



32 Tolland

Community Overview

Tolland is a rural community with a land area of 39.7 square miles and an estimated population of 15,100 according to the 2010 Census. Elevation ranges from about 500 to over 1,000 feet above sea level. Its land area contributes primarily to the Willimantic River Watershed to the east, but also to the Hockanum River Watershed to the west. The Willimantic River forms the eastern boundary of Tolland, and numerous smaller watercourses flow through town, including Browns, Chapin Meadow, Charter, Clark, Clough, Green, Grover, Labonte, Polk, Spice, Sucker, and West Brooks, as well as the Skungamaug River. Main transportation routes include Interstate 84 and routes 30, 74 and 195. Principal industry in Tolland includes manufacturing and professional services.

Since adoption of the 2014-2019 Capitol Region Natural Hazards Mitigation Plan Update (“2014 HMP”), construction has begun to convert a former school into 37 units of elderly housing. Other new development has generally not been in the floodplains or other notable hazard areas.

Critical Facilities

Critical Facilities throughout the Capitol Region are listed in Appendix B. In Tolland these include the Town Hall (in which the Resident State Trooper Office is located), Senior Center (a shelter), Tolland High School (shelter), Birch Grove (shelter), the Tolland Fire Training Center (EOC), State Police Barracks, the Tolland County Mutual Aid Fire Service Inc. (a regional emergency dispatch center), the Woodlake at Tolland Nursing and Rehabilitation Center, Old Post Village and Winding River elderly housing complexes, one age-restricted development, group homes, and multiple communication towers.

Table 32-1: Critical Facilities, Tolland

Facility	Shelter	Generator
Tolland Town Hall (Resident State Trooper Office)		
Tolland Senior Center	X	X
Tolland High School	X	X
Birch Grove Primary School	X	Partial
Tolland Fire Training Center (EOC)		X
State Police Barracks		X
Tolland County Mutual Aid Fire Service Inc.		X
Woodlake at Tolland Nursing & Rehabilitation Center		X
Old Post Village Elderly Housing		Partial
Winding River Elderly Housing		X
Group Homes		
Communication Towers		X

Since the 2014 HMP the High School generator was rewired in order to be properly hooked up. Birch Grove has a program in place to ensure emergency generators are replaced over time.

Tolland does not currently have sufficient sheltering capacity; its shelters can house less than 7% of the Town's population.

A new highway garage and pump station are currently under construction and will be added to the critical facilities list upon completion.

Capabilities

Hazard mitigation is incorporated into Tolland's Plan of Conservation and Development (POCD). POCD actions specifically address natural hazards, specifically flooding and drought.

The Town has not permitted any new construction in hazard prone areas since 2008.

The DPW maintains a list of bridges and culverts that needs attention. It prioritizes efforts based on the list.

Tolland has a limited dry-hydrant program to make sure firefighting water is available throughout Town. Public water with hydrants covers a small portion of Tolland.

Tree maintenance in Tolland is addressed in large part by Eversource. Tolland has a small annual budget for tree trimming on a case-by-case basis. The Town maintains a contract with a tree company for tree removal, as needed.

New Capabilities

Tolland has added fiber-optic cables and back up capabilities for electronic assets, improving its communication capabilities.

The Town has expanded its GIS capabilities. It now has agricultural mapping data that help provide information useful for drought planning.

Tolland has adopted Low Impact Development (LID) regulations, though enforcing maintenance can be a challenge.

A map modernization effort by FEMA is currently underway for Tolland County, but its full extent, and how much of Tolland it will cover, is unknown.

CT DOT and DEEP have replaced the Route 74 bridge at South River Road.

Challenges

Challenges Overview

Poor-drainage flooding caused by rapid rainfall is a primary concern for the Town. Inundation of flood zones by flooded waterways is a lesser concern due to the relatively small amount of land that falls within those flood zones.



Flooding occurs on Weigold Road, Gehring Road, the east end of Torry Road, the west end of Old Post Road, the north end of South River Road, the west end of Slater Road, Route 74 at Skungamaug Road, and some sections of Tolland's Industrial park. Del-Aire Campground is a private campground on the north end of Shenipsit Lake Road that is also at risk of flooding. Tolland has several areas of unimproved roads with varying elevations that often become washed out and need repairs following large storms. The Willimantic River has been known to flood over its banks during storms. The flooding that occurred in 2005 nearly washed out the Route 74 bridge at South River Road. Gages Brook and portions of the Industrial Park are in the 1-percent annual-chance flood zone, raising water quality concerns.

Tolland is working to meet the new MS4 stormwater requirements and ensure proper maintenance. Stormwater utility maintenance is a priority for the Town.

Tolland has a large amount of open space and brush fires are a concern.

Extreme snow loads and extreme temperatures experienced since the 2014 HMP are amplifiers of the effects of other natural hazards.

Other areas of concern are the elderly population in Town.

Hazard Losses

The economic losses faced by Tolland from natural hazards can be estimated by reviewing historic, and modeling future, loss figures. Loss estimates are summarized below.

Historic FEMA Payments

FEMA reimburses communities for hazard losses through programs including Public Assistance (PA) and the National Flood Insurance Program (NFIP). Combining PA and private flood insurance payments can give an estimate for total losses to a community.

The NFIP has paid 10 property damage claims in Tolland totaling \$9,289.54 to-date; none have been Repetitive Loss (RL) Property claims.

Total PA reimbursements to the community were as follows:

- Flood Events: \$106,944 (\$5,629 annually)
- Hurricane Events: \$390,433 (\$20,549 annually)
- Winter Storm Events: \$2,681,671 (\$141,141 annually)

These are summarized in the tables below.



Table 32-2: Flood Event PA Reimbursements, Tolland

Incident	Oct 2005
Declaration	12/16/2005
Disaster No.	1619
Entity	FEMA PA Reimbursement
State	\$14,266
Municipal	\$92,678
Nonprofit	\$0
Total	\$106,944
Annualized	\$5,629

Table 32-3: Hurricane Wind Event PA Reimbursements, Tolland

Incident	Aug - Sep 2011 (T.S. Irene)	Oct - Nov 2012 (Storm Sandy)
Declaration	9/2/2011	10/30/2012
Disaster #	4023	4087
Entity	FEMA PA Reimbursement	
State	\$56,469	\$40,083
Municipal	\$138,849	\$155,033
Nonprofit	\$0	\$0
Total	\$195,317	\$195,116
Annualized	\$10,280	\$10,269

Table 32-4: Winter Storm PA Reimbursements, Tolland

Incident	Mar 2003	Dec 2003	Jan 2005	Feb 2006	Jan 2011	Oct 2011	Feb 2013	Jan 2015
Declaration	3/11/03	1/15/04	2/17/05	5/2/06	3/3/11	11/17/11	3/21/13	4/8/15
Disaster #	3176	3192	3200	3266	1958	4046	4106	4213
Entity	FEMA PA Reimbursement							
State	\$15,283	\$18,784	\$30,398	\$27,235	\$38,304	\$867,957	\$65,760	\$153,394
Municipal	\$51,365	\$67,109	\$72,501	\$61,900	\$93,127	\$823,147	\$173,999	\$121,409
Nonprofit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$66,648	\$85,893	\$102,899	\$89,135	\$131,430	\$1,691,105	\$239,759	\$274,803
Annualized	\$3,508	\$4,521	\$5,416	\$4,691	\$6,917	\$89,006	\$12,619	\$14,463

National Centers for Environmental Information Losses

The table below summarizes events in the National Centers for Environmental Information (NCEI) severe storm database that were specifically noted as having impacted the community since 2012.



Table 32-5: NCEI Database Losses since 2012, Tolland

Date	Event	Property Damage
6/22/2012	Thunderstorm Wind	\$40,000
7/18/2012	Hail	\$0
9/8/2012	Thunderstorm Wind	\$5,000
9/18/2012	Thunderstorm Wind	\$10,000
6/25/2013	Thunderstorm Wind	\$5,000
7/10/2013	Thunderstorm Wind	\$25,000
8/4/2013	Thunderstorm Wind	\$2,500
11/1/2013	Thunderstorm Wind	\$5,000
7/3/2014	Thunderstorm Wind	\$10,000
7/27/2014	Hail	\$50,000
2/25/2016	Thunderstorm Wind	\$10,000
2/25/2016	Thunderstorm Wind	\$5,000
7/22/2016	Thunderstorm Wind	\$30,000
8/11/2016	Thunderstorm Wind	\$5,000
4/6/2017	Lightning	\$2,500
Total		\$205,000

NCEI losses under other event categories (such as drought, high wind, flooding, and winter storms) were not specifically noted as impacting this community, though they did impact Tolland County and nearby towns. NCEI losses are reported in Section II of this Plan.

HAZUS-MH Losses

CRCOG used FEMA’s Hazus-MH model to analyze the risks that the community might face from flooding, hurricanes, and earthquakes. The model estimates economic losses due to damage to buildings and building contents, as well as other economic disruptions. Both residential and commercial structures are addressed. Losses from different hazards are summarized below. Where available, estimates from the previous and current versions of the HMP are provided side-by-side; differences between the two may have been caused by a combination of the following:

- Changes in methodology: such as hazard zone mapping
- Changes in data: such as population and property values
- Changes in the model: this HMP utilized Hazus-MH version 4.0 rather than 2.1
- Other factors: inherent in a complex software like Hazus-MH

More details are available in the Multi-Jurisdictional HMP. Ultimately, changes in the loss estimates reflect the reality that small differences in hazard event features can have a significant impact on losses incurred.



Table 32-6: Estimated Damages to Tolland from a 1% Annual-Chance Flood

Loss Type	2014 Results	2018 Results
Households Displaced	135	105
People Needing Shelter	160	122
Buildings at Least Moderately Damaged	11	0
Economic Losses		
Residential Building & Content Losses	\$8,930,000	\$5,659,988
Other Building & Content Losses	\$4,350,000	\$3,291,478
Total Building & Content Loss	\$13,280,000	\$8,951,466
Total Business Interruption Losses	\$120,000	\$266,211
TOTAL	\$13,400,000	\$9,217,677

Table 32-7: Estimated Damages to Tolland from a 1% Annual-Chance Hurricane

Loss Type	2014 Results (1938 event)	2018 Results (1% track)
Buildings at Least Moderately Damaged	402	6
Buildings Completely Damaged	20	0
Total Debris Generated	69,111 tons	18461
Truckloads (at 25 tons/truck) of building debris	170	738
Economic Losses		
Residential Building & Content Losses	\$45,440,000	\$17,139,426
Other Building & Content Losses	\$5,240,000	\$288,132
Total Building & Content Loss	\$50,680,000	\$17,427,558
Total Business Interruption Losses	\$4,910,000	\$403,508
TOTAL LOSSES	\$55,600,000	\$17,831,066

Losses were calculated from a modeled probabilistic earthquake (1% annual-chance of occurrence), as well as for four specific scenarios with epicenters around Connecticut.

Table 32-8: Estimated Damages to Tolland from a Probabilistic Earthquake

Loss Type	2018 Results
Wage Loss	\$1,310
Rent Loss	\$1,184
Relocation Loss	\$2,269
Income Loss	\$1,011
Inventory Loss	\$91
Total Business Disruption	\$5,864
Structural Loss	\$4,875
Non-Structural Loss	\$17,170
Total Building Loss	\$22,045
Total Content Loss	\$6,508
TOTAL LOSSES	\$34,417



Table 32-9: Estimated Damages to Tolland from Modeled Earthquake Scenarios

Epicenter Location	Magnitude	Estimated Total Losses
East Haddam	6.4	\$159,450.70
Haddam	5.7	\$29,283.32
Portland	5.7	\$47,764.79
Stamford	5.7	\$2,966.21

Average Annualized Losses

Average Annualized Loss (AAL) figures are useful tools for comparison of the risks faced from different hazards with different likelihoods of occurring in a given time period. AAL estimates were prepared for each natural hazard that may impact the community based on the methodologies discussed in Section II of the Multi-Jurisdictional HMP. Dam failure, drought, tornado, and wildfire losses were sourced from the 2014 Connecticut Natural Hazard Mitigation Plan Update, with dam failure data supplemented by the National Performance of Dams Program and the Connecticut Department of Energy & Environmental Protection. Earthquake and hurricane losses were calculated in HAZUS-MH. Losses for flooding came from NFIP claims, for winter storms from Public Assistance Reimbursements, and for thunderstorms from the NCEI database. These are presented in the table below in dollars per year. Note that Hurricanes and Tropical Storms represent the largest share of total annualized losses.

Table 32-10: : Average Annualized Losses, Tolland

Dam Failure	Drought	Earthquakes	Flooding	Hurricanes and Tropical Storms	Severe Winter Storms	Thunderstorms	Tornadoes	Wildfires	Total
\$925	\$0	\$34,417	\$5,873	\$1,020,020	\$141,141	\$5,479	\$4,374	\$5,200	\$1,217,429

Losses Summary

A review of the above loss estimates demonstrates that the Town of Tolland has experienced significant expenses as a result of natural hazards and is at risk for additional losses if some of the less-frequent events were to occur. These actual and potential losses justify hazard mitigation actions to reduce losses in the future.

Mitigation Strategies and Actions

Noted Hazard Mitigation Needs

Over the course of Plan development, multiple hazard mitigation needs were noted.

- The Town must explore options for increasing its sheltering capacity and storage of emergency supplies.



- Tolland is interested in developing a new EOC with improved features; the South Windsor EOC was specifically cited as a good model.
- An upgrade of culverts under Route 195 near the Big-Y supermarket is high on the DPW list of priorities.
- The Town wishes to review and improve its dry-hydrant program to ensure its hydrant replacement and maintenance efforts are sufficient.
- Tolland is interested in enhancing its tree-trimming program, potentially by adopting UConn’s “Stormwise” forest vegetation management program.
- Tolland is interested in implementing the USDA “right tree right place” when planting new trees.
- Crumbling building foundations are a significant and widespread problem in Tolland and exacerbate the effects of natural hazards.

Status of Previous Mitigation Strategies and Actions

The Town of Tolland reviewed the mitigation actions proposed in the 2014 HMP and determined the status of each. That information is included in the table below.

Table 32-11: Status of Previous Mitigation Strategies and Actions, Tolland

Action #	Action	Notes	Status
GOAL: IDENTIFY AREAS AND MEASURES THAT WOULD BENEFIT FROM HAZARD MITIGATION PLANNING (WIND).			
Objective 1: Reduce conflicts between existing and utility wires and trees.			
1.1	Maintain agreements with private contractors for emergency tree service work.	This is part of the Town’s standard operations. This is a capability	Capability
Objective 2: Provide back-up power for all critical facilities/infrastructure.			
2.1	Secure funding for generator acquisition.	Action completed.	Completed
Objective 3: Ensure safe and adequate means for traveling throughout town.			
3.1	Purchase additional signs, barricades and related supplies for road closures and alternate-route marking.	This is performed as part of the Town’s standard emergency preparedness and response activities.	Capability
3.2	Continue good communications with public safety officials in adjacent communities.	This is part of the Town’s standard operations. This is a capability	Capability
GOAL: IDENTIFY AREAS AND MEASURES THAT WOULD BENEFIT FROM HAZARD MITIGATION PLANNING (FLOOD).			
Objective 1: Improve reliability of access to Fire Station 340.			
1.1	Analyze and make recommendations to improve Gehring Road crossing of Spice Brook.	This has not yet been completed due to staffing and budget limitations.	Carry Forward
1.2	Implement recommendations of above study.	This action is delayed until completion of that listed above.	Carry Forward
Objective 2: Improve drainage in Industrial Park.			
2.1	Analyze and make recommendations to improve natural and artificial drainage in Industrial Park and Gages Brook.	DPW recently cleaned out two key culverts in Industrial Park, which should help address flow problems. The Town wishes to keep the action.	Carry Forward
2.2	Implement recommendations of above study. (Because this is expected to be a long term, multi-year project, for the 2014-2019 Plan period, the action to be taken is to develop a scope of work for the recommended improvements.)	This action is delayed until completion of that listed above.	Carry Forward with Revisions



Action #	Action	Notes	Status
Objective 3: Ensure safety of Depot/South River Road Bridge over the Willimantic River.			
3.1	Monitor CT DOT studies of Willimantic River.	This is an ongoing effort. This is a capability	Capability
3.2	Inspect and evaluate the center pier and make recommendations for its improvement and/or maintenance.	Action completed.	Completed
3.3	Implement recommendations of above analysis. (Because this is expected to be a long term, multi-year project, for the 2014-2019 Plan period, the action to be taken is to develop a scope of work for the recommended improvements.)	This action has not yet been completed due to funding limitations. Town is working on identifying funding sources.	Carry Forward
Objective 4: Prevent increased flooding as a result of future development.			
4.1	Implement Low Impact Development regulations.	This has been completed.	Completed
4.2	Educate commissioners, developers and the community on Low Impact Development.	The Town has initiated an education program and expects to provide some training for developers and local engineers within the 2018-2019 fiscal year. Carry forward to completion.	Carry Forward
4.3	Continue erosion and sedimentation control enforcement.	This is part of the Town's standard operations. This is a capability	Capability
Objective 5: Ensure protection of private property.			
5.1	Raise awareness in the community of the National Flood Insurance Program.	Consider new strategy to link on EM page with annual updates on multiple pages, add e-mail blasts.	Carry Forward with Revisions
5.2	Identify private bridges that may need repair and reach out to owners to determine best means of evaluating and implementing necessary upgrades. Because this is expected to be a long term, multi-year project, for the 2014-2019 Plan period, the action to be taken is to develop a scope of work for the project.	This action has not yet been completed due to funding and staffing limitations.	Carry Forward
GOAL: REDUCE IDENTIFY AREAS AND MEASURES THAT WOULD BENEFIT FROM HAZARD MITIGATION PLANNING (STORMS).			
Objective 1: Develop network/measures to evacuate citizens to shelters.			
1.1	Develop and maintain list of special needs populations.	This action has been completed, but needs another update; 37 new vulnerable population units will soon be added.	Carry Forward with Revisions
1.2	Use town website to communicate emergency planning information to residents.	This action has been completed, but the Town wishes to also include e-notifications on the website.	Carry Forward with Revisions
GOAL: IDENTIFY AREAS AND MEASURES THAT WOULD BENEFIT FROM HAZARD MITIGATION PLANNING (FOREST FIRES).			
Objective 1: Reduce potential losses as a result of fires.			
1.1	Develop a system for servicing/dredging fire ponds and dry hydrants periodically.	Town has pursued this action but has not yet found a funding source.	Carry Forward

Active Mitigation Strategies and Actions

The Town proposed to initiate several new mitigation actions for the upcoming five years. Additionally, a number of actions from the previous planning period are being carried forward or replaced with revised actions. These are listed below.



Each of the following actions has been prioritized based on FEMA guidelines, listed from highest to lowest priority, and numbered.

Action #1

Develop a list of private contractors that can be utilized for emergency tree service work.

Goal	7. Improve the emergency response capabilities of the region and its communities
Category	Preparedness & Emergency Response
Lead	Public Works
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	01/2019 - 12/2019
Priority	High

Action #2

Develop a system for servicing/dredging fire ponds and dry hydrants periodically.

Goal	7. Improve the emergency response capabilities of the region and its communities
Category	Prevention
Lead	Fire Department
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	01/2019 - 12/2019
Priority	High

Action #3

Update list of special needs populations to include 37 new units and any other new additions to the population.

Goal	7. Improve the emergency response capabilities of the region and its communities
Category	Preparedness & Emergency Response
Lead	Emergency Management
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	01/2019 - 12/2019
Priority	High



Action #4

Develop a plan to increase municipal sheltering capacity to meet 7% requirement.

Goal	7. Improve the emergency response capabilities of the region and its communities
Category	Preparedness & Emergency Response
Lead	Emergency Management
Cost	\$10,000 - \$25,000
Funding	Town Operating Budget / Grants
Timeframe	07/2019 - 06/2021
Priority	High

Action #5

Hire engineer to repair or replace center pier on Willimantic River.

Goal	1. Minimize the impact of natural hazards on physical buildings and infrastructure
Category	Structural Projects
Lead	Public Works
Cost	More than \$100,000
Funding	Grants
Timeframe	07/2022 - 06/2023
Priority	High

Action #6

Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.

Goal	6. Improve public outreach, education, and warning systems
Category	Education & Awareness
Lead	Planning, in coordination with DEEP
Cost	\$0 - \$10,000
Funding	Materials & Resources Provided by CT DEEP
Timeframe	07/2019 - 06/2022
Priority	Medium

Action #7

Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.

Goal	1. Minimize the impact of natural hazards on physical buildings and infrastructure
Category	Prevention
Lead	Public Works & Planning
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	01/2020 - 12/2020
Priority	Medium



Action #8

Update bridge and culvert sizing requirements to allow for passage of larger storm events: utilize the Cornell NRCC Extreme Rainfall figures found at <http://precip.eas.cornell.edu/>.

Goal	2. Ensure Municipal Codes and Regulations support hazard mitigation
Category	Prevention
Lead	Public Works
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	01/2020 - 12/2020
Priority	Medium

Action #9

Add a link to the Emergency Management page on the Town Website with information about the National Flood Insurance Program.

Goal	6. Improve public outreach, education, and warning systems
Category	Education & Awareness
Lead	Emergency Management
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	01/2020 - 12/2020
Priority	Medium

Action #10

Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.

Goal	3. Improve institutional awareness and understanding of natural hazard impacts and mitigation within municipal governments and other decision-making bodies
Category	Education & Awareness
Lead	Planning
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	07/2019 - 06/2024
Priority	Medium



Action #11

Conduct annual outreach campaign to educate residents on signing up for emergency alerts, building and maintaining disaster plans and kits, and improving their disaster readiness. Include notifications on the Town website.

Goal	6. Improve public outreach, education, and warning systems
Category	Education & Awareness
Lead	Emergency Management
Cost	\$10,000 - \$25,000
Funding	Town Operating Budget
Timeframe	07/2019 - 06/2024
Priority	Medium

Action #12

Analyze and make recommendations to improve Gehring Road crossing of Spice Brook.

Goal	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
Category	Structural Projects
Lead	Public Works
Cost	\$25,000 - \$50,000
Funding	Town Operating Budget / Grants
Timeframe	07/2021 - 06/2023
Priority	Medium

Action #13

Analyze and make recommendations to improve natural and artificial drainage in Industrial Park and Gages Brook.

Goal	1. Minimize the impact of natural hazards on physical buildings and infrastructure
Category	Structural Projects
Lead	Public Works & Planning
Cost	\$25,000 - \$50,000
Funding	Town Operating Budget / Grants / CT DEEP
Timeframe	07/2021 - 06/2023
Priority	Medium



Action #14

Implement recommendations to improve Gehring Road crossing of Spice Brook.

Goal	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
Category	Structural Projects
Lead	Public Works
Cost	More than \$100,000
Funding	Grants
Timeframe	07/2022 - 06/2024
Priority	Medium

Action #15

Send out email blasts with information about the National Flood Insurance Program.

Goal	6. Improve public outreach, education, and warning systems
Category	Education & Awareness
Lead	Emergency Management
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	01/2021 - 12/2022
Priority	Low

Action #16

Educate commissioners, developers and the community on Low Impact Development requirements on an ongoing basis.

Goal	3. Improve institutional awareness and understanding of natural hazard impacts and mitigation within municipal governments and other decision-making bodies
Category	Education & Awareness
Lead	Planning
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	07/2019 - 06/2024
Priority	Low



Action #17

Seek Certification within the Sustainable CT program and make progress with the hazard mitigation goals associated with SustainableCT certified actions.

Goal	4. Increase the use of natural, “green,” or “soft” hazard mitigation measures, such as open space preservation and green infrastructure.
Category	Natural Resources Protection
Lead	Planning
Cost	\$0 - \$10,000
Funding	Town Operating Budget
Timeframe	07/2021 - 06/2022
Priority	Low

Action #18

Coordinate with CT SHPO to conduct historic resource surveys to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.

Goal	8. Ensure community character and social equity are addressed in mitigation activities
Category	Property Protection
Lead	Planning, in coordination with SHPO
Cost	\$10,000 - \$25,000
Funding	SHPO
Timeframe	07/2021 - 06/2023
Priority	Low

Action #19

Develop a scope of work for making recommended improvements, developed as a separate action, to the Industrial Park and Gages Brook.

Goal	1. Minimize the impact of natural hazards on physical buildings and infrastructure
Category	Structural Projects
Lead	Public Works
Cost	\$10,000 - \$25,000
Funding	Town Operating Budget
Timeframe	07/2021 - 06/2023
Priority	Low



Action #20

Explore creation of a new EOC with improved capabilities and technologies

Goal	7. Improve the emergency response capabilities of the region and its communities
Category	Preparedness & Emergency Response
Lead	Emergency Management
Cost	\$10,000 - \$25,000
Funding	Town Operating Budget
Timeframe	07/2021 - 06/2023
Priority	low

Action #21

Identify private bridges that may need repair, and reach out to owners to determine best means of evaluating and implementing necessary upgrades. Because this is expected to be a long term, multi-year project, for the current Plan period, the action to be taken is to develop a scope of work for the project.











Goal	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
Category	Structural Projects
Lead	Public Works
Cost	\$25,000 - \$50,000
Funding	Town Operating Budget / Grants
Timeframe	07/2023 - 06/2024
Priority	Low



**Capitol Region Natural Hazards
Mitigation Plan Update**



Tolland, Connecticut
Flood Plains, Dams
& Critical Facilities

Critical Facilities



-  Emergency Center
-  Fire Station
-  Healthcare Facility
-  Police Station
-  Public Infrastructure
-  School
-  State Facility
-  Town Facility
-  Waste Water Facility
-  NRHP Buildings/Sites

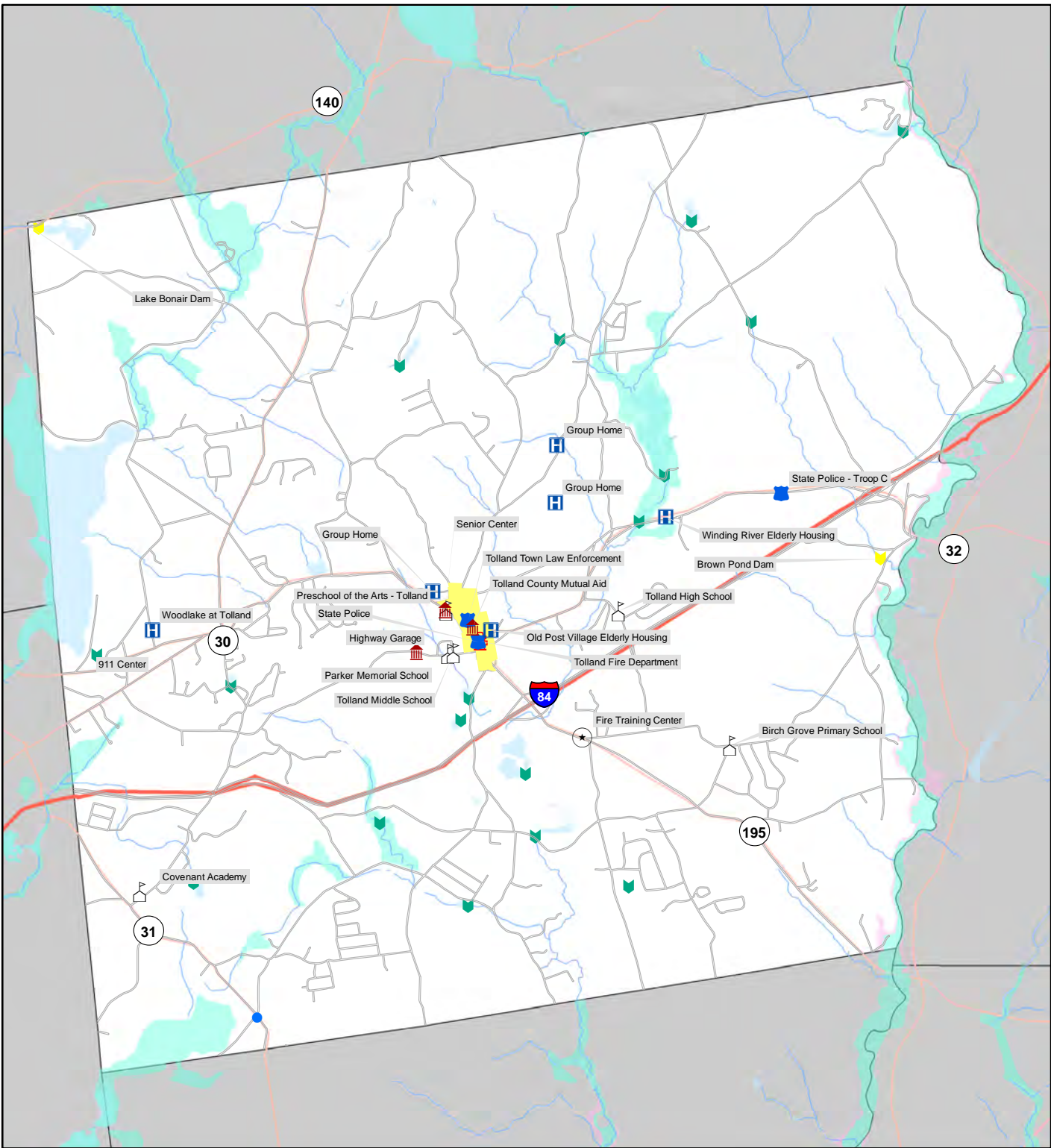
 NRHP Districts/Areas

Dam Hazard Class

-  A, AA, BB or Unclassified
-  Class B-Significant Hazard

FEMA Flood Hazard Area

-  100 Year Flood Zone
-  500 Year Flood Zone



Data Sources: FEMA, National Register of Historic Places, CT DEEP, CRCOG, ESRI



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