

# WESTERN CONNECTICUT REGIONAL PLAN OF CONSERVATION & DEVELOPMENT

Highlight of Major Findings  
July 17, 2019



Working Document \*not for public disclosure\*

## OVERVIEW OF THE REGIONAL PLAN



How is the Regional Plan Used?



Demographic and Zoning Trends



Infrastructure – Natural and Manmade



Housing



Natural Resources



Economic Development



Community Character



Timetable



HOW IS THE REGIONAL PLAN USED?



## HOW IS THE REGIONAL PLAN USED?

- Evaluate **regional management** of shared infrastructure (CGS 4-124s)
- **Review Water System Plans** for consistency with Regional Plan (CGS-25-33h)
- Advise on **Responsible Growth strategies** (CGS 8-35a)
- Set **development priorities** (CGS 8-35a)
- Assist with **municipal land use regulation** (CGS 8-35c)
- Address **intermunicipal boundary issues** (CGS 8-3b)
- **Assess Water supply conditions** and problems (CGS 25-33g)
- Review **projects of regional significance** (CGS 4-124u)

Technical Assistance

Consistency Reviews

Regional Impacts

Coordinate Land & Transportation Issues

Responsible Growth Strategies



## HOW IS THE REGIONAL PLAN USED? (CONTINUED)

- Meet mandate for **land use/transportation coordination** (23 USC 134(h)(1))
- Ensure **State C&D Plan considers regional land use** issues (CGS 8-35)
- Address regional input to municipal plans (CGS 22a 102d)
- Address regional input to state plan (CGS 16a-28)
- Review applications to operate **foreign trade zones** (CGS 7-136e)
- Assist private investment studies and municipal bond sales
- **Market the region** as a coordinated jurisdiction
- Coordinate **water and sewer utilities** between towns

Technical Assistance

Consistency Reviews

Regional Impacts

Coordinate Land & Transportation Issues

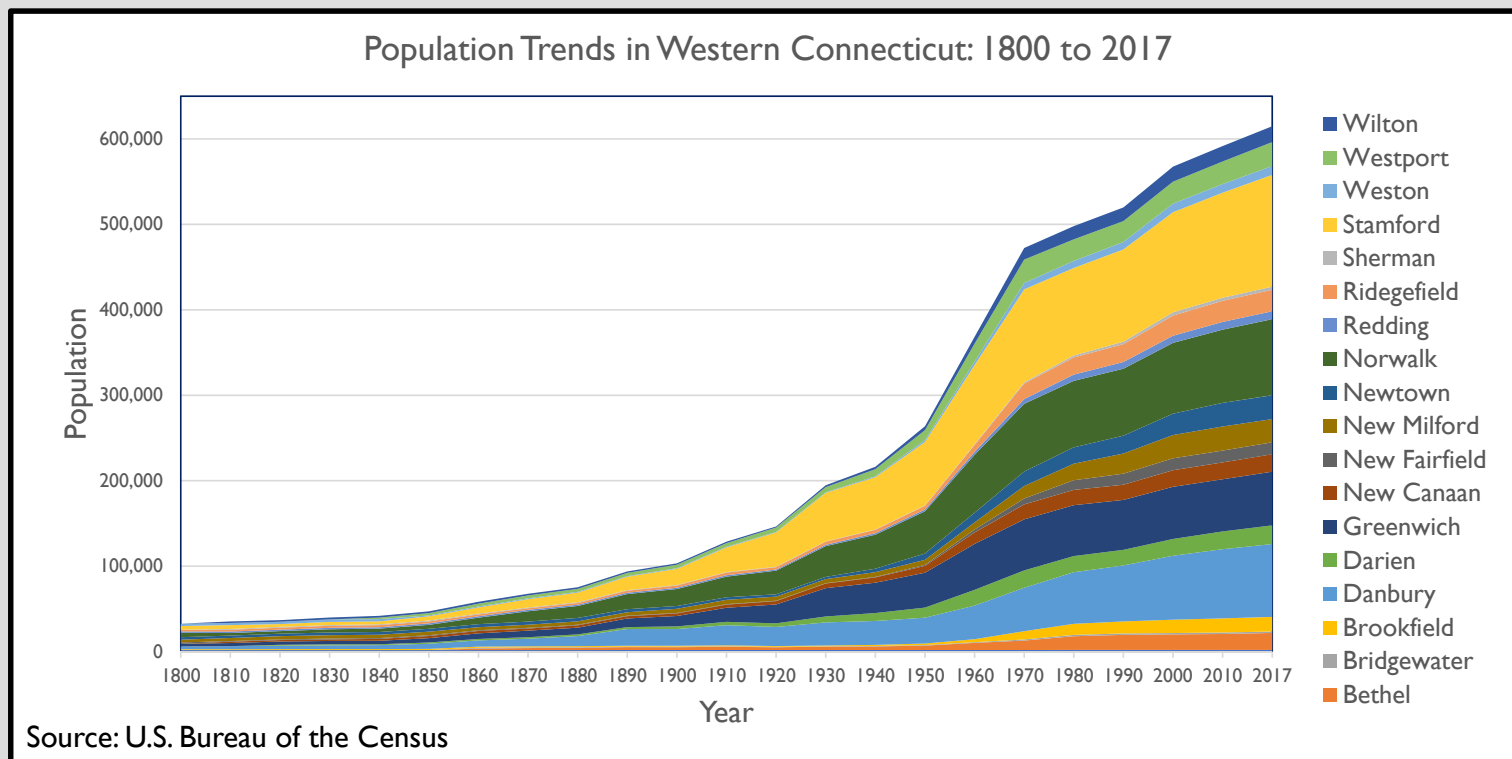
Responsible Growth Strategies



## DEMOGRAPHIC AND ZONING TRENDS

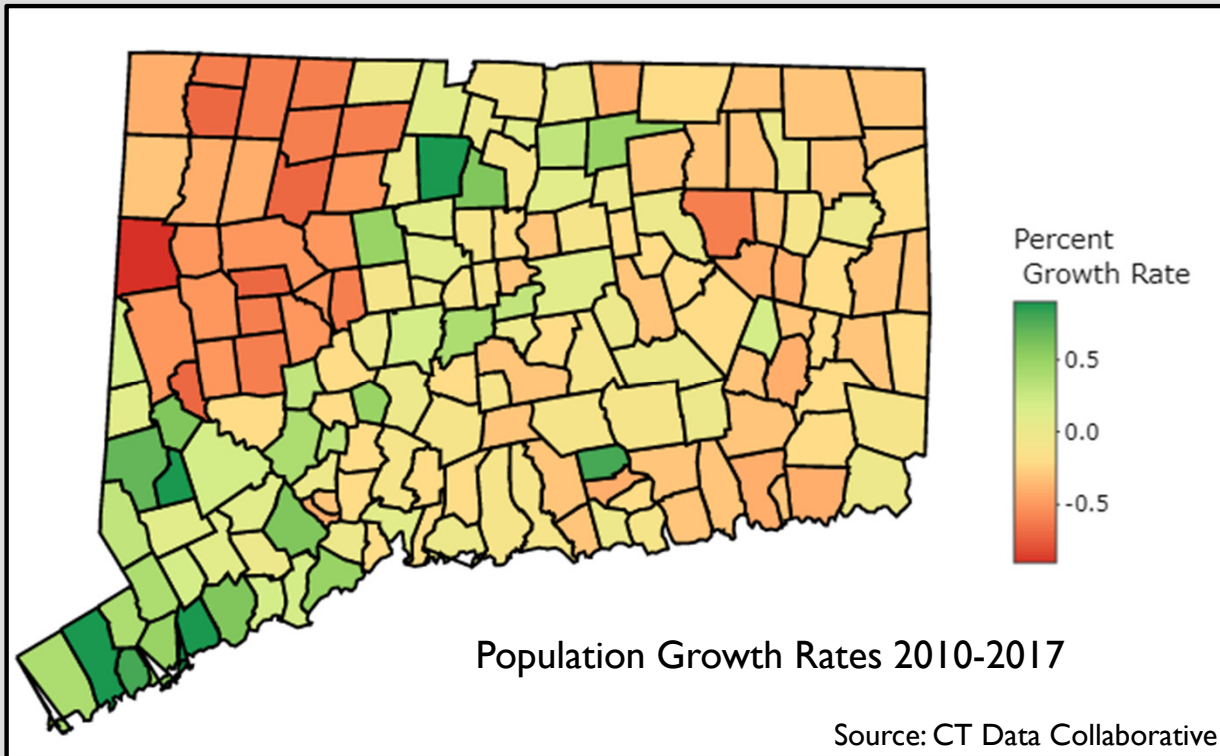


## DEMOGRAPHIC TRENDS





## DEMOGRAPHIC TRENDS







## SCHOOL ENROLLMENT TRENDS – LESS CHILDREN IN SUBURBS

Public School Enrollment Trends in Western Connecticut: 2010-2017			
Municipality	Enrollment 2010	Enrollment 2017	Change in Enrollment 2010 to 2017
Bethel	3,568	3,632	64
Bridgewater	521	327	-194
Brookfield	3,234	3,626	392
Danbury	12,008	13,056	1,048
Darien	5,457	5,322	-135
Greenwich	10,392	9,390	-1,003
New Canaan	4,741	4,774	33
New Fairfield	3,450	2,911	-539
New Milford	5,708	4,393	-1,315
Newtown	6,226	6,161	-65
Norwalk	12,499	13,183	684
Redding	2,192	1,909	-283
Ridgefield	6,072	6,317	246
Sherman	1,080	858	-222
Stamford	15,866	18,066	2,200
Weston	3,198	2,857	-341
Westport	6,341	6,134	-207
Wilton	4,607	4,614	7
Grand Total	107,160	107,529	369

School age (1 to 19 years old) Projections for Western Connecticut: 2015-2040						
Municipality	2015	2020	2025	2030	2035	2040
Bethel	3,304	3,034	2,786	2,591	2,523	2,444
Bridgewater	243	228	203	208	183	181
Brookfield	3,044	2,753	2,600	2,481	2,540	2,633
Danbury	15,038	15,911	16,212	16,511	17,096	17,295
Darien	5,494	4,910	4,392	4,318	4,580	5,408
Greenwich	12,778	11,645	11,498	11,233	10,542	10,304
New Canaan	4,760	4,144	3,799	3,893	3,997	4,621
New Fairfield	2,816	2,306	1,861	1,623	1,502	1,374
New Milford	4,999	4,622	4,206	3,860	3,784	3,683
Newtown	5,906	5,313	4,640	4,545	4,903	5,683
Norwalk	15,143	15,332	15,471	15,376	15,845	16,191
Redding	1,729	1,667	1,547	1,536	1,648	1,838
Ridgefield	5,437	4,686	4,135	3,942	4,071	4,646
Sherman	566	472	373	325	304	275
Stamford	22,224	22,378	23,403	23,460	23,349	22,652
Weston	2,272	1,845	1,641	1,535	1,557	1,704
Westport	5,831	5,095	4,581	4,481	4,388	4,945
Wilton	4,038	3,633	3,230	2,988	2,926	3,375
Grand Total	115,622	109,974	106,578	104,906	105,738	109,252



## SENIOR POPULATION

By 2040, nearly half of all municipalities are expected to have seniors exceeding 20% of their population.

Estimated Senior Population 65 Years Old or Over in Western Connecticut: 2017				Projected Trend
Municipality	Total Population	Total Senior 65 years & Older	Percent of Population 2017	Percent of Population 2040
Bethel	19,526	2,870	15%	21%
Bridgewater	1,681	488	29%	33%
Brookfield	17,064	2,821	17%	20%
Danbury	84,573	11,348	13%	11%
Darien	21,742	2,606	12%	11%
Greenwich	62,782	10,596	17%	19%
New Canaan	20,357	3,172	16%	13%
New Fairfield	14,091	2,310	16%	24%
New Milford	27,380	4,043	15%	22%
Newtown	28,030	4,375	16%	25%
Norwalk	88,537	12,557	14%	13%
Redding	9,274	1,776	19%	23%
Ridgefield	25,206	4,072	16%	17%
Sherman	3,654	766	21%	29%
Stamford	128,851	17,805	14%	13%
Weston	10,369	1,333	13%	18%
Westport	27,777	4,548	16%	18%
Wilton	18,659	2,877	15%	15%
Total	609,553	90,363	15%	15%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates and CT Data Collaborative Population Projections.



## ZONING TRENDS

- 38 | zoning districts have been established in Western Connecticut
- 43% of all zones are dedicated to **residential** development
  - 36% of all zones are dedicated to a range of **commercial** developments
  - 7% of all zones are for **natural resource protection** (watersheds, historic districts, aquifer protection, coastal zones, and floodplains)
  - 6% of all zones are dedicated to **industrial** development
  - 2% of all zones are for **mixed use** development



## DEVELOPED AND DEVELOPABLE LAND – PART I ALLOCATION OF LAND BY ZONES

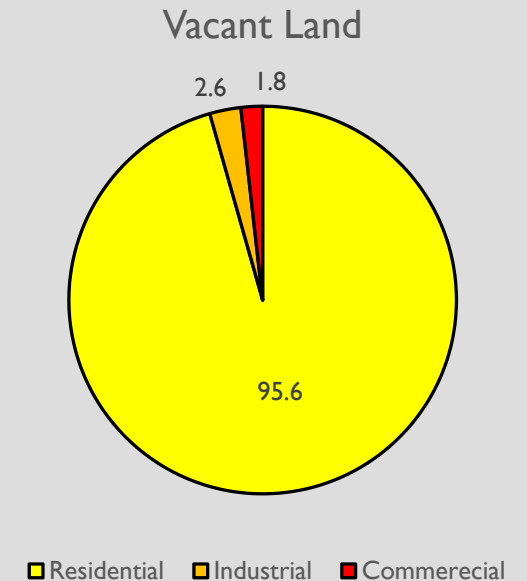
### Development is Driven by Zoning Classifications:

- 90% of the region's land is zoned for **residential** development (321,418 acres)
  - 3% is zoned for **multi-family** development including elderly housing (11,136 acres)
- 3% is zoned for **commercial** development (10,358 acres)
- 3% is zoned for **industrial** development (10,135 acres)
- 4% is zoned for other purposes (educational parks, parkland, conservation zones, river design zones, hospital zones, etc.)



## DEVELOPED AND DEVELOPABLE LAND – PART 2 ZONING STATUS OF VACANT LAND

- 95.6% of the region's vacant land is zoned **residential** (54,431 acres)
- 2.6 % of the region's vacant land is zoned **industrial** (1,508 acres)
- 1.8% of the region's vacant land is zoned **commercial** (1,014 acres)





## DEVELOPED AND DEVELOPABLE LAND –PART 3 LAND WITH WATER AND SEWER SERVICE

- 117,190 acres of the region is served by public water (33% of the land)
- 49,114 acres of the region is served by sewage treatment plants (14% of the land)
- 6,644 acres of the region is vacant and zoned residential and falls within a short distance of public water and/or sewer service pipe-lines (2% of the land)



# **INFRASTRUCTURE**

## NATURAL & MANMADE



## NATURAL SYSTEM INFRASTRUCTURE PRIORITIES - I

### **Protecting Riparian Corridors is a high priority:**

- They limit water and thermal pollution of watercourses
- Create migratory pathways for all kinds of species
- Reinforce wetland and watercourse regulations
- Support CTDEEP's Greenway program
- Protects tree canopies & reduces impervious cover on "critical edge" habitat







## NATURAL SYSTEM INFRASTRUCTURE PRIORITIES - 2

### Revisit Floodplain Management Principles

- Revise 100 Year Floodplain boundaries to reflect climate change reality
- Flood Insurance Rate Maps are inconsistent with hydrologic trends
  - \$172 million in flood insurance losses in Western CT in last forty years
- Proactive assessment of anticipated flooding levels following current trends
  - FEMA's retrospective methodology for determining the 100 year flood is obsolete
    - We need to have our eye on the ball – not where it is now or in the past but where it will be in 30 years from now.



## NATURAL SYSTEM INFRASTRUCTURE PRIORITIES - 3

### **Paving over Natural Systems has Stormwater Consequences**

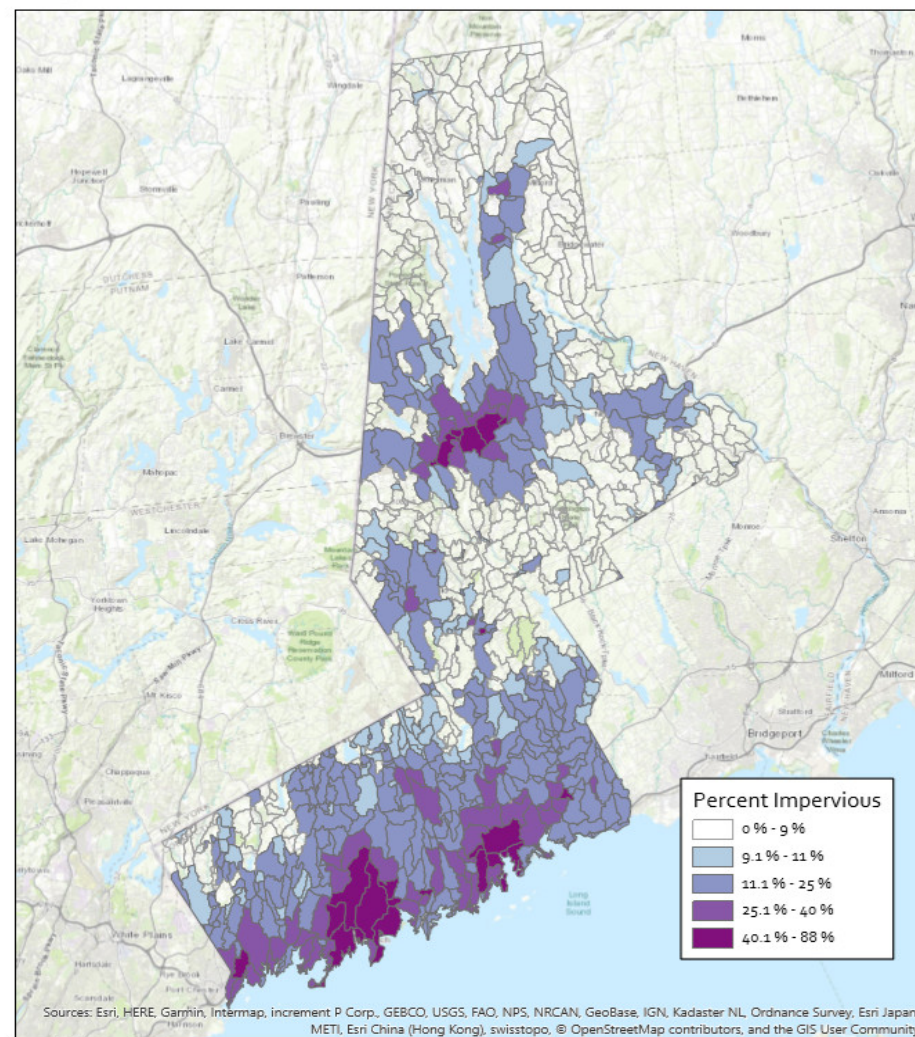
- 46% of region's land exceeds 11% impervious cover threshold (165,758 acres)
  - This threshold, when exceeded, aggravates water pollution
  - Protecting forest canopies along watercourses is a countermeasure
- Only 12% of all land above the 11% threshold is regulated
  - Directly Connected Impervious Cover Areas (DCIA) represents 19,650 acres
- Adopting impervious cover standards in zoning is a key action item



## IMPERVIOUS COVER – A STATUS REPORT

Municipality	% of town at 11%+ Impervious cover	Municipality	% of town at 11%+ Impervious cover
Darien	100%	Bethel	53%
Westport	99%	Weston	48%
Norwalk	98%	Ridgefield	47%
Stamford	84%	Newtown	24%
New Canaan	74%	New Fairfield	24%
Danbury	65%	New Milford	15%
Greenwich	64%	Redding	4%
Brookfield	54%	Sherman	0%
Wilton	54%	Bridgewater	0%

## Impervious Cover



Impervious cover percentage  
per basin within WestCOG



0 0.5 1 2 Miles



## URBAN INFRASTRUCTURE – TELECOMMUNICATIONS DEMOGRAPHIC FACTORS

- Age, income & education profoundly influence acceptance of internet services
- Limits opportunities for improved retail services and other social networking options
- 78% of those 65 and older subscribed to a broadband service
- 29% of households 25 years or over with less than a high school education did not have broadband internet service.



## URBAN INFRASTRUCTURE – TELECOMMUNICATIONS THE HARDWARE

- Influencing Connecticut Siting Council and Federal Communication Decisions requires a delicate balance of diploma, reason and good planning
- Nearly three hundred radio, television & cell towers exist in Western CT
  - Heights range from 24 feet (Westport) to 499-feet (Brookfield)
- Municipal zoning regulations are often inconsistent with current FCC regulations
  - Recent FCC “shot clock” regulations triggers a review of zoning approval processes (October 2018)



## URBAN INFRASTRUCTURE LOCAL ROADWAYS & BRIDGES AN INVESTMENT RESPONSIBILITY

- Approximately 2,640 miles of locally-owned roads
- 740 locally-owned bridges



## URBAN INFRASTRUCTURE LOCAL ROADWAYS & BRIDGES AN INVESTMENT RESPONSIBILITY

Road Infrastructure Feature	Unit	Cost/Unit	Unit Area	Total Units	Total Replacement Cost
Intersection Replacement	SY	\$165.98	400	17,710	\$1,175,802,320
Culvert Replacement	SF	\$235.00	12	111,124	\$313,369,680
Bridges Reconstruction	SF	\$545.00	16,785	740	\$6,769,390,500
Road Reconstruction	SY	\$165.98	27,878,400	46,433,024	\$7,706,953,324
Traffic Signal Replacement	number	\$200,000.00	1	816	\$163,200,000
Total					\$16,128,715,824

Source: WestCOG calculations based on CTDOT Highway Transportation Asset Mgt Plan, p. 5-8



## AVOIDING URBAN INFRASTRUCTURE – SEWER AVOIDANCE AND CONTROL OF UNBUILDABLE LAND

Buildable Lot Criteria	Municipalities with Buildable Lot Criteria
Wetlands	15
Watercourses	15
Easements	9
Steep Slopes	8
Floodplains	7
Narrow Strips of Land	2
Source: Western Connecticut Council of Governments, April, 2019	





## SEWER INFRASTRUCTURE – LIMITING FACTOR TO GROWTH PART I

<b>Water Pollution Control Facilities in Western CT (WPCF)</b>	<b>Design Flow MGD</b>	<b>Actual Flow (MGD)</b>	<b>Available Capacity MGD</b>	<b>Worst Case Population Serviceable by Available Capacity</b>
Total for 14 WPCFs	77.647	48.415	29.232	389,760

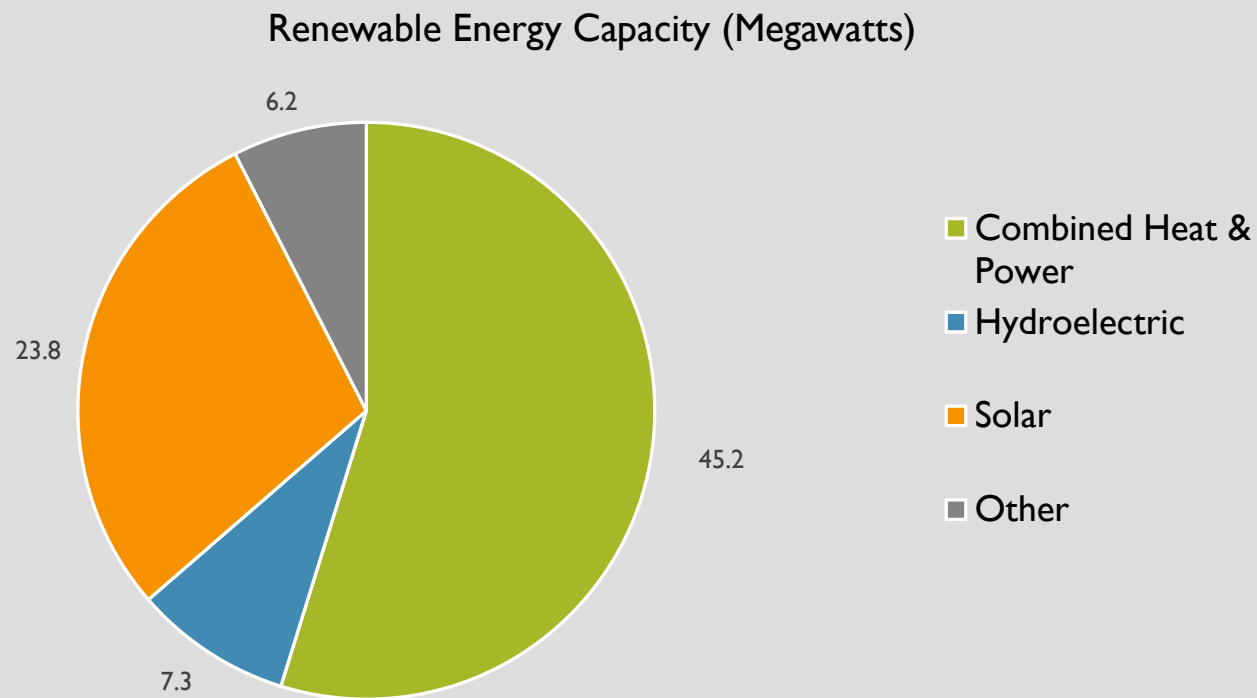


## SEWER INFRASTRUCTURE – LIMITING FACTOR TO GROWTH PART 2

<b>Municipality</b>	<b>Land Area with Sewer Service (%)</b>	<b>% of 2010 Population Served by Sewers</b>	<b>Municipality</b>	<b>Land Area with Sewer Service (%)</b>	<b>% of 2010 Population Served by Sewers</b>
Bethel	22.5%	77%	Newtown	3.7%	16%
Bridgewater	0.0%	0%	Norwalk	56.8%	93%
Brookfield	6.8%	34%	Redding	0.3%	11%
Danbury	24.9%	84%	Ridgefield	3.9%	27%
Darien	53.7%	95%	Sherman	0.0%	0%
Greenwich	24.7%	82%	Stamford	37.5%	89%
New Canaan	8.5%	49%	Weston	0.0%	1%
New Fairfield	0.0%	0%	Westport	24.1%	69%
New Milford	4.1%	40%	Wilton	4.3%	25%



## RENEWABLE ENERGY INFRASTRUCTURE – NAME PLATE CAPACITY IN MEGAWATTS





## RENEWABLE ENERGY INFRASTRUCTURE



- Solar, hydroelectric and other renewable energy sources account for the equivalent of less than 13% of Region's energy consumption
- State Class I renewable energy goal = 40% by 2030



## SOLAR ENERGY INFRASTRUCTURE – A GROWING INDUSTRY

### **Land Use Controls play a key role in future of solar energy**

- **Two basic approaches are emerging:**
  1. Solar integrated into new or existing buildings (distributed generation)
  2. Solar energy farms on existing farmland or in lieu of forest
- **Planning and zoning commission can influence solar adoption by:**
  - Reduce barriers to its adoption; encourage solar orientation and access
  - Provide incentives for energy efficient; passive solar factors and photovoltaics
  - Pubic Act 78-314 established the legal basis for encouraging solar energy use



# INFRASTRUCTURE NATURAL & MANMADE

## Key Policy Recommendations:

- **Stormwater Goals (4 goals)**  
Minimize the installation of impervious surfaces in new developments
- **Redefine Floodplain Management (4 goals)**  
Set boundaries of 100-year floodplain based on post-2001 meteorological data
- **Riparian Corridor (3 goals)**  
Encourage adoption of streambelt zones to protect riparian values of major watercourses
- **Transportation Infrastructure (2 goals)**  
Develop transportation asset management plans for key transportation assets
- **Sewer Avoidance (3 goals)**  
Employ sewer avoidance strategies where failing septic systems threaten public water supplies
- **Renewable Energy Infrastructure (5 goals)**  
Adopt zoning regulations to facilitate installation of renewable energy

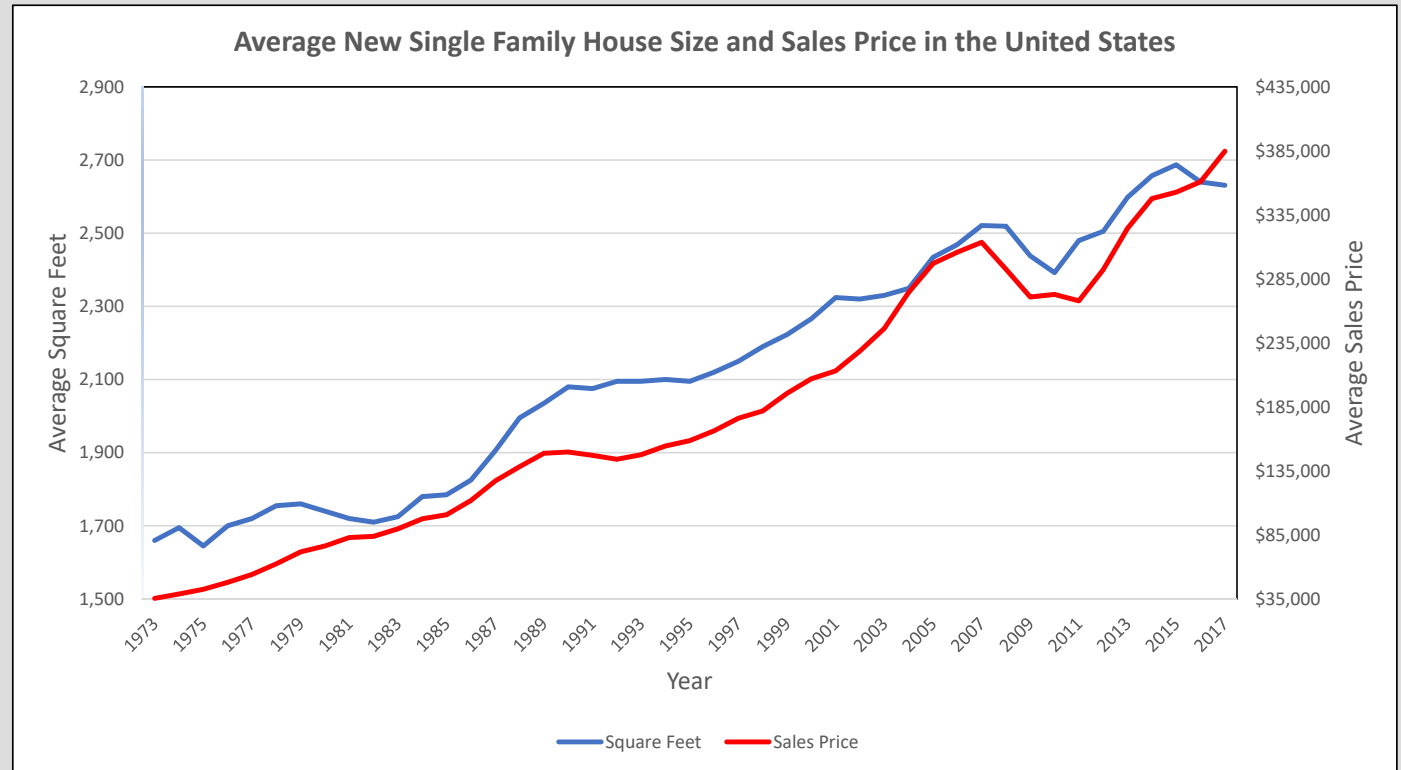


# HOUSING



## HOUSING – AFFORDABILITY CHALLENGE BUILDING SIZE

Increasing  
cost of single  
family house  
parallels its  
increasing size  
in the United  
States.

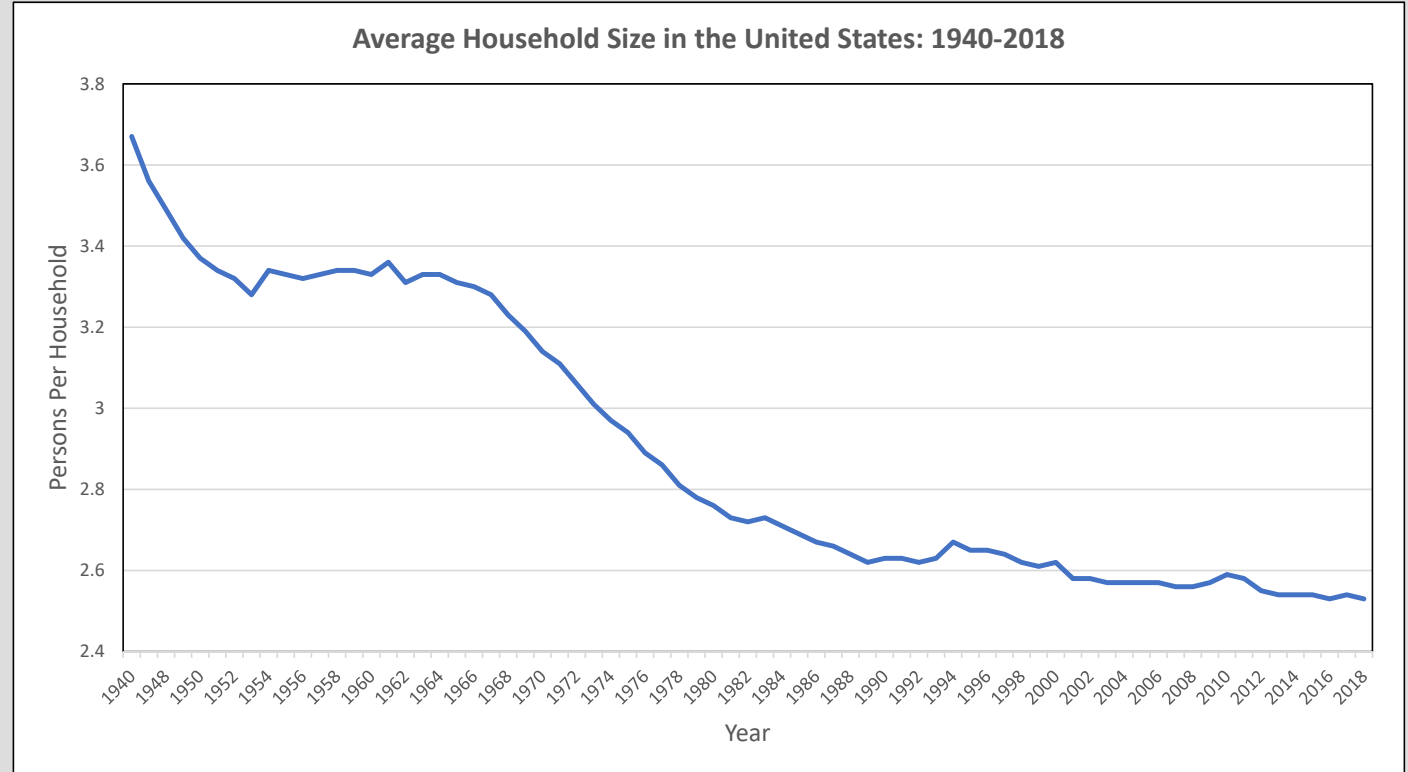






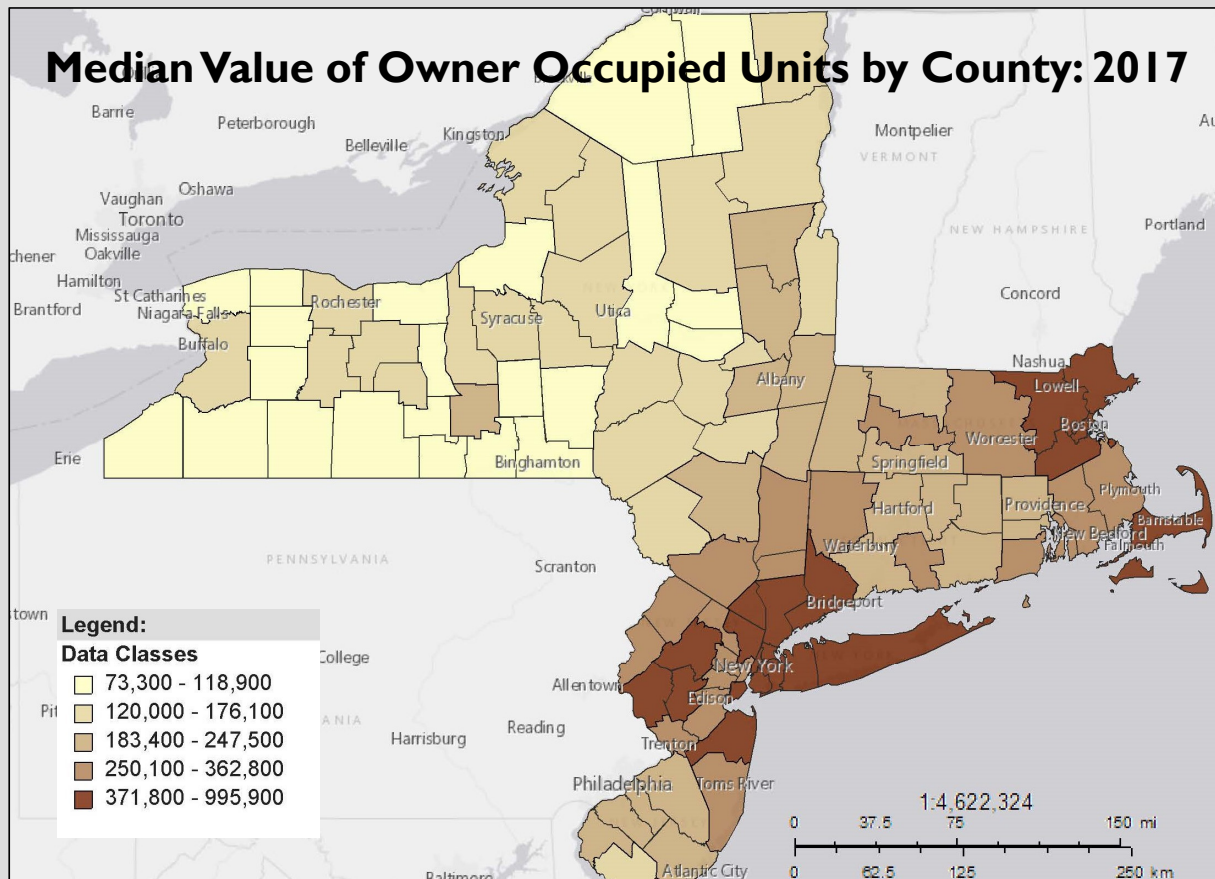
## HOUSING – AFFORDABILITY CHALLENGE HOUSEHOLD SIZE

Decline in average household size in United States creates enormous amount of underutilized space.





# HOUSING – AFFORDABILITY CHALLENGE



Housing costs in Fairfield County are similar to counties in the Boston & New York Metro areas.

Source: U.S. Bureau of the Census, 2013-2017 American Community Survey 5-Year Estimates



## HOUSING AFFORDABILITY STRATEGIES

- Promote **accessory apartments** with fewer regulatory constraints
- Allow **two family housing** consistent with public health requirements
- Allow **letting of rooms** with limits on the number of occupants
- Support **multi-family housing** along transit corridors & where sewer & water service exists



# HOUSING

## Key Policy Recommendations:

- **Affordable Housing (3 goals)**

Provide flexibility in development of accessory apartments & 2 family DUs

- **Transit Oriented Housing (2 goals)**

Encourage a mix of housing and commerce in the village districts

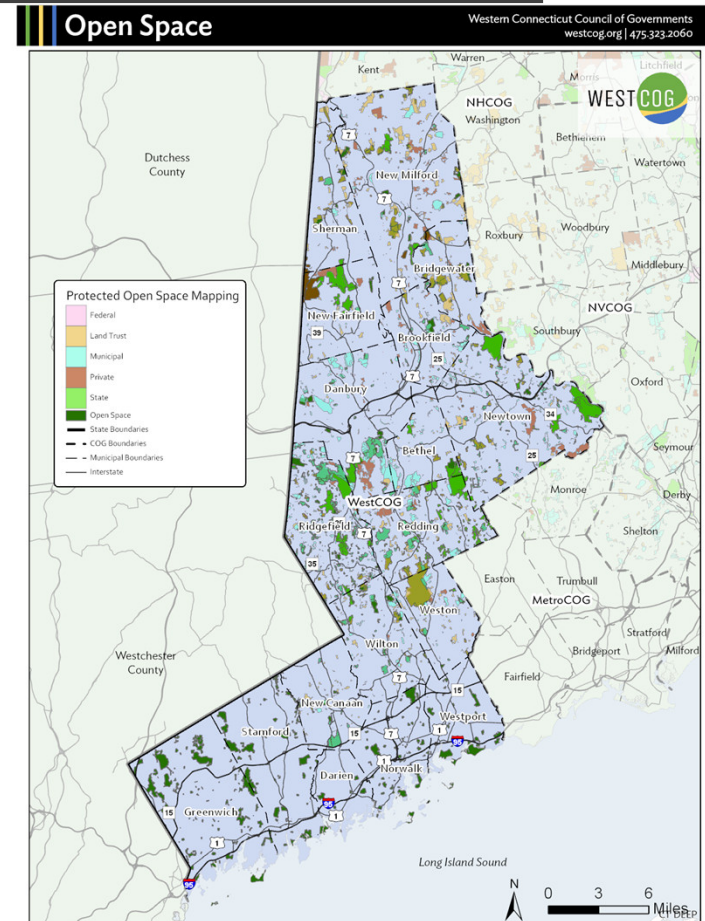


# NATURAL RESOURCES



# PROTECTED OPEN SPACE IN WESTERN CONNECTICUT

- An estimated **59,070** acres of land in Western Connecticut has been deeded to Open space.
- To meet its share of the goal, the region needs **8,404** acres by the year 2023.
  - **Statewide goal = 21% of all land deeded as open space by 2023.**
  - **Region's share of goal = 4,202 acres**
  - **State's share of goal = 4,202 acres**

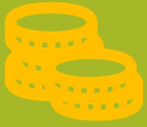




## NATURAL RESOURCES

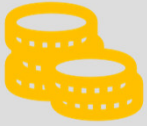
### Key Policy Recommendations:

- **Water Resources (8 goals)**  
Adopt aquifer protection regulations for *potential* drinking water aquifers
- **Open Space, Farm & Forests (9 goals)**  
Identify and protect open space to meet State's Green Plan



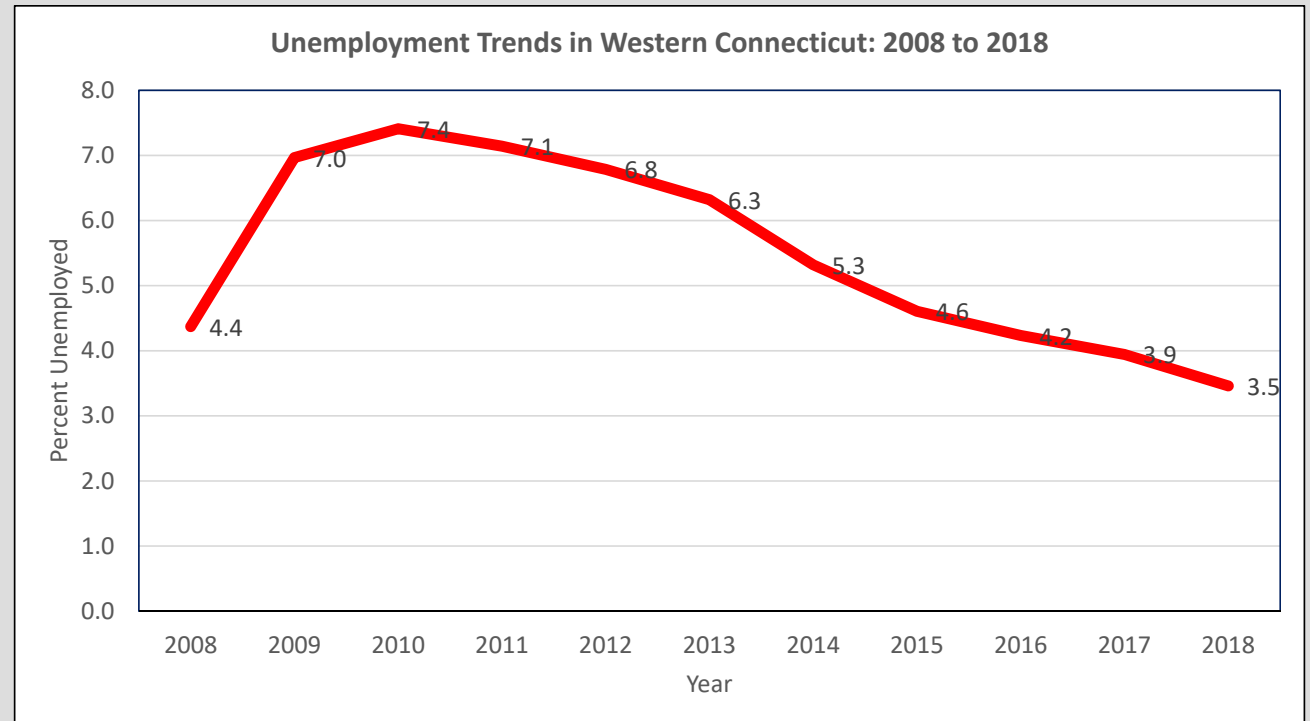
# ECONOMIC DEVELOPMENT

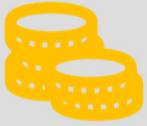




## ECONOMIC DEVELOPMENT

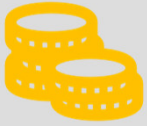
Unemployment is at an all time low in Western Connecticut compared to the years following the great recession of 2008





## LABOR FORCE TRENDS – GROWTH IN PAST DECADE FOCUSED IN CITIES

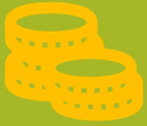
Municipality	Labor Force 2008	Labor Force 2018	Municipality	Labor Force 2008	Labor Force 2018
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Bridgewater	1,031	836	Norwalk	48,442	50,799
Brookfield	9,277	9,336	Redding	4,688	4,444
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Greenwich	30,504	28,879	Stamford	67,015	70,883
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New Fairfield	7,564	7,131	Westport	12,837	12,710
New Milford	16,316	15,184	Wilton	8,344	8,473



COMMUTING PATTERNS OF RESIDENTS:  
PERCENT STAYING IN COMMUNITY FOR  
EMPLOYMENT: 2015

Less than 30% of workers live in the  
town they work in

Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics, 2019



# ECONOMIC DEVELOPMENT

Key Policy Recommendations:

- **Economic Development (5 goals)**  
Encourage development along transit corridors & with direct major highway access



# COMMUNITY CHARACTER



# COMMUNITY CHARACTER

- **Historic Preservation**

- Over 5,000 historic buildings in 85 historic districts. One of the most extensive historic preservation programs in New England

- **Scenic Roads**

- 81 locally designated scenic roads covering over 85 miles of rural vistas

- **Historic Villages**

- 35 Village Districts exist in ten municipalities

- **Natural Resources**

- Farm, forests and open space add New England character



*Photo taken of Scenic Burying Ground Road, Greenwich, CT*



## COMMUNITY CHARACTER

Key Policy Recommendations:

- **Historic Preservation (4 goals)**  
Promote the tourism value of the region's unique cultural/historic resources



## TIMELINE

- July 17<sup>th</sup> – Planners' Lunch Presentation
- August 8<sup>th</sup> – Open for comments from Planners
- August 29<sup>th</sup> – Comments from Planners due
- September 5<sup>th</sup> – Open for comments from COG
- September 19<sup>th</sup> – COG Meeting Presentation
- October 3<sup>rd</sup> – COG comments due
- October 17<sup>th</sup> – COG Meeting Presentation (final draft shared)
- November 1<sup>st</sup> (tent.) – Public Comment Period opens
- Week of November 4<sup>th</sup> (tent.) – Two Public Hearings (locations TBD)



# QUESTIONS? COMMENTS?

Any follow up questions should be addressed to Kristin:

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