meet with representatives from each community to discuss implementation of the Plan, and to best align regional and municipal policies, to the extent appropriate and possible.

PREPARE AN IMPLEMENTATION ACTION AGENDA

METROCOG should prepare an implementation "action agenda" which highlights the improvement and development projects and activities to be undertaken during the next few years. The implementation matrix for each policy chapter found within this Plan identifies priorities; this will help in developing a preliminary list of prioritized objectives. An "action agenda" might consist of:

- A detailed description of the projects and activities to be undertaken;
- The priority of each project or activity;
- An indication of the public and private sector responsibilities for initiating and participating in each activity; and,
- A suggestion of the funding sources and assistance programs that might potentially be available for implementing each project or activity.

To remain current, the "action agenda" should be updated annually.

EXPLORE FUNDING SOURCES & IMPLEMENTATION TECHNIQUES

Many of the projects and improvements recommended in the Plan could be implemented through administrative and policy decisions or traditionally funded programs.

However, other projects may require special technical and/or financial assistance. METROCOG should continue to explore and consider the wide range of state, federal, and foundation resources and programs that may be available to assist in the implementation of planning recommendations. For example, initiatives related to economic development, housing, sustainability and environment can receive assistance from grant programs established for specific categories of actions or projects.

There are several grant funding sources available to municipalities seeking to enhance local transportation infrastructure and parks and open space offerings. Some grants require that the requested funding be used to support recommendations in either local or regional Plans of Conservation and Development. As such, the Plan can be used to support grant applications, and plan graphics can serve as a starting point for mapping proposed improvements. Staff should possess the expertise necessary to apply for these grants, but outside assistance may be used if staff does not have adequate time to dedicate to the application process.

SUMMARY OF GOALS, OBJECTIVES, & STRATEGIES

This section collates all of the Plan's goals, objectives, and strategies into a single chart to ensure effective tracking and implementation of the Plan's recommendations.

The table is organized as follows:

- Land Use & Development
- Housing & Neighborhoods
- Transportation & Mobility
- Economic Development
- Natural Features

CHAPTER 4: LAND USE & DEVELOPMENT

GOAL: Promote growth and change that concentrates development in and around established regional centers with existing infrastructure and conserves the region's precious natural resources, waterfront, and rural areas while protecting residents and property from natural hazards.

Objective		Strategy		Applicability			
4.1 <i>Compact Growth</i>	Evaluate changes to development regulations to promote compact, walkable, context-sensitive development within the region.	4.1A Mixed Use	Enhance and expand mixed use districts within the Region's established town centers and encourage development of vibrant, mixed use districts along major transportation corridors and in communities currently lacking a town center or downtown areas.	●	●	●	
		4.1B Transit-Oriented Development	Leverage rail stations in Bridgeport, Fairfield, and Stratford, as well as key bus corridors such as Routes 8/25 and Long Hill Green, to drive new transit-oriented residential development.	●	●	●	
		4.1C Targeted Density	When consistent with local goals, provide for smaller lot sizes, increased height, and higher dwelling unit maximums in targeted areas that leverage transit and infrastructure without negatively impacting community character.	●	●	●	
		4.1D Connectivity & Small Blocks	Where possible, provide for the development of small blocks by requiring new street segments to establish multiple points of access to the larger street network.	●	●	●	
4.2 <i>Employment Infill</i>	Encourage development that leverages regional infrastructure and institutional assets located in the urbanized core of the METROCOG region.	4.2A Recruitment & Expansion Of Anchors	Support the location and expansion of activity generators including key employers and cultural institutions within the Region.	●	●	●	
		4.2B Brownfield Redevelopment	Continue to support and facilitate the remediation and redevelopment of brownfields as destinations for new industry and employment uses.	●	●	●	
4.3 <i>Conservation</i>	Prevent the unnecessary or premature development of valued farmland, key coastal areas, drinking supply watersheds, and other natural areas by minimizing leapfrog development, conserving open space, and encouraging compact or contiguous growth.	4.3A Conservation Design	Where appropriate, support the use of conservation design strategies such as clustered development to preserve sensitive natural areas and open space.	●	●	●	●
		4.3B Coastal Area Hazard Mitigation	Identify key coastal areas and hazard mitigation strategies to better protect the region from the destructive impacts of coastal flooding, storm surge, and the sea level rising.	●	●		
		4.3C Open Space Preservation	Support communities and partner organizations in their strategic identification and preservation of open space areas.	●	●	●	●
		4.3D Watershed Planning & Protection	Work with local communities to identify sensitive watershed areas and implement strategies to limit the impacts of development to protect the health of regional natural systems.	●	●	●	●
		4.3E Context-Sensitive Design Guidelines	Develop design guidelines unique to each community to promote context-sensitive development that responds to regional policies while respecting local character.			●	●
		4.3F Farmland Preservation	Educate working farm and large private landowners about State and Federal farmland and open space preservation programs and consider the development of a regional preservation program.			●	●
4.4 <i>Policy Coordination</i>	Continue to align and update local Plans of Conservation and Development with the recommendations of the State of Connecticut Conservation and Development Policies Plan and the METROCOG Regional Plan of Conservation and Development.	4.4A Major Project Review & Joint Planning	Continue the role of METROCOG as the forum to collectively review, discuss, and provide meaningful input on major developments with the potential for regional impact and encourage joint planning initiatives between member communities.	●	●	●	●
		4.4B Open Space Planning	Develop a regional open space plan that can be used by local communities to guide open space preservation and establish a regional open space network.	●	●	●	●
		4.4C Resiliency	Continue to assist communities in planning for coastal and inland flooding along local waterways and the Long Island Sound and develop a unified approach to responsible and resilient infrastructure networks, sustainable inland development, preservation, and wetlands restoration.	●	●	●	●

CHAPTER 5: HOUSING & NEIGHBORHOODS

GOAL: Foster the development and revitalization of neighborhoods that can provide a wide range of housing options in areas served by transit and other essential infrastructure.

Objective		Strategy		Applicability			
5.2 <i>Rural Character</i>	Protect the character and environmental quality of rural residential and agricultural areas and safeguard these areas from incompatible development.	5.2A Critical Watersheds	Prevent development on critical watershed lands of any residential structure that exceeds one dwelling unit per two acres of “buildable” area (excluding wetlands), as detailed in the 2005-2010 State of Connecticut Conservation and Development Policies Plan.				●
		5.2B Conservation Easements	Support the usage of conservation easements that restrict development on forested, rural, environmentally-sensitive, and agricultural land.		●	●	●
5.3 <i>Transit-Oriented Development</i>	Leverage key nodes in the public transportation network to facilitate transit-oriented development of higher-density, mixed-use districts with residential units.	5.3A TOD Zoning	Encourage localities to amend zoning ordinances to include transit-oriented development (TOD) overlays or planned development districts that allow for increased residential densities (varying by community), facilitating easy access to regional rail and bus systems in key locations.	●	●	●	
		5.3B Transit Partnerships	Partner with MTA Metro North, Greater Bridgeport Transit, and the Bridgeport-Port Jefferson Steamboat Company to identify opportunities for new transit oriented developments and increased connectivity between transportation infrastructure and neighborhoods.	●	●	●	
		5.3C METROCOG Incentives	Utilize Metro COG resources, such as federal and state funding, grants, partnership opportunities, and staff expertise, to incentivize and/or stimulate mixed-use transit-oriented development in locations identified in the Future Land Use Map.	●	●	●	
		5.3D Marketing	Market the region’s easy rail access to New York City, Stamford, and New Haven to residential developers and prospective residents, such as young professionals, empty nesters, and seniors.	●	●		
		5.3E Affordable Housing in Mixed-Income Environments	Work with local officials and developers to identify incentives for the financing of affordable housing in mixed-income transit oriented development (TOD) areas.	●	●	●	
5.4 <i>Existing Neighborhoods</i>	Prioritize investment and development within established neighborhoods over the development of new neighborhoods in undeveloped areas.	5.4A Infill Development	Work with communities to identify and market brown-field, vacant, and underutilized sites within existing residential or mixed-use areas for infill development.	●	●		
		5.4B Adaptive Re-Use	Support the adaptive reuse of historic and other existing structures for residential uses.	●	●	●	●
5.5 <i>Sustainability</i>	Encourage the use of sustainable and energy-efficient design and construction methods in new buildings and infrastructure.	5.5A Clustering & Low Impact Development	Utilize clustering and low impact development principles in new developments and subdivisions, where applicable.		●	●	
		5.5B Green Home Design	Work with communities and developers to encourage development in line with national/international standards on green building design	●	●	●	●
		5.5C Stormwater Management	Work with communities to evaluate local incentives or taxes to reduce the amount of impervious surface.	●	●	●	●

CHAPTER 6: TRANSPORTATION & MOBILITY

GOAL: Maintain and modernize the Region’s established regional transportation network while improving access to all modes of transportation including transit users, bicyclists, and pedestrians.

Objective		Strategy		Applicability			
6.1 Congestion	Work to reduce roadway congestion, especially along I-95, Route 15, Route 8, Route 25, and other important regional roadways.	6.1A CTDOT & I-95	Coordinate and cooperate with CTDOT to evaluate the need for highway widening, congestion pricing, and/or the establishment HOV lanes to encourage carpooling on I-95.				
		6.1B Circulation Improvements	Encourage and support strategic circulation improvements that can reduce local roadway inefficiencies, such as providing cross access easements, adding bus turnouts, implementing roundabouts, and adding/consolidating turn lanes.				
		6.1C CT Rides	Encourage business and resident participation in the “CT Rides” program.				
		6.1D Public Transportation	Increase the attractiveness of utilizing public transportation, including bus, ferry, and rail, for daily commuting.				
6.2 Transit Usage	Balance public transit ridership and coverage goals and increase transit usage by making it a safe, reliable, and efficient method of transportation for any need.	6.2A Bus Rapid Transit	Support bus rapid transit or a similar service within the east-west corridor between (a) the Stratford rail station and Fairfield Metro Center rail station, (b) the Route 8 corridor between Shelton-Derby rail station and Downtown Bridgeport, and (c) the Route 25 corridor between Danbury and Downtown Bridgeport.				
		6.2B Employer Incentives	Work with major employers in downtowns and town centers to maximize participation in pre-tax transportation plans and encourage development of further incentives for employees to utilize public transportation to commute to work.				
		6.2C ITS Communication	Identify opportunities to integrate ITS communication systems into transit operations to increase the reliability and attractiveness of usage.				
		6.2D Train Station Parking	Implement station-area parking enhancements to increase the attractiveness of commuting by rail.				
		6.2E Barnum Station	Support the development of a new commuter rail station in East Bridgeport.				

6.3 <i>Economic Development</i>	Recognize the connection between safe and efficient transportation infrastructure and economic growth, and support major investments that can strengthen the economic competitiveness of the Region.	6.3A Freight	Support transportation infrastructure improvements that can ensure the safe and efficient movement of multi-modal freight throughout the region.	●	●	●	
		6.3B Sikorsky Memorial Airport	Support and help identify funding for investments that can help Sikorsky Airport fulfill its role as a regional corporate and general aviation airport for the New England region.		●		
		6.3C Rail Infrastructure	Support major improvements that can increase speed and efficiency along the Metro North rail line, such as bridge repair/replacement and fleet upgrades.	●	●	●	
		6.3D Bridgeport Harbor	Support the implementation of the State's "Deep Water Port Strategy Study" and identify investments that can help Bridgeport Harbor increase its competitiveness for liquid bulk and energy related uses, private ferry services, and shipyard and ship repair services, as well as build redundancy into the regional freight distribution system.	●	●		
6.4 <i>Transit-Oriented Development</i>	Leverage key transit nodes in existing downtowns and town centers to create walkable, high-density, mixed-use districts that can serve as "transit hubs" for different transportation networks.	6.4A Zoning & Development Regulations	Support development of transit-oriented development ordinances that facilitate higher-density, mixed-use development in targeted areas based on existing or proposed transportation networks.	●	●	●	
		6.4B Pedestrian-Oriented Building & Site Design	Encourage or require building design that is pedestrian oriented and has a relationship to the street and existing transportation network.	●	●	●	
		6.4C Cooperation & Coordination	Partner with the State of Connecticut, MTA Metro North, Greater Bridgeport Transit, and the Bridgeport-Port Jefferson Steamboat Company to identify opportunities for new transit oriented developments and increased synergies between transportation infrastructure and neighborhoods.	●	●	●	
6.5 <i>Equity Strategies & Environmental Justice</i>	Ensure that transportation infrastructure provides access to essential services and is accessible to all, including low-income communities and those with disabilities.	6.5A ADA Compliance	Preemptively implement Americans with Disabilities Act (ADA) compliant infrastructure at key nodes and multi-modal connections within the transportation network.	●	●	●	●
		6.5B Affordable TOD Housing	Encourage or incentivize the construction of affordable housing units within identified transit-oriented development target areas.	●	●	●	
		6.5C Service Expansion	Partner with Greater Bridgeport Transit (GBT) to evaluate extending service areas and hours of operation.	●	●	●	
6.6 <i>Walkability and Bikeability</i>	Increase the walkability and bikeability of the region, and continue to develop non-motorized linkages within and between communities.	6.6A Multi-Use Trail Network	Continue development of a comprehensive regional multi-use trail network, including the Pequonnock River Trail, Merritt Parkway Trail, and Housatonic River Greenway, which connects to a broader state trail and greenway system, as well as a network of local trails that link parks, open spaces, and the regional trail network to one another.	●	●	●	●
		6.6B Complete Streets	Continue to work with partnering communities in the establishment of a "complete streets" policy that can safely accommodate motorists, pedestrians, and cyclists equally on appropriate roadways.	●	●		
		6.6C Sidewalk Network	Work with local municipalities and businesses to fill gaps in the sidewalk network and ensure that neighborhoods are adequately connected to parks, civic uses, commercial areas, transit stops, and schools.	●	●	●	

CHAPTER 7: ECONOMIC DEVELOPMENT

GOAL: Promote investments in human capital and infrastructure and foster partnerships that build on the region’s industrial legacy and position the region to attract quality employers.

Objective		Strategy		Applicability			
7.1 <i>Downtowns & Town Centers</i>	Position downtowns and town centers as the cores of the Region and support local revitalization efforts that can strengthen the Region.	7.1A Placemaking	Support “placemaking” strategies that increase the visual appeal and unique character of the Region’s downtowns and town centers and make it a safe and attractive mixed-use environment to live, work, invest, and play.	●			
		7.2B Multi-Family Housing	Support development of multi-family housing that can capitalize on proximity to major employers, institutions, and transit access to New York City, Stamford, and New Haven, and provide the “rooftop density” necessary to support retail and restaurant uses.	●			
		7.2C Downtown/Town Center Partnerships	Facilitate creation of a Downtown or Town Center Partnership (comprised of local government officials, businesses, colleges and universities, hospitals, and other major employers) that can meet regularly to align investments, establish partnerships, identify joint-application opportunities for grants, and work collectively to solve common problems and increase activity and investment.	●			
		7.2D Transit Upgrades	Support public transportation upgrades and investments at MTA Metro North and Greater Bridgeport Transit that can increase the efficiency, accessibility, and attractiveness of transit within downtowns and town centers.	●			
7.2 <i>Brownfields & Contaminated Sites</i>	Remediate and repurpose brownfield and contaminated sites and reposition them as unique opportunities for infill development that can create jobs, generate new tax revenue, and support areas served by transit.	7.2A Federal & State Grants	Pursue all available federal and state grant opportunities for the study, remediation, and redevelopment of brownfield sites.	●	●	●	●
		7.2B GIS	Utilize the GIS infrastructure to foster better prioritization of brownfield development and continue ongoing efforts to develop a comprehensive Brownfields Redevelopment Strategy.	●	●	●	●
7.3 <i>Innovation</i>	Encourage co-location of major employers, employee housing, educational institutions, and transit access in targeted areas that can spur new growth and investment and establish a critical mass of activity and investment.	7.3A Branded Innovation Districts	Evaluate the potential for establishing branded “innovation districts” within each community (as desired and appropriate) that can capitalize on local anchors/institutions, established business incubators, and growth in key industries such as education, healthcare, tech and the environmental sector.	●	●		
		7.3B Connectivity	Strengthen physical (e.g. streetscaping, pedestrian connections), social (e.g. shared events, public spaces), and economic (business-to-business purchasing, product collaboration) linkages between institutions and partners in employment hubs, districts, and clusters.	●	●		
		7.3C Workforce Housing	Support the development of workforce housing within walking distance of employment hubs, where appropriate.	●	●		
		7.3D Promotion of Mixed-Use Environments	Reevaluate existing zoning regulations within employment hubs and innovation districts to ensure they facilitate, where appropriate, a mixed-use environment conducive to innovation.	●	●		

7.4 Education & Workforce Preparedness	Provide all of the Region's children with access to quality education and ensure they are equally and fully prepared for the 21st century workforce.	7.4A Magnet Schools	Support continued development of "inter-jurisdictional" magnet schools.				
		7.4B Vocational Training	Partner with The WorkPlace to increase access to vocational training and other technical skills programs.				
		7.4C Internships	Encourage internship and summer employment opportunities for teenage youth within the region, showcasing future career opportunities.				
		7.4D Higher Education	Work with the region's numerous colleges and universities to identify partnership opportunities with established employers and growing startups to develop innovative projects and spur job growth.				
7.5 Regional Approach	Establish a regional approach to attracting new businesses, investors, and professionals.	7.5A Economic Development Strategy	Consider expanding METROCOG's mission to include regional economic development planning, such as ongoing development of a Comprehensive Economic Development Strategy (CEDS), either alone or in partnership with neighboring regional planning organizations.				
		7.5B Private Sector Participation in Planning	Promote private sector participation in local and regional planning efforts, and encourage cooperation and communication between member towns, the Fairfield County Business Council, and Bridgeport Regional Business Council.				
		7.5C: Economic Data	Compile and share regional economic data with local communities to ensure better planning, development, and marketing efforts.				

CHAPTER 8: NATURAL RESOURCES

GOAL: Preserve sensitive natural areas and protect regional assets, such as local watersheds, riparian zones, regional water supplies, and wetlands, while promoting an integrated network of park and recreation areas throughout the region.

Objective	Strategy	Applicability				
8.1 <i>Coastal Management & Water Quality</i>	8.1A Development of a Living Shoreline Plan	Implement the Living Shoreline Plan to restore waterfront habitats, support tidal wetland vegetation, and improve coastal resiliency.				
	8.1B Water Quality	Develop metrics to monitor water quality and inform watershed management plans.				
	8.1C Buffers and Riparian Zones	Ensure that adequate natural buffers are provided along rivers and streams to filter and reduce stormwater runoff and reduce the potential impacts of flooding.				
8.2 <i>Regional Greenways & Trails</i>	8.2A Regional Trails & Greenways Plan	Create a regional greenways and trails plan, in direct coordination with local government, key stakeholders, and the public, that encourages connections both within the region and to larger trail systems.				
	8.2B Parks & Open Space Assessment	In partnership with local municipalities, conduct a park and open space allocation assessment and identify populations under-served by these recreational opportunities.				
	8.2C Waterfront Open Space	Coordinate with local communities and private property owners to preserve and expand a regional system of greenways along the area's waterways.				
	8.2D Greenways & Trails Land Acquisition	Evaluate policies for greenway and trail acquisition that may include conservation easements, open space dedication ordinances, and contribution of conservation properties to land trusts in exchange for locally-controlled development incentives and bonuses as part of future projects.				
8.3 <i>Hazard Mitigation</i>	8.3A Drainage Capacity	Increase the capacity of drainage systems, including the separation of combined sewer systems, utilization of low impact development techniques, and construction of green infrastructure.				
	8.3B Disaster Planning	Foster inter-agency cooperation and natural disaster contingency planning between local governments, public safety providers, state and federal agencies, and residents to ensure coordinated and efficient responses to natural disasters.				
	8.3C Protecting Roadways	Work with the State Department of Transportation to identify infrastructure enhancements that can reduce the impact of natural disasters along the Region's busiest roadways.				
	8.3D Protecting Community Facilities	Develop infrastructure that can protect critical community facilities, such as hospitals, wastewater facilities or power generators, from natural disasters and relocate facilities susceptible to repetitive loss				
	8.3E Citizen Education	Educate residents, businesses, and stakeholders throughout the Region about natural hazards and disasters, and ensure they are fully informed about shelter locations, evacuation routes, and flood insurance, and technical assistance programs.				
8.4 <i>Land Use & Transportation</i>	8.4A Conservation Design	Develop a best practice manual that includes model ordinances, policies, and regulations to promote conservation design development in the region.				
	8.4B Best Management Practices & Low Impact Development	Integrate low impact development and best management practices as trails are designed, constructed and maintained.				
	8.4C Education	Educate residents about sustainable practices and the environment in order to foster a culture of environmental stewardship.				

