**Vernon**

The Town of Vernon is a great place to live and work with a high quality of life, desirable residential neighborhoods and schools. The town is a fully suburban community on the eastern edge of the Capitol Region and encompasses a land area of 18.4 square miles and has a population of approximately 29,622. Vernon’s elevation ranges from about 150 feet in the west to over 800 feet in the east. Vernon’s land area contributes primarily to the Hockanum River Watershed; however, the southeastern corner of town drains to the Willimantic River Watershed. Major watercourses include the Hockanum and Tankerhoosen Rivers, as well as Clarks and Railroad Brooks. Vernon is bisected by Interstate 84 which travels east-west. Other major thoroughfares that run through Vernon include state routes 30, 31, 74 and 83. There are distinct historic, agricultural, urban, suburban, and rural areas that provide a choice of lifestyles. A variety of cultural, recreational, and commercial activities are available throughout town offering goods and services, employment and amusement. Strong business sectors include retail, professional, medical, and commercial – industrial as well as farming and horticultural enterprises.

**Challenges**

Localized flooding is one challenge Vernon faces. In 2013, the Town incorporated low impact development (LID) requirements into its Zoning Regulations to aid in reducing its vulnerability to flooding. The Town has not permitted any new development in the flood plain since the adoption of the 2008 Plan. The National Flood Insurance Program (NFIP) has paid 25 claims in Vernon totaling $149,474 to-date. Vernon has eleven Repetitive Loss Property claims to-date with payments totaling $92,732. CRCOG used FEMA’s Hazus-MH model to analyze the risks that the Town of Vernon might face from a major flood. The model estimates that economic losses to the town including residential and commercial damage and business interruptions due to a flood having a 1% chance of occurring any given year (the 100-year flood) would be over $50 million. The impacts of such a flood are summarized below:

<table>
<thead>
<tr>
<th>Estimated Damages from 100-Year Flood</th>
<th>Household Displaced</th>
<th>People Needing Shelter</th>
<th>Buildings at Least Moderately Damaged</th>
<th>Expected Damage to Essential Facilities</th>
<th>Total Estimated Economic Losses</th>
<th>Total Residential Building &amp; Content Losses</th>
<th>Total Commercial, Industrial &amp; Other Building &amp; Content Losses</th>
<th>Total Business Interruption Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>336</td>
<td>805</td>
<td>76</td>
<td>0.00</td>
<td>$50,460,000</td>
<td>$21,920,000</td>
<td>$28,230,000</td>
<td>$310,000</td>
</tr>
</tbody>
</table>

Losses from strong hurricanes would also be significant. The model estimates that economic losses to the town including residential and commercial damage and business interruptions due to a Category 3 hurricane such as the 1938 Hurricane would be nearly $140 million. The impacts of such a storm are summarized below:

<table>
<thead>
<tr>
<th>Estimated Damages from a 1938 Strength Hurricane</th>
<th>Household Displaced</th>
<th>People Needing Shelter</th>
<th>Buildings at Least Moderately Damaged</th>
<th>Buildings Completely Damaged</th>
<th>Total Estimated Economic Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>190</td>
<td>42</td>
<td>1,182</td>
<td>56</td>
<td>$139,900,000</td>
</tr>
</tbody>
</table>
According to information from the Connecticut Department of Emergency Management and Homeland Security, the three federally declared natural disasters of 2011 resulted in total expenses to the municipality of over $4 million. These expenses include debris and snow removal, emergency protective measures and repairs to damaged infrastructure and buildings but do not include damages experienced by private citizens and businesses.

<table>
<thead>
<tr>
<th>Applicant</th>
<th>100% of Amount Eligible for 75% Reimbursement</th>
<th>Total Damages Eligible for Public Assistance Due to 2011 Disasters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100% of Amount Eligible for 75% Reimbursement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DR-1958-CT 2011 Snow</td>
<td>DR-4023-CT Irene August 2011</td>
</tr>
<tr>
<td></td>
<td>DR-4046-CT Severe Weather Oct 2011 Alfred</td>
<td></td>
</tr>
<tr>
<td>Town of Vernon</td>
<td>$106,773.87</td>
<td>$142,079.05</td>
</tr>
<tr>
<td>Vernon Other</td>
<td>$5,819.71</td>
<td></td>
</tr>
<tr>
<td>Vernon Total</td>
<td>$112,593.58</td>
<td>$142,079.05</td>
</tr>
</tbody>
</table>

Goals, Objectives and Strategies

**GOAL: PRESERVATION OF LIFE AND PROPERTY**

**Objective 1:**
Improve snow removal equipment at public works.

**Strategic Action:**

1.1 Incorporate needs in Capital Improvement Plan and pursue opportunities to upgrade equipment.

   **Lead:** Public Works, Administration
   **Priority:** Medium
   **Status:** The Town of Vernon has adopted a vehicle and equipment replacement plan and has begun a multi-year fleet replacement program. This effort will continue throughout the 2014-2019 Plan.

   **Potential Funding Sources:** Grants, capital improvement and general operating budget.

   **Timeframe:** 2014-2019: Annual purchase through capital improvements and budget process as well as application for grant funding as available.
Objective 2:
Provide police/fire/EMS with dedicated 4-wheel drive vehicles.

Strategic Action:

2.1 Pursue opportunities to obtain vehicles - through grants, surplus military equipment, etc.
   Lead: Police and Fire
   Priority: Medium
   Status: Completed. The following vehicles have been purchased or have been approved for purchase by department: VPD = 4 SUV’s; VFD = 1 SUV (Fire Marshal), 1 SUV (Command Vehicle), 1 Utility F-150, 2 ATV’s; DPW = 5 F-250’s, 1 Ford Escape; Public Schools = 1 F-250, 1 Ford Escape, 2 Kubotas (pre-positioned at schools to support primary and secondary shelter operations).

Objective 3:
Provide public works with mobile generator to power shelters.

Strategic Action:

3.1 Work with CREPC to identify grant programs for purchasing portable generators and modifying buildings for hook-up.
   Lead: Emergency Management, Police
   Priority: High
   Status: The Office of Emergency Management (OEM) purchased the following portable generators: (2) 7kw, (1) 3kw, (2) 2kw. OEM secured a state homeland security grant to purchase and install a fixed generator at Vernon Center Middle School (primary shelter). Vernon Public Schools purchased and installed a fixed generator at Rockville High School (secondary shelter). This effort will continue for the 2014-2019 plan with a focus on securing grant funding for a fixed generator for the Town of Vernon’s Town Hall and Annex buildings (secondary EOC and town-wide IT network) and a fixed generator for Fire Station #5. Applications for grant funding will be made as opportunities become available through state and federal programs.
   Potential Funding Sources: Grants and general operating budget.
   Timeframe: 2014 – 2019

Objective 4:
Ensure emergency preparedness of residents and businesses.

Strategic Actions:

4.1 Conduct periodic educational outreach to residents on storm readiness and property maintenance issues.
   Lead: Public Works, Emergency Management, Police
Priority: High
Status: This is an established practice utilizing Everbridge (R-911), town website, and mass media to educate residents. Host public forums (i.e. CRCOG). DPW provides specific information to residents on property maintenance and keeping road gutters clear. This effort will continue for the 2014-2019 Plan.
Potential Funding Sources: Grants and general operating budget.

4.2 Conduct periodic outreach to private medical-care facilities and apartment complexes to encourage installation of generators.
Lead: Emergency Management, Building
Priority: Medium
Status: This is an established practice. Vernon Housing Authority included in Town of Vernon emergency operations at EOC. Worked with local medical facilities to review and exercise plans as well as to authorize priority electrical utility restoration with CL&P.
Potential Funding Sources: Grants and general operating budget.

4.3 Complete the requirements to join FEMA's Community Rating System to reduce flood insurance premiums for residents.
Lead: Planning, Emergency Management
Priority: Medium
Status: Deferred. The Town of Vernon will join the rating system and a community information program will be established as part of the 2014-2019 Plan.
Potential Funding Sources: Grants and general operating budget.

**GOAL: IMPLEMENT PREVENTATIVE PROGRAMS TO MITIGATE STORM DAMAGE**

**Objective 1:**
Purchase and implement GIS mapping program.

**Strategic Actions:**

1.1 Continue planning to implement GIS for use by all town departments, including emergency services.
Lead: Planning, Administration, Emergency Management
Priority: Medium
Status: Established a GIS program that was utilized to support EOC operations during storms, specifically with coordinating school roof snow removal and road clearing operations.
Potential Funding Sources: Grants and general operating budget.
Objective 2:
Maintain adequate manpower and equipment for preventative tree program and assessment.

Strategic Action:

2.1 Investigate CRCOG service sharing initiative for opportunities to share equipment used in tree maintenance.
   Lead: Public Works, Administration
   Priority: Medium
   Status: The Town of Vernon purchased a 60 foot bucket truck, (12) new chain saws, and has added grapple apparatus to a loader, Bobcat and steer loader. Additional requested equipment includes a high capacity chipper, grapple truck and chip dump truck.
   Potential Funding Sources: Grants, capital improvement and general operating budget.

Objective 3:
Make improvements to town Emergency Operations Center and communications facility.

Strategic Action:

3.1 Acquire telephones, computer server and back-up, mobile hand-held radios and enable wireless connections.
   Lead: Police, Fire, Emergency Management
   Priority: Medium
   Status: Efforts are underway. The Town of Vernon has implemented several improvements to its Emergency Operations Center (EOC), specifically in the areas of information technology and communications. In addition, the Town of Vernon has established a specific IT plan for EOC operations and is in the process of establishing a dedicated HAM radio operations room. The Town of Vernon is also exploring the possibilities of a unified/co-located (VFD and VPD) dispatch center during emergencies.
   Potential Funding Sources: Grants and general operating budget.
   Timeframe: HAM radio room to be completed by the end of FY2015.

NEW OBJECTIVE:

Objective 4:
Obtain weather and water level monitoring and alerting systems.

Strategic Actions:

1.1 Acquire weather monitoring system that provides real-time data and alerts to inform critical decision making for emergency preparedness and response operations.
   Lead: Emergency Management
Priority: High
Status: This is a new initiative for the Plan Update. The Office of Emergency Management (OEM) is exploring internet based streaming weather monitoring systems.

Potential Funding Sources: Grants and general operating budget.
Timeframe: To be completed by the end of FY2013/14.

1.2 Acquire water level monitoring system that provides real-time data and alerts to inform critical decision making for emergency preparedness and response operations. 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 review available systems and grant funding options.
Lead: Emergency Management, Public Works
Priority: Medium
Status: This is a new initiative for the Plan Update.
Potential Funding Sources: Grants and general operating budget.
Timeframe: 2014–2019

GOAL: IMPROVE DRAINAGE IN FLOOD ZONES

Objective 1:
Conduct study of existing drainage problem areas for improvements.

Strategic Actions:

1.1 Study improvements to Franklin Road to alleviate road flooding issues. (The Town made claims for FEMA assistance in repair costs following the October 2005 flood). 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 and Request for Proposal (RFP) for the study.
Lead: Engineering, Public Works
Priority: Medium
Status: Deferred. Study has yet not been completed. No significant progress made on this effort however, it remains important to the Town.
Potential Funding Sources: Grants and general operating budget.
Timeframe: 2018-2019

1.2 Study improvements to Manchester Flats area - Route 83, Welles and Main Streets. (During the October 2005 flood, a motel on Rt. 83 became inaccessible, isolating guests.) 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 and Request for Proposal (RFP) for the study.
Lead: Engineering, Public Works
Priority: Medium
Status: Deferred. Study has yet not been completed. No significant progress made on this effort however, it remains important to the Town.
Potential Funding Sources: Grants and general operating budget.
Timeframe: 2018-2019
1.3 Study improvements along Frederick Road. (Residents in area currently carry flood insurance and have utilized town sandbags during high water events.) 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 and Request for Proposal (RFP) for the study.

- **Lead:** Engineering, Public Works
- **Priority:** Medium
- **Status:** Deferred. Study has yet not been completed. No significant progress made on this effort however, it remains important to the Town.
- **Potential Funding Sources:** Grants and general operating budget.
- **Timeframe:** 2018-2019

**Objective 2:**
Upgrade or repair identified problem areas.

**Strategic Action:**

- **Strategic Action 2.1** Upon completion of above studies, prioritize and implement recommended improvements. 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 prioritized list of projects.

- **Lead:** Engineering, Public Works, Administration
- **Priority:** Medium
- **Status:** Deferred until completion of studies.
- **Potential Funding Sources:** Grants and general operating budget.
- **Timeframe:** By fall of 2019

**Objective 3:**
Obtain public notification system.

**Strategic Action:**

- **Strategic Action 3.1** Improve public notification system.

- **Lead:** Emergency Management, Police
- **Priority:** Medium
- **Status:** The Town of Vernon subscribes to the state’s Everbridge/Reverse-911 public notification system. The Town of Vernon has also upgraded its current public warning siren system to include portable/handheld radio activation and voice announcement capabilities. System improvements will continue for the 2014-2019 Plan with a focus on expanding the public warning siren system to the northeast and southeast corners of the town.
- **Potential Funding Sources:** Grants, capital improvements, and general operating budget.
- **Timeframe:** 2014 – 2019.
Map 60: Vernon Population Density, Dams and Flood Zones
Map 61: Vernon Flood Plains, Repetitive Loss Areas, Dams and Important Facilities