### Beacon Water Supply and Demand Summary

<table>
<thead>
<tr>
<th></th>
<th>1974</th>
<th>2006</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage (units = million gallons)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melzingah Reservoir</td>
<td>58</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Mt. Beacon Reservoir</td>
<td>125</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>Cargill Reservoir</td>
<td>158</td>
<td>158</td>
<td>158</td>
</tr>
<tr>
<td>Water tanks</td>
<td>two @ 0.5 mg; one @ 1.0 mg</td>
<td>one @ 0.5 mg; three @ 1.0 mg</td>
<td>one @ 0.5 mg; three @ 1.0 mg</td>
</tr>
<tr>
<td><strong>Flows (units = million gallons per day)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wells (safe yield)</td>
<td>one 0.7 mgd</td>
<td>two w/ combined total of 1.54 mgd; one 1.2 mgd</td>
<td>two w/ combined total of 1.54 mgd; one 1.2 mgd</td>
</tr>
<tr>
<td>Combined 3 Reservoirs (safe yield)</td>
<td>0.71</td>
<td>0.77</td>
<td>0.77</td>
</tr>
<tr>
<td>TOTAL capacity (safe yield)</td>
<td>1.4</td>
<td>3.45</td>
<td>3.45</td>
</tr>
<tr>
<td>Water leased to Town of Fishkill</td>
<td>0</td>
<td>-0.18</td>
<td>up to -0.5</td>
</tr>
<tr>
<td>TOTAL demand by City of Beacon</td>
<td>-2.0</td>
<td>-2.4</td>
<td>-3.0</td>
</tr>
<tr>
<td>Water Supply Status</td>
<td>risk of shortage</td>
<td>reliable supply</td>
<td>at capacity</td>
</tr>
</tbody>
</table>

The Beacon City Water District has two wells to the north of the City. These two wells have the capacity to deliver a safe yield of 1.54 mgd. The City also uses a well in the Village of Fishkill, which provides 1.2 mgd safe yield. The City also has a contract to sell up to 0.5 mgd directly to the Town of Fishkill. Currently, approximately 0.28 mgd is actually utilized by the Town of Fishkill. The City built a water treatment plant in 1990 near the point at which the Fishkill Creek enters the City. The plant has a current capacity to treat up to 4.0 mgd, and was designed so that it could be expanded to treat up to 6.0 mgd.

The table above is based on a 1992 report from an engineering firm, O’Brien and Gere. The report assumed a 25 percent increase in water usage between 1992 and 2020, which would result in a demand of 3.0 mgd. The analysis presented below is based on a demographic analysis of the City’s previous and potential future population growth, and instead uses an assumption of a 5 percent population growth rate per decade. The City declined slightly by 1.4% between 2000 and 2010 but grew by 11.8% between 1990 and 2000. Therefore, a 5 percent growth rate per decade is a conservative assumption.

The City is also in the process of developing another well at the existing Water Treatment Plant property at 460 Liberty Street. This location was identified as a target parcel for drilling because the underlying...
bedrock geology appears favorable to produce high-yielding wells. The City has hired Leggette, Brashears & Graham, Inc. to oversee the supply test well and planning for the site. Assuming the wells are successful, engineering design plans and specification will be prepared and submitted to the DCDOH and New York State Department of Health (NYSDOH) for approval to connect the new wells to the water system.

In 2013, The County of Dutchess Department of Health (DCDOH) conducted an inspection of the Town of Fishkill’s Rombout Community Public Water Supply. DCDOH notified the Town that their 400,000 gallon (0.4 MG) water storage tank in the low-pressure portion of the system is not effective and needs to be replaced by a new elevated water storage tank or a formal agreement for water storage established with the City of Beacon. DCDOH stated that currently, the City of Beacon is supplying the treated water storage needs for the City as well as the area served by the Town of Fishkill’s 400,000 gallon storage tank.

In September 2015, O’Brien & Gere was retained by the City to identify the surplus (or deficit) in treated water storage in the City’s water system by comparing the volume of storage recommended to meet the City’s needs with the volume of treated water storage available in the City’s water system. The analysis concluded that the City of Beacon currently has an adequate capacity to meet the recommended water storage needs in the Rombout water system after the existing 0.4 MG tank in the Rombout water system is taken out-of-service. It is recommended that the City develop a formal agreement with the Town of Fishkill to supply their water supply needs.

The primary water supply issues have more to do with maintaining Beacon’s aging infrastructure, rather than having enough supply for existing and new development. The distribution network system for the Beacon Water District consists primarily of 8”, 10” and 12” feeder mains. One concern with the distribution system is that a small percentage of the distribution system consists of asbestos-based pipes installed from the late 1940s to the late 1950s. These pipes should continue to be replaced whenever roads are upgraded throughout the City.
5.2. **Sewage Treatment System: Existing Conditions**

The City of Beacon has a public sewerage system that serves most of the City. The City’s sewage treatment plant was built in 1963 and upgraded in 1972. The plant has a design flow of 6 mgd and a present usage of 3.0 to 3.5 mgd, which includes approximately 1.0 mgd pumped into the City’s system from the Town of Fishkill.

Existing data and City staff have indicated that the plant has sufficient capacity to handle sewage flow from the entire drainage basin area for the foreseeable future. While the City’s treatment plant is more than adequate to handle sewage volume, during rainstorms or other weather events that increase water flow within the drainage basin, the treatment plant receives up to 10 or more mgd of sewage and stormwater, or 4.0 mgd more than its effective capacity. Over the past ten years, the City has made a significant capital investment to investigate and remediate inflow and infiltration of groundwater and stormwater into the sanitary sewer system. Technologies used to detect problem areas have included smoke testing, video cameras, and sewer flow meters.

*Figure 5-1: WWTP Water Demand and Production*
5.3. Water Supply and Sewage Treatment Goals and Recommendations

GOAL:

Maintain and improve City utilities, emphasizing environmental protection, health and safety. Work cooperatively with area municipalities to maintain and improve water and sewer utilities. Comply with the State’s Stormwater Management Program.

OBJECTIVES AND RECOMMENDATIONS:

A. Identify Issues and Maintain Sewer and Stormwater Systems

Continue to detect issues, repair and upgrade sewer and stormwater infrastructure.

Programs, Research and Funding:

5.1 As a MS4 Community, the City should educate property owners and construction contractors about the detrimental cumulative effect of connecting sump pumps and other drainage systems to the sewer system (which is illegal), and about the applicable regulations, funding, and infrastructure alternatives.

5.2 Research and apply for additional sources of funding, including non-profit grants and state and federal funding to support the City's ongoing efforts to remove Inflow and Infiltration (I & I) from the sewage system.

5.3 The City should develop a program including regulation, funding and outreach to specific areas or types of property owners and education to address stormwater connections to sewer lines on private property.

5.4 Explore opportunities to cooperate with neighboring municipalities to improve sewage treatment systems within the drainage basin.

5.5 Explore opportunities to cooperate with state and federal agencies to improve sewage treatment systems within the drainage basin.

5.6 Encourage stormwater management, such as pervious paving, in areas of the City where there is heightened concern about stormwater treatment.
Inventory and Analysis:

5.7 The City should identify areas not served by stormwater lines and investigate appropriate means for property owners to treat storm water.

B. **New development and redevelopment.**

Ensure that as a part of the development review process, new development minimizes stormwater impacts.

5.8 Encourage or require low-impact development techniques to minimize stormwater impacts of new development.

5.9 Encourage or require conservation subdivisions, which result in less impervious surfaces than conventional subdivisions due to shorter road and driveway lengths.

5.10 Create incentives for minimizing stormwater impact for new development. (See also Objectives F and G in the Environmental Features Chapter).

C. **Asbestos Main Replacements**

Replace asbestos-based water mains whenever road construction provides an opportunity.

5.11 Continue to inventory possible locations of asbestos-based water mains.

5.12 Based on anticipated road construction schedules, density of residential population and other relevant factors, establish a non-binding schedule of replacement for asbestos-based water mains identified in the inventory.

5.13 Seek additional funding from non-profit, state, and federal sources for replacement of water mains and/or other mitigation measures.

D. **Water Supply Improvements**

Continue to improve water mains for domestic water and firefighting purposes. Preserve the quality of the water supplied.

5.14 Based on the density of residential population, the degree of deficiency in volume and/or pressure, anticipated road construction schedules, and other relevant factors, establish a non-binding schedule of replacement for all under-sized water mains identified in the inventory. (See also Objective F of the Environmental Features Chapter.)

5.15 Encourage the use of water efficient fixtures in existing buildings and new construction.
5.16 Continue to improve water supply infrastructure with smart technology (i.e. automatic leak detection).

**E. Plan for Improvements**

Develop a sewer and water infrastructure plan, which should be linked with a capital budget.

5.17 The plan should identify existing conditions within the system and existing needs.

5.18 Based on current and proposed land uses and zoning, and based on anticipated rates of development, the plan should estimate future needs for 5, 10, 15, and 20 years into the future.

5.19 Based on the previous two steps identified above, the plan should identify proposed infrastructure improvements at specified times and identify funding sources within the context of a City-wide capital budget.

5.20 Explore establishing development fees for projects outside of the city using sewer and water infrastructure.

**F. Public Outreach**

5.21 Raise public awareness with flyers, training and workshops to educate the public on water conservation and reuse.

5.22 Educate homeowners and responsible City agencies about alternative stormwater management and drainage systems, including improvements such as rain barrels and roof downspout disconnects where feasible.
6.1. Existing Transportation Network

The transportation system connects residences with work, shopping, recreational and community facilities. In Beacon, as in the rest of Dutchess County, the primary element of the transportation system is the road network. Other elements of the transportation system include the sidewalk and trail network, the network of bicycle paths and lanes, the Metro-North rail system, regional and inter-city bus service, waterborne transportation, and the regional airport in Newburgh.

The public outreach done in 2006 suggests that Beacon residents value the ability to walk safety and conveniently throughout the City. Residents felt that daily needs were generally within either walking distance or a short drive. Many participants felt that the City should improve public transportation to Main Street, and along the length of Main Street, with a trolley or shuttle. Other suggested general city-wide improvements were more sidewalks, improved lighting, more bicycle paths and clear signage indicating bicycle routes.

The community feedback during the Comprehensive Plan Update prioritized developing stronger public transit options between major commercial attractions (Main Street, the waterfront, and Dia:Beacon). Participants were also interested in developing opportunities to easily walk or bike to local natural areas.

Regional Context

The City of Beacon is connected to the region by Interstate Highway 84 which provides connections to the Newburgh-Beacon Bridge, the Taconic State Parkway, New York State Thruway, and Stewart International Airport. Figure 6-1 illustrates the functional classification of roadways in Beacon.

Beacon has several arterial roads that can accommodate thru-traffic and link Beacon to regional economic centers. NY Route 9D connects to Interstate 84, runs through Beacon’s downtown to Putnam County. NY Route 52 runs west and northeast through Beacon and connects to major retail destinations in the area.

The City is also served by several public transit options. Metro-North Rail provides connection to Beacon via the Hudson River Line. The Hudson line connects north to Poughkeepsie and New York City to the south. Ferry service connects Beacon to Newburgh via the Hudson River. The City is also served by the Dutchess County LOOP Bus System. Stewart Airport is located 5 miles away and is accessible via bus from the Beacon train station.
**Interstate**

*Interstate 84* is a four-lane highway that traverses the northern portion of the City of Beacon. Exit 11 is the closest exit to the highway just north of the municipal boundary of the City of Beacon. Exit 11 is the last exit before the Newburgh-Beacon Bridge. Interstate 84 provides connections to New York communities west of the Hudson River, Pennsylvania, and Connecticut to the east.

**Principal Arterials**

*Route 9D* (North and Wolcott Avenues) is a two to three-lane arterial road that traverses the length of the City; crossing into Beacon north near Interstate 84, then curves east towards Mount Beacon before turning south towards Cold Spring.

**Minor Arterials**

*Route 52* (Fishkill Avenue and Teller Avenue) is a two-lane arterial road that serves as the northeast gateway into Beacon and runs south along the abandoned railroad line adjacent to Fishkill Creek before turning west at Memorial Park and meeting Route 9D at Wolcott Avenue.

*South Avenue* is a two-lane arterial road that begins at Main Street in the Central Business District and ceases its designation as a minor arterial at the intersection of Wolcott Avenue (Route 9D).

**Traffic Volumes**

New York State Department of Transportation releases Average Annual Daily Trip (AADT) data which provides estimates for the average daily traffic volumes on different route segments at a particular count station location. Figure 6-1 illustrates the AADT data for roadways in the City of Beacon. Arterial roadways in Beacon, those urban roads that are able to accommodate high volumes of traffic, are indeed servicing the majority of traffic volume in the City of Beacon. The highest traffic volumes are along Interstate 84 where an estimated 67,696 vehicles utilize the Newburgh-Beacon Bridge on a daily basis. New York State Route 9D carries the second heaviest amount of traffic where an estimate 23,021 cars utilize this roadway. State Highway 52 is the other major arterial roadway in Beacon, and it is estimated to handle 10,054 vehicles per day.
Figure 6-1: Roadway Classification and Traffic Volumes

CITY OF BEACON COMPREHENSIVE PLAN UPDATE
The 2009 Frederick P. Clark Associates study also provided a Level of Service (LOS) of service analysis for major intersections in the downtown and waterfront areas. LOS is determined by the average delay per vehicle during a peak 15-minute period during a peak 1-hour period. Table 6-1 provides the classification of level of service for signalized and unsignalized intersections. Table 6-2 provides the results of the LOS analysis for downtown Beacon.

**Table 6-1: Level of Service for Signalized and Unsignalized Intersections**

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Signalized Intersection</th>
<th>Unsignalized Intersection</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>≤ 10.0</td>
<td>≤ 10.0</td>
</tr>
<tr>
<td>B</td>
<td>10.1 to 20.0</td>
<td>10.1 to 15.0</td>
</tr>
<tr>
<td>C</td>
<td>20.1 to 35.0</td>
<td>15.1 to 25.0</td>
</tr>
<tr>
<td>D</td>
<td>35.1 to 55.0</td>
<td>25.1 to 35.0</td>
</tr>
<tr>
<td>E</td>
<td>55.1 to 80.0</td>
<td>35.1 to 50.0</td>
</tr>
<tr>
<td>F</td>
<td>More than 80.0</td>
<td>More than 50.0</td>
</tr>
</tbody>
</table>

**Table 6-2: Level of Service**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Control Type</th>
<th>Lane Group/Movement</th>
<th>2008 Existing Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Weekday Morning</td>
<td>Weekday Afternoon</td>
</tr>
<tr>
<td>Route 9D at Inter-state 84 West-bound On-Off Ramps</td>
<td>Traffic Signal</td>
<td>Overall</td>
<td>A</td>
</tr>
<tr>
<td>Route 9D at Inter-state 84 East-bound On-Off Ramps</td>
<td>Traffic Signal</td>
<td>Overall</td>
<td>B</td>
</tr>
<tr>
<td>Route 9D at Verplanck Avenue</td>
<td>Traffic Signal</td>
<td>Overall</td>
<td>B</td>
</tr>
<tr>
<td>Route 9D at Beekman Street (North)/West Church Street</td>
<td>Traffic Signal</td>
<td>Overall</td>
<td>B</td>
</tr>
<tr>
<td>Route 9D at Main Street (Route 52)/Municipal Plaza</td>
<td>Traffic Signal</td>
<td>Overall</td>
<td>A</td>
</tr>
<tr>
<td>Route 9D at South Avenue</td>
<td>Traffic Signal</td>
<td>Overall</td>
<td>B</td>
</tr>
<tr>
<td>Main Street (Route 52) at South Avenue</td>
<td>Unsignalized</td>
<td>WB</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LT</td>
<td>B</td>
</tr>
<tr>
<td>Route 9D at Beekman Street (South)</td>
<td>Unsignalized</td>
<td>EB</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LR</td>
<td>B</td>
</tr>
<tr>
<td>Beekman Street at Flynn Drive</td>
<td>Unsignalized</td>
<td>EB</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LR</td>
<td>A</td>
</tr>
<tr>
<td>Beekman Street at Railroad Drive</td>
<td>Unsignalized</td>
<td>EB</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LT</td>
<td>A</td>
</tr>
<tr>
<td>Beekman Street at West Main Street</td>
<td>Unsignalized</td>
<td>EB</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LT</td>
<td>B</td>
</tr>
</tbody>
</table>
The 2009 study found that the key signalized intersections along Route 9D and Main Street are currently operating at acceptable Levels of Service during peak traffic hours. Traffic volumes were also expanded to reflect a 2027 design year with the anticipation of development and redevelopment over a 20-year period. The analysis was conducted under the assumption that several significant development proposals in the waterfront area would be completed, but many of those proposals are no longer under consideration by the City Council.

Three development proposals were considered in the analysis including: the Metro-North TOD, the Long Dock Development and the Edgewater developments. The full (Phase 2) Metro-North proposal would total 617 residential units and 114,000 square feet of mixed-use commercial space, as well as a total of 400 commuter parking spaces. The Long Dock development included a 166 room hotel, 12,339 square foot Sport Center, 8,514 square foot Quality Restaurant, 8,902 square foot high turnover restaurant, 1,004 square feet of retail space and 22,600 square foot area for public amenities. The Edgewater development comprised 236 dwelling units.

As discussed in Section 10, the future land use plan is significantly scaled back from what was included in the 2009 study: the Long Dock development will remain open space; there will be no additional commuter parking spaces at the metro north lot; and the development proposed for the train station is significantly scaled back in density. Therefore, traffic impacts would be significantly less than what was studied in 2009.

Even with the proposed development, the 2009 study found that all but one of the intersections will continue to operate at acceptable levels. The intersection at Route 9D and Beekman/West Church Street would have significantly worse delays, especially during peak traffic volumes in the evening. Main Street intersections would continue to operate at acceptable levels but with greater delays during peak periods.

The City will need to conduct further traffic/roadway analysis in the future as plans evolve in relation to the development of specific areas in the waterfront/train station area.

Parking

The City of Beacon is well-served by current public and private parking facilities. Figure 6-2 illustrates existing parking facilities and on-street parking in the downtown area. The 2014, Beacon Center City Parking Analysis conducted by Dutchess County Department of Planning and Development inventoried existing public parking facilities and current utilization rates. The Center City area parking capacity for on-street parking and parking lots is provided in Table 6-3. Utilization rates of parking in the Center City area are provided in Table 6-4. The data collected in 2014 suggests there is still ample parking capacity in the downtown area for future growth.
### Table 6-3: Center City Parking Capacity\(^{10}\)

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Street (Main Street)</td>
<td>326</td>
</tr>
<tr>
<td>On-Street (other than Main Street)</td>
<td>778</td>
</tr>
<tr>
<td><strong>On-Street Total</strong></td>
<td><strong>1,104</strong></td>
</tr>
<tr>
<td>Private Lots</td>
<td>316</td>
</tr>
<tr>
<td>Municipal Lots</td>
<td>478</td>
</tr>
<tr>
<td>Parking Lot Total</td>
<td>794</td>
</tr>
<tr>
<td><strong>Study Area Total</strong></td>
<td><strong>1,898</strong></td>
</tr>
</tbody>
</table>

### Table 6-4: Utilization Rates for Center City\(^{11}\)

<table>
<thead>
<tr>
<th>Time Period of Count</th>
<th>In Parking Lots</th>
<th>On-Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekday morning</td>
<td>53%</td>
<td>38%</td>
</tr>
<tr>
<td>Weekday afternoon</td>
<td>59%</td>
<td>47%</td>
</tr>
<tr>
<td>Weekday evening</td>
<td>31%</td>
<td>40%</td>
</tr>
<tr>
<td>Saturday morning</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>Saturday Afternoon</td>
<td>43%</td>
<td>44%</td>
</tr>
<tr>
<td>Saturday evening</td>
<td>38%</td>
<td>40%</td>
</tr>
</tbody>
</table>

---

\(^{10}\) Dutchess County Department of Planning and Development, “Beacon Center City Parking Analysis,” November 2014

\(^{11}\) Dutchess County Department of Planning and Development, “Beacon Center City Parking Analysis,” November 2014
Figure 6-3: Downtown Parking Inventory

CITY OF BEACON COMPREHENSIVE PLAN UPDATE
Public Transit

The City of Beacon is connected to the region by several public transit options including Metro-North Railroad, Dutchess County LOOP Bus System and the Newburgh/Beacon ferry service. Current level of service of each public transit option is provided in the section below.

Rail

The Metro-North rail service between Beacon and New York City operates seven days a week. Trains depart approximately every 20 minutes during weekday and weekend peak morning and afternoon hours. During the weekend, the service runs every hour. This train service is heavily utilized, both during the week and on the weekend. The service from Beacon to Poughkeepsie is also well utilized by commuters. Table 6-5 provides ridership data for 2015 at the Beacon Station and surrounding train stations. Further information on ridership and issues and opportunities pertaining to the train station area, will be discussed in Section 10: Waterfront and Train Station Area.

<table>
<thead>
<tr>
<th>Location</th>
<th>Weekday</th>
<th>Weekday</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM Peak</td>
<td>Off-Peak</td>
<td>Weekly</td>
<td></td>
</tr>
<tr>
<td>Beacon</td>
<td>1,711</td>
<td>658</td>
<td>2,369</td>
<td>1,651</td>
</tr>
<tr>
<td>New Hamburg</td>
<td>824</td>
<td>213</td>
<td>1,037</td>
<td>562</td>
</tr>
<tr>
<td>Poughkeepsie</td>
<td>824</td>
<td>860</td>
<td>1,684</td>
<td>1,773</td>
</tr>
</tbody>
</table>

Bus

There are seven Dutchess County LOOP buses, four of which converge at Main Street in Beacon. Two of these buses connect the downtown to the train station. The RailLink line runs every Monday through Friday during peak hours in the morning and afternoon. The Route G Bus line operates Monday through Saturday during the afternoon and runs every 60 minutes until 6PM. Route G connects the Beacon Train Station with DIA: Beacon and Main Street. The RailLink operates as a Commuter Shuttle to the Metro-North Hudson Line train stations in Dutchess County during morning and afternoon peak hours. The RailLink connects to the Intermodal Center on 9D where a free Park and Ride lot is located for patrons of the Beacon train station. The Leprechaun bus service provides commuters a connection between Newburgh, Stewart International Airport and Beacon Station. The service operates every 30 minutes during peak AM and PM hours on weekdays.
FIGURE 6-4: PUBLIC TRANSIT AND SIDEWALKS

CITY OF BEACON COMPREHENSIVE PLAN UPDATE

Legend
- RailLink AM + PM Routes
- Route A
- Route B
- Route F
- Bus Stop
- Sidewalk
- Beacon Municipal Boundary
- - - - Metro North Railroad
- - - - Abandoned Railroad

0 0.25 0.5 Miles
**Ferry**

The Newburgh-Beacon ferry caries passengers across the Hudson River between the two cities in just 10 minutes. The service runs on weekdays and is primarily a transportation service for commuters from the west side of the river, wishing to take the Metro-North Hudson Line to New York City. Six ferries operate in the morning between the hours of 5 AM and 8 AM and eight ferries run in the evening between the hours of 5 PM and 9 PM.

**Bicycle and Pedestrian Circulation**

Main Street, the major commercial hub for Beacon, features pedestrian amenities including, continuous sidewalks and tree plantings on both sides of the street. Sidewalks and trails are shown in Figure 6-3. Citywide, there are important gaps in the sidewalk network, particularly in proximity to schools and parks. Two examples include Blackburn Avenue, which leads to Memorial Park and Sargent Avenue from Route 9D to Wodenethe/Education Drive which leads to Sargent school/soccer fields. Both streets have a lot of pedestrian activity and apparent space for a sidewalk on one side. While sidewalks are not necessary for all streets, the City should consider locations where development of these facilities is needed.

There is a lack of street furniture that would enhance the pedestrian experience. Portions of Main Street lack visual or commercial amenities, and there is a lack of connectivity between the east and west ends of Main Street. Main Street attracts a large amount of pedestrian activity on Saturday afternoons due to the cultural activities and the historic atmosphere along the commercial corridor. Main Street also connects the downtown to the waterfront area, Hudson Highlands, and the Trail of Two Cities (via the Newburgh Beacon Bridge). Accessing Main Street from other areas in Beacon by foot or bicycle is a challenge due to the steep slopes that surround the area.

There are no dedicated bicycle lanes on Main Street and bicyclists share the road with other vehicles. While more bicycle facilities have been placed since the prior plan, residents expressed the need for additional racks in the downtown and secure and covered parking at the station.

**Walk Bike Dutchess**

In 2014, the Poughkeepsie-Dutchess County Transportation Council (PDCTC) developed Walk Bike Dutchess. The pedestrian and bicycle Plan provides policy and design guidance to municipalities and other agencies, to help improve conditions for walking and bicycling. It also provides design guidelines for walking and bicycling facilities and recommends education, encouragement, enforcement, and evaluation programs to improve safety and promote walking and bicycling. The Plan identified the following needs in Beacon:
• Improve the safety of walking and bicycling on Main Street—reduce the danger of bicyclists being hit by car doors, and increase driver yielding to people at crosswalks.
• Create a walking and bicycling connection between the Beacon waterfront, Madam Brett Park, and Main Street.
• Create consistent wide shoulders on Route 9D.
• Implement the Beacon Loop Trail and Hudson Highlands Fjord Trail (a path from Beacon to the Putnam County line, ultimately linking to Cold Spring).
• Implement the Fishkill Creek Greenway & Heritage Trail.
• Provide bicycle parking at public buildings, commercial destinations, and provide bike lockers at train stations.
• Upgrade traffic signals to respond to bicycles.
• Educate people about how to safely share the road when driving, walking, and bicycling.

Figure 6-4: Walk Bike Dutchess
Bridges

There are limited locations to cross the Fishkill Creek. Currently there are bridges located at Route 9D (Wolcott Ave), Churchill Street and East Main Street. The City is currently looking to re-establish a connection across the Creek at South Avenue (at the Madam Brett Park and Trail) with a new multi-use bridge. The former Tioronda Bridge on South Avenue was dismantled several years ago due to structural and safety issues. Currently a utility bridge, which carries water and sewer lines occupies the bridge site.

The multi-use bridge proposed by the City would provide direct pedestrian and bicycle access to the Hudson River waterfront, Denning’s Point State Park, Mount Beacon, Hudson Highlands Trail system and the Fishkill Creek Greenway which also provides access to the central business district. The bridge would also provide access for vehicles between South Avenue/Tioronda Avenue and Route 9D. The City is currently in the process of developing survey, engineering, design and construction documents for the South Avenue Bridge. Funding for this project is through a New York State CFA grant the City was awarded which came as a result of recommendations made in the City’s Local Waterfront Revitalization Program.

With regard to the design of the bridge, the City has established a Project Advisory Committee to work with the chosen consultant team during the design process. The City would like to incorporate elements of the historical trusses that have been stored since the original bridge was taken down by integrating design elements of the historical bridge. The City has information of previous plan and design information of the existing utility bridge for use in the design of the new bridge.

Historic images of Tioronda Bridge
6.2. Transportation Goals and Recommendations

GOAL:

Develop an integrated and efficient transportation system consistent with City land use patterns and objectives and the regional transportation plan to assure the effective and economic movement of people and goods within and through Beacon, including public transportation, pedestrian and bicycle systems.

OBJECTIVES AND RECOMMENDATIONS:

A. Traffic Management

Improve road intersections as needed to maintain an acceptable level of service for vehicles and high levels of pedestrian safety.

6.1 Monitor the level of service of intersections on Main Street and feeder streets. Traffic should be managed so as not to detract from pedestrian uses of Main Street.

6.2 Coordinate development at the train station with traffic improvements such as signal timing, turning lanes and improving alternate routes as necessary to facilitate traffic flow so that traffic does not detract from the quality of life in Beacon. Where turning lanes are added, streets may need to be widened slightly to accommodate right-turn movements.

6.3 Continue to monitor the traffic flow at the intersection at Route 9D and Beekman Street/West Church Street and adjust signal timing if necessary.

6.4 Develop long-term plans for improvement of Route 9D between Beekman Street and the intersection with Interstate 84 to handle increased traffic capacity. Long-term plans for this corridor should include an analysis of potential improvements to the configuration of the interstate interchange. The City should participate with other stakeholders in planning and advocating for improvements in this area.

6.5 Consider the installation of traffic calming features, such as raised crosswalks, on major roads and collector roads, including but not limited to Beekman Street and West Main Street.
6.6 Improve access and capacity to the Waterfront/Train Station area. This may be achieved through additional turning lanes, improvements to intersections on Route 9D, potential new roads, and improved public transportation (as recommended in the Transportation Linkages Plan).

6.7 Establish and enforce truck routes that protect residential districts. Coordinate with the Town of Fishkill and the County as necessary.

B. Public Transportation

Improve public transportation service, particularly the connection along in the City’s business district to the intermodal train/bus/ferry station and Waterfront/Train Station area and to Dia:Beacon.

6.8 County Bus Service. Work closely with the County to identify new bus routes and opportunities to increase the frequency of bus service. Bus service should be improved by expanding the transit network throughout the City, more effectively linking the City to the rest of southern Dutchess County. In addition, bus links should target:

- Main Street
- the Waterfront/Train Station area
- service to the prison for employee commuting

6.9 Trolley. Work with Dutchess County to establish funding mechanisms that would enable a free or low-cost trolley to be available at frequent intervals between points along Main Street and the train/bus/ferry station (see Section 4.2).

6.10 Rail Spur Line. Explore the potential feasibility of establishing passenger service from the Beacon train station at the waterfront to the east end of Main Street via the Fishkill Creek railroad, using vehicles that can travel on both rail and road.

6.11 Long Distance Transit Improvements. Actively seek an advisory role in planning long distance transportation improvements with federal and state organizations. The potential local traffic impact of such improvements should be considered. Such planning may involve transit links to Stewart airport, future Metro-North service, and Amtrak service. In addition, the City should encourage Metro-North to consider the feasibility of an additional station in the vicinity to reduce traffic impacts in Beacon.

6.12 Satellite Commuter Parking. Advocate for the development and improvement of satellite commuter parking with bus service to the Beacon station. Improvements
include facility location(s), physical site improvements, and improved incentives, such as tickets inclusive of bus and parking services at discounted rates.

C. Pedestrian Facilities
Ensure that gaps in the sidewalk network are filled, particularly in proximity to schools, parks and other activity centers.

6.13 Develop a list of priority locations for sidewalks, with a plan for implementation.

6.14 Develop pocket parks/plaza space along Main Street in connection with infill development (see Section 4.2)

6.15 Implement complete street improvements along Main Street to improve accessibility for all users of all ages and abilities.

D. Parking
Monitor parking needs, utilize parking management strategies and expand parking supply as necessary, specifically in the area around Main Street.

Regulations:

6.16 Delete Section 223-26.B, which exempts structures and land uses in existence on April 20, 1964. This section dates from 1977 and is no longer applicable.

Inventory and Analysis:

6.17 Identify areas of high parking demand and limited parking supply and institute parking management programs such as metered parking and limited time parking to maximize community benefits.

6.18 Identify areas where additional parking is needed and where appropriate properties are available for sale and purchase properties for the development of municipal parking.

Development of Parking Facilities:

6.19 Seek public parking easements on privately owned parking facilities as a method of ensuring adequate public parking supply.

6.20 Parking lots adjacent to Main Street should generally be designed with an entrance on Main Street or on a side street and all exits on the parallel street behind Main Street.
6.21 Encourage and facilitate the use of parking areas used only during weekday business hours for other uses. Improve public information to residents and tourists about the availability of these parking areas.

6.22 Explore the creation of a Parking Improvement District with bonding authority to oversee parking area construction and maintenance.

6.23 Structured parking should be allowed only in locations where its visual impact is relatively small. For instance, structured parking should not be allowed to front directly on Main Street, and should be appropriately screened from view by existing or proposed buildings and/or by vegetation. Suitable sites may be identified in advance by the City to facilitate appropriate development.

E. Bikeways

Develop a bikeway system connecting greenways, community facilities, recreation areas, schools and Main Street.

6.24 Incorporate Route 9D improvements consistent with the Hudson Highlands Fjord Trail Master Plan (2015).

6.25 Determine the feasibility of using the easement area of the railroad tracks along Fishkill Creek for a bicycle and pedestrian path; develop path with financial assistance from the State and other sources.

6.26 Consider developing bike lanes or adding sharrow markings on the following roads:

- Route 9D from Interstate 84 to South Avenue
- South Avenue from Route 9D to Tioronda Bridge to Grandview Avenue to Route 9D
- Beekman Street
- Teller Avenue
- Fishkill Avenue
- Verplanck Avenue
- Tioranda Avenue (or along rail spur line if feasible)

6.27 Require bike parking to be provided on site in new large scale developments.

F. Street Connectivity

Improve street connectivity of local roads and collector roads.
6.28 Proposed collector roads are featured on the Proposed Land Use Map, including extensions of Church Street to allow for a more convenient alternative route to Main Street and a modification to the alignment of Howland Avenue.

6.29 Continue to provide local street connectivity as land in outlying areas is subdivided for residential development.

6.30 Re-build the Tioranda Bridge (aka South Avenue Bridge) as a multi-use bridge to connect South Avenue to Route 9D and provide direct access to the Hudson River waterfront, Denning’s Point State Park, Mount Beacon, Hudson Highlands Trail system and the Fishkill Creek Greenway.
Section 7: Environmental Features

All of the activities and investments that take place in the City are closely related to the City’s natural resources. The City’s natural resources include the land itself as a surface for buildings and roads, the soils of the land, the water underground and above ground, and the plants and animals that inhabit the landscape. The City’s transportation systems, economy, development patterns and potential development are all influenced by the natural features of the City. In addition, the City has an interest in preserving important natural features, for practical reasons, for aesthetic reasons, and for the sake of preserving biodiversity in the region.

The City is an urban center within the metropolitan New York region because of its proximity to the Hudson River. Although the river no longer serves as a primary mode of transportation, the plains and gradual hills of the river valley still contain most of the transportation routes and population centers in the area. The City’s drinking water comes from bedrock aquifers through two approximately 200-foot deep wells north of the City, from a subsurface soil and gravel aquifer well in the Village of Fishkill, and from surface water collected in three reservoirs to the south and east of the City. The relatively flat terrace between Fishkill Creek and the banks above the Hudson River provided suitable conditions for construction, and most of the structures of the City are located in this area.

The 2006 Public Opinion Survey showed that there is a broad consensus among City residents that environmental issues are important. The visioning workshops conducted in June 2006 included frequent references by participants to the importance of the natural environment for the participants. Beacon’s location at the junction of two vast natural resources, the Hudson Highlands and the Hudson River, creates a strong sense of place and provides an abundance of outdoor recreation opportunities. Many workshop participants wanted the City to add to its current open space holdings. Community Feedback from the 2017 Update to the Comprehensive Plan also strongly supported sustainability initiatives, open space preservation, and maintaining the water quality in local waterways.

Sustainability

In the years since the 2007 Comprehensive Plan, interest in sustainability planning has taken center stage in Beacon, as it has across the region and the world. This reflects a number of factors, including more development pressure on a diminishing supply of land; greater awareness of the environmental impacts of human activities; and broader issues such as water quality, flood impacts and global warming. Many of these issues were raised during the public outreach for the 2017 Comprehensive Plan Update. Sustainability concepts such as renewable energy, public transit, resource conservation and water quality were all identified as important focus areas for the Comprehensive Plan.
Although associated most closely with the environment, sustainability is a far broader concept. As defined by the American Planning Association, sustainable development “maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economies depend.” Sustainability should be achieved with an integrated approach to planning for land use, transportation, the environment, housing, economic development and infrastructure.

The strategies in the recommendation portion of this chapter (Section 7.2) include additions to those presented in the 2007 Plan, including:

- Land use regulations that promote sustainable new development
- Upgrades to improve resilience and efficiency of City owned facilities and infrastructure. Improvements underway include the conversion of all street lights in the city to LED (by April 2017. The City is also working with BQ Energy to construct and install a solar farm on the former landfill south of the sanitation facility.
- Policy recommendations that encourage economic growth and improvements in ways consistent with sustainable development. A Green Economy promotes a triple bottom line: sustaining and advancing economic, environmental and social well-being.
- Community engagement strategies to educate the public about programs and other efforts to promote sustainability.

Another change in the City since the prior plan is the creation of a Conservation Advisory Committee (CAC). The CAC is charged with advising the Planning Board and the City Council on matters affecting the preservation, development and use of the natural and man-made features in the City. The Committee advises on major environmental threats and maintains an inventory of natural resources and an index of all open spaces. The Committee consists of nine members appointed for a two-year term. Meetings are held on the 4th Thursday of each month at City Hall.
7.1. **Environmental Conditions**

Approximately 14 percent of the City, consisting of about 420 acres, is currently undeveloped land. An additional 194 acres are protected as parkland, representing about 6 percent of City lands. Also, approximately 30 acres of wetlands are protected as habitat through NYS DEC regulation (the only wetland protected by the DEC is at the mouth of Fishkill Creek), and approximately 72 acres of wetlands are protected through Army Corps of Engineers regulation.

The City of Beacon has a dynamic topography and a variety of important natural resources. The main topographic features of the City are the relatively flat area between the Hudson River and the northwest side of Fishkill Creek, the steep slopes near the Hudson River, the steep slopes adjacent to Fishkill Creek, and the slopes to the southeast towards Mount Beacon. The central area of Beacon is characterized by a mixture of large flat areas and low undulating hills typically rising up to 50 feet above the surrounding land surface. Elevations range from 510 feet on the slopes of Mount Beacon to near sea level along the Hudson River.

The higher elevations on the southeast side of the City offer scenic views, and include significant areas of steep slopes. These slopes are important elements within the City viewshed; the grades of the slopes also pose severe constraints to development. Steep slopes account for approximately 290 acres of land in Beacon, which is approximately 9 percent of the City’s land area. Approximately 30 of these steep slope acres are considered very steep, being over 25 percent slope. Although the upper slopes and the summit and ridgeline of Mount Beacon lie within the Town of Fishkill, the City has a significant interest in advocating for the continued protection of the scenic qualities of the undeveloped forested slopes of this area.

The City of Beacon contains habitat for a wide variety of plant and animal species. Primary locations include the areas along the banks and within the Fishkill Creek, the areas along the banks of the Hudson River, and the slopes of Mount Beacon. Continued efforts are required to protect local plants and animals and their habitats, and to diminish the presence of invasive species in order to encourage biological diversity.
Environmental Constraints

Topography and Steep Slopes

The City of Beacon is characterized by an irregular pattern of hills and valleys ranging from near sea level along the Hudson River to 510 feet along the eastern border of the City. Figure 7-1 shows steep slopes in the City. The slope of an area refers to its degree of steepness and is expressed as a percentage of incline from the horizon. The use of land with slopes up to 15% for development purposes usually does not require any special treatment for slopes other than normal erosion control methods. Slopes of 15% and over are generally classified as steep for land use purposes, because they often have the potential for erosion, runoff and access problems. Development on slopes from 15 to 25% requires closer control and possibly special design consideration. Slopes over 25% usually present significant restrictions to development; these areas must be closely monitored to avoid serious detrimental environmental impacts if development is considered.

Wetlands

The City of Beacon contains both freshwater and tidal wetlands (see Figure 7-1). These resources have been identified by NYSDEC, and National Wetlands Inventory (NWI), prepared by the United States Fish and Wildlife Service (USFWS).

Wetlands within the City are protected at the state or federal level, or some combination of each. Pursuant to the Freshwater Wetlands Act, the NYSDEC regulates wetlands that are at least 12.4 acre or, if smaller, have unusual local importance. The NYSDEC also regulates a 100-foot buffer surrounding these protected wetlands. The U.S. Army Corps of Engineers also protects wetlands under Section 404 of the Clean Water Act, irrespective of size.

Drainage Basins and Surface Water Resources

The City falls within one major drainage basin known as the Hudson-Wappinger River Basin, as designated by the New York State Department of Environmental Conservation. Fishkill Creek is the main stream that flows in a northeast to southwesterly direction through the City of Beacon toward the Hudson River which forms the western boundary of the City. A portion of the headwaters of Dry Brook are located within the eastern portion of the City, before flowing south to Beacon Reservoir in the Town of Fishkill. The City’s drainage basins can be further subdivided into two sub-basins: Fishkill Creek which contains the stream by the same name as well as Dry Brook, and Hudson River which contains all lands northeast of the Fishkill Creek where surface water flows directly toward the Hudson River.
**Floodplains**

A "100-year floodplain" describes an area subject to a 1% probability of a certain size flood occurring in any given year. Since floodplains can be mapped, the boundary of the 100-year flood is commonly used in floodplain mitigation programs to identify areas where the risk of flooding is significant. In reviewing floodplains maps, however, it is important to note that the locations of floodplain boundaries are not static. Floodplain filling, changes in the amount of impervious land cover, and other activities that alter the drainage characteristics of a watershed can affect the shape and size of floodplains within that watershed.

The 100-year flood plains, as mapped by the Federal Emergency Management Administration (FEMA), within the City are shown. The FEMA 100-year floodplains in Beacon are generally located along Fishkill Creek and the Hudson River and some low-lying areas throughout the City. Property owners can review more detailed FEMA maps to determine if their property is located within a floodplain boundary.

**Climate Change**

In the 2012 State of the Environment, Dutchess County’s Environmental Management Council (EMC) reported that residents could expect increasing number of extremely hot summer days and a decrease in the overall number of cold winter days due to changes in the Earth’s climate. Over the last 70 years, Poughkeepsie has seen an average number of days per year with at least 2-inches of rain has increased from 1 to 2.5. The EMC noted that Dutchess County residents can expect the average annual precipitation rate to increase 5% by 2020 and 10% by 2050.

Around the globe and along the Hudson River, sea level is rising due to global warming, which is in turn primarily a result of emissions from the burning of fossil fuels and other human activities. Beacon, being a waterfront community must be especially aware of the risks associated with climate change. Projections for future sea level rise in Beacon are shown in Figure 7-2. This graphic, provided through Scenic Hudson’s Sea Level Rise (SLR) Mapper, combines data and analysis from NYS DEC, US EPA, US Census Bureau, Dr. Roger Flood (SUNY Stony Brook) and FEMA.
Figure 7-2: Sea Level Rise Projections

City of Beacon Comprehensive Plan Update

Source: Scenic Hudson: Sea Level Rise (SLR) Mapper. Mapper combines data and analysis from NYS DEC, US EPA, US Census Bureau, Dr. Roger Flood (SUNY Stony Brook) and FEMA.
Other Significant Environmental Features

Fishkill Creek Estuary and Marsh

Fishkill Creek runs along the length of the City of Beacon along Route 52, east of the downtown area, and finally turning east to empty into the Hudson River south of Denning’s Point. Fishkill Creek has been designated by the NYS Secretary of State as a Fish and Wildlife Habitat of Statewide Significance under the New York State Management Program. It is one of the major tributaries that empties into the lower portion of the Hudson River estuary. Due to the diverse ecological communities, and the lack of significant human disturbance to that ecology, the Creek provides an important habitable area for fish and wildlife species. The Rare or Threatened species in Beacon are listed in below:

Table 7-1: Rare and Threatened Species in Beacon

<table>
<thead>
<tr>
<th>Species</th>
<th>Scientific Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beggar Tick</td>
<td>Bidens hyperborea</td>
<td>Rare</td>
</tr>
<tr>
<td>Smooth Bur-Marigold</td>
<td>Bidens laevis</td>
<td>Rare</td>
</tr>
<tr>
<td>Heartleaf plantain</td>
<td>Plantago cordata</td>
<td>Rare</td>
</tr>
<tr>
<td>Bald Eagle</td>
<td>Haliaeetus leucocephalus</td>
<td>Threatened</td>
</tr>
</tbody>
</table>

Parks and Trails

As discussed in Section 9, there are many parks and open space resources that serve as valuable environmental features for the community. There are four parks along the Hudson River Waterfront. Denning’s Point State Park is home to Beacon Institute’s Center for Environmental Innovation and Education (CEIE). CEIE is also a public visitor's center for Denning’s Point State Park, and is located near the entrance to the Denning’s Point State Park’s public walking trail.

Scenic Hudson’s Long Dock Park is a waterfront park that promotes themes of recovery, remediation, reuse, and re-engagement. The park transformed a man-made peninsula from a degraded, post-industrial relic to a major waterfront public and environmental asset. Pete and Toshi Seeger Riverfront Park, situated on another peninsula provides recreation and picnic areas with expansive views of the river.

Madam Brett Park, along Fishkill Creek provides a place for visitors to explore the ecology of a vital Hudson River tributary and the tidal wetland at its mouth. Fishkill Marsh supports an extraordinary variety of wildlife. It furnishes a home for amphibians and aquatic mammals, including muskrats; serves
as a hunting ground for ospreys, bald eagles and other raptors; and is a stopover for migratory birds. A boardwalk and observation platforms afford up-close discoveries of these and other creatures.¹²

**Scenic Views**

In 2012, the City of Beacon adopted its Local Waterfront Revitalization Program (LWRP). This planning process, sponsored by New York State Department of State (DOS), and is intended to coordinate local and state actions needed to achieve the community’s goals for its waterfront. During that planning process, the City identified specific views from different vantage points that have been deemed significant and should be protected from encroachment by development. A list of those views are listed below. A map of these views is provided in Figure 7-3.

1. Main Street & Route 9D  
2. Beacon Street & Route 9D  
3. Rombout Avenue & Route 9D  
4. Wolcott Avenue and Route 9D  
5. South Avenue & Route 9D  
6. Denning’s Avenue at South Avenue  
7. Sargent Avenue at St. Lawrence Seminary  
8. South Avenue Vs mile west of Denning’s Avenue  
9. Paye Street  
10. River Street and Beekman Street  
11. Southwest view from Wolcott Avenue 200’ west of Bayview Avenue  
12. West view from Wolcott Avenue 200’ west of Bayview Avenue  
13. Northwest view from Wolcott Avenue 200’ west of Bayview Avenue.

¹² http://www.scenichudson.org/parks/madambrettpark
FIGURE 7-4: SIGNIFICANT VIEWS
CITY OF BEACON COMPREHENSIVE PLAN UPDATE
Environmental Issues

In 2012, the Dutchess County Environmental Management Council (EMC) published a report entitled Dutchess County, State of the Environment, which provides recommendations to protect land and water and ensure the continued availability of the resources that are critical for the continued sustainability of human habitation in the County. The report’s primary concern is with the protection of water resources, including streams, groundwater, wetlands, lakes and ponds. Second on the list of concerns is land preservation and land management. A summary of the issues the county faces and recommendations to address these challenges is listed below:

Dutchess County, State of the Environment: Recommendations

- **Climate Change**: Integrate climate change information (e.g., increased floods, increased droughts and increased summertime heat) into planning efforts to reduce risks and adapt to the changing climate.

- **Air and Precipitation Quality**: Continue to develop and implement plans to reduce ozone by reducing its precursors (VOC and NOx); control the sources of PM2.5, e.g., vehicular travel and smoke.

- **Water Quality and Quantity**: Protect water quality, especially groundwater, by taking steps to improve the efficiency of road salt, ensure adequate maintenance of septic systems and wastewater treatment, and reduce agricultural runoff. Protect water quantity by protecting floodplains and wetlands, which act as buffers during floods and reduce impervious surfaces, which greatly enhance floods.

- **Municipal Solid Waste and Recycling**: Increase the recycling rate by increasing public education and improving ease of access to recycling facilities. The City has increased its recycling pickup to weekly service, which has increased steadily and reduced the City’s municipal waste tonnage.

- **Hazardous Waste Sites**: Remain aware of superfund sites and their status (these sites are under regulation of state and federal agencies); and report any spills or suspected hazardous waste sites to the NYS DEC immediately.

- **Biological Resources, Including Wildlife and Rare and Endangered Species**: Protect key habitats via careful planning; utilize experts at local colleges and research institutions to make informed decisions about preserving biodiversity resources; collaborate with land use planners and conservation groups to improve effectiveness of biodiversity conservation.

- **Land Use Change**: Maintain large tracts of un-fragmented forest to reduce susceptibility to pests, pathogens and invasive species and to ensure biodiversity; reduce impervious surface
development using green infrastructure practices. Focus new development in existing or emerging centers to reduce overall run-off and to protect natural and agricultural green spaces.

- **Invasive Species**: Continue to educate the public about the presence and threat of invasive and exotic species and continue diligent efforts such as preventing firewood transport to prevent the spread of invasive species into and throughout the county. Pressure the federal government to reduce the careless movement and introduction of demonstrated and potentially invasive species.

- **Lyme Disease and Other Infectious Diseases**: Maintain large tracts of un-fragmented forests to ensure biodiversity and reduce the prevalence of Lyme disease. Continue education of the public about avoiding ticks and other disease carrying organisms and health care professionals about the symptoms and treatment of Lyme disease and other vector-borne diseases.
7.2. **Environmental Features Goals and Recommendations**

The City of Beacon has a wealth of natural resources that not only contribute to its scenic beauty and visual appeal, but are important to the health, safety, and general welfare of its residents, business owners, and visitors. The City must assure the protection of its sensitive environmental features, particularly the protection of surface and groundwater quality, wetlands, steep slopes, trees, rivers and tributaries, as well as ensuring smart growth for future development and redevelopment.

**ENVIRONMENTAL FEATURES GOALS**

1. Preserve environmentally significant features and create an open space system of sufficient size to reserve adequate areas for the protection of water related resources, wildlife, and land forms of particular environmental value. The rare assets of the City, such as the Hudson River and Fishkill Creek should be protected, as should the Hudson Highlands on the slopes of Mount Beacon.

2. Encourage high environmental standards for development and infrastructure, develop sources of renewable energy and improve the environmental performance of City-owned property.

**OBJECTIVES AND RECOMMENDATIONS:**

**Sustainability**

Land use and Development: Implement land use regulations that promote sustainability.

7.1 Incorporate sustainable practices into future open space planning efforts

7.2 Preserve Beacon’s remaining natural habitats through land use controls

7.3 Green Building: Encourage new development to adhere to LEED and LEED Equivalency standards.

7.4 Increase permeable surfaces through green infrastructure projects (e.g. green roofs, rain gardens, permeable pavers, and bioswales).

7.5 Create incentives for green infrastructure within sub-watersheds draining to the Fishkill Creek, Hudson River, and other environmentally sensitive areas.
Community Facilities and Infrastructure: Work with local utilities to improve resilience.

7.6 Ensure capital improvements use best practices to improve the ecological health of Fishkill Creek and the Hudson River.

7.7 The most current climate science should be considered when siting, designing, developing, or renovating municipal infrastructure to mitigate the effects of sea level rise and storm surge.

7.8 Review floodplain development regulations in light of sea level rise projections.

7.9 Reduce stormwater run-off from all municipal owned grounds and structures.

7.10 Encourage backyard composting

7.11 Reduce waste and increase municipal recycling rates.

7.12 Promote Local Renewable Energy Generation

7.13 Explore opportunities for renewable energy production on publicly-owned sites and infrastructure.

7.14 Identify opportunities for the use of district energy systems/community energy districts in zoning districts where appropriate.

7.15 Expand supply of electronic vehicle charging stations and alternative fueling stations

7.16 Develop a “Green Fleet” program that reduces carbon emissions from the City's inventory of vehicles.


7.17 Support the growth of green businesses

7.18 Support/encourage the training and preparation of under-skilled or under-employed residents for jobs in the new green economy.

B. Land Capabilities

Ensure that development density is reasonably related to land capabilities, with lower densities maintained on lands least able to support intensive uses due to natural features such as steep slopes, soil types, and wetlands.
7.19 Amend the zoning and subdivision design chapters of City Code to ensure that smart growth principles and conservation design principles are incorporated into subdivisions and site plans.

7.20 Ensure that design plans presented to Planning Board catalog areas of impervious surface before and after proposed development.

C. Land Manipulation

Discourage development which involves significant land manipulation that destroys natural topographic features and creates potential for drainage, erosion and other environmental problems. Prohibit such land manipulation in low density areas as designated in the Land Use Plan.

7.21 Review and revise City regulations protecting steep slopes, wetlands and other significant natural features in accordance with this objective.

D. Open Space Corridors.

Establish and preserve open space corridors along Fishkill Creek and the Hudson River, and seek open space linkages to the large areas of open space in the Hudson Highlands on the slopes of Mount Beacon.

7.22 Where reasonably feasible, preserve and create natural habitat in the following corridors with a width of up to 500 feet:

- Hudson River shoreline area;
- Fishkill Creek (the corridor shall be more precisely defined in the Fishkill Creek Corridor Plan);
- Dry Brook and an unnamed tributary joining Dry Brook from the east at a point south of Jessen Place;
- Between the mouth of Fishkill Creek and the Hudson Highlands (slopes of Mount Beacon) through two large properties east of the mouth of Fishkill Creek;
- Between lands now or formerly known as the Fairview Cemetery and Fishkill Creek.

7.23 Actively pursue easements for passive recreation and/or public acquisition of land for properties in proposed open space corridors. Passive recreation corridors should be integrated with existing and proposed Fishkill Creek trails (see Recreation and Community Facilities Chapter). The Planning Board should request such easements where properties that could contribute to an open space corridor are seeking Planning Board approval. The City may contact property owners directly to achieve the above objective within the context of an Open Space Plan.
7.24 Areas established for open space within any future subdivisions should be designed to connect with off-site natural, undeveloped areas to form continuous open space corridors.

7.25 Study and document through maps and other means the migration of existing wildlife and the locations of all important wildlife corridors in the City.
Section 8: Historic Resources

Historic buildings, sites and neighborhoods make up the core of a community’s character and identity. Such historic resources can serve its residents not only with a link to the past but as a model for the future. Beacon is rich in its historic heritage. Heroes from America’s past, including Washington, Hamilton, Adams and Roosevelt, have been in Beacon and have gazed out upon its magnificent vistas. Crisscrossing this city are more than a dozen nationally recognized places of historic interest, including houses, churches and distinctive buildings designed by such renowned architects as Calvert Vaux, Frederick Withers and Richard Morris Hunt. Scores of other recognized historic sites of nearly equal charm and value are interspersed throughout the city. From mountain to river, from the East End of Main Street to the stately Victorian homes on the Hudson bluffs, one can discover homes and neighborhoods largely unchanged from the late nineteenth century.

The seat of legacy for Beacon is the Madam Brett Homestead. Built in 1709 by the city’s founders, Roger and Catheryna Brett, the homestead is the oldest home in Dutchess County and the first example of Beacon’s commitment to historic preservation. Saved from the wrecking ball in 1954 by public subscription, the Madam Brett house is now a museum operated by the Melzingah Chapter of the Daughters of the American Revolution. Some 50 years later, with a groundswell of local public support for the preservation movement, Beacon earned national recognition for its renaissance after being named in 2005 a Preserve America Community. With this designation comes an obligation to meet the higher standard this prestigious award demands. Hereafter, the city must move forward after first looking backward, with historic preservation a guiding principle.

The history of the city goes back to a time before recorded history, when the Melzingah, a tribe of Native Americans, are believed to have lived in the area prior to Dutch settlement. Colonial history in the area begins with Francis Rombout and Gulian Verplanck, whom were granted the Rombout Patent in 1683, which stretched from today’s Beacon to the Town of Poughkeepsie. Rombout’s daughter Catheryna Rombout Brett became the first year-round colonial settler in the region. In contrast to some of the neighboring large landowners, the Rombout-Brett family tended to sell land to settlers in the area, instead of retaining land ownership and charging rent. This approach developed a broad base of stakeholders and a culture of civic participation.

Change came rapidly to the Hudson River Valley. By the mid-1700’s, Fishkill Landing was a thriving commercial port. The village of Matteawan, which grew up around mills that were sited to take advantage of the water power of Fishkill Creek, became a prominent local hub of industry by the mid-1800’s. The two villages merged in 1913 to form the City of Beacon, and the extent of their development is evident today in the two- and three-story brick buildings lining each end of Main Street.
The 2006 Public Opinion Survey showed that historic preservation is important to City residents. The visioning workshops held in June 2006 by the Comprehensive Plan Committee revealed that Beacon residents feel that they have a high quality of life, and a distinctive sense of place was often cited as a principal contributing factor to this quality of life. Beacon’s well-maintained stock of historic buildings and landmarks contributes significantly to this sense of place. When residents were asked what makes them proud of Beacon, in addition to the natural beauty and cultural assets of the City, residents frequently referred to the many historic assets of the city, such as the Tioronda Bridge, the Incline Railway, the Madam Brett Homestead, and the historic buildings on Main Street.

Community feedback from the 2017 Update to the Comprehensive Plan also showed strong support for the Beacon Historical Society and preserving the history of the City of Beacon. Participants also showed support for providing incentives for the preservation of historic and older homes in the City.

### 8.1. Existing Historic Resources

Currently, there are twelve properties listed on the State and National Register of Historic Places. These are shown in Figure 8-1 and listed below:

<table>
<thead>
<tr>
<th>Resource</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mount Gulian</td>
<td>145 Sterling Street</td>
</tr>
<tr>
<td>Eustatia</td>
<td>12 Monell Place</td>
</tr>
<tr>
<td>Brett, Madam Catheryna, Homestead</td>
<td>50 Van Nydeck Avenue</td>
</tr>
<tr>
<td>Howland Cultural Center</td>
<td>447 Main Street</td>
</tr>
<tr>
<td>Tioranda Bridge</td>
<td>South Avenue</td>
</tr>
<tr>
<td>Lower Main Street Historic District</td>
<td>142-192 &amp; 131-221 Main Street</td>
</tr>
<tr>
<td>Reformed Dutch Church of Fishkill Landing</td>
<td>1113 Wolcott Avenue</td>
</tr>
<tr>
<td>U.S. Post Office</td>
<td>369 Main Street</td>
</tr>
<tr>
<td>Bogardus-DeWindt House</td>
<td>16 Tompkins Avenue</td>
</tr>
<tr>
<td>Dia:Beacon (former National Biscuit Company Carton Making and Printing Plant)</td>
<td>3 Beekman Street</td>
</tr>
<tr>
<td>Peter C. DuBois House</td>
<td>36 Slocum Road</td>
</tr>
<tr>
<td>Beacon Engine Company No.1 Firehouse</td>
<td>57 East Main Street</td>
</tr>
<tr>
<td>St. Luke’s Episcopal Church Complex</td>
<td>850 Wolcott Avenue</td>
</tr>
<tr>
<td>Mt. Beacon Fire Observation Tower</td>
<td>S. Beacon Mountain</td>
</tr>
<tr>
<td>Trinity Methodist Church</td>
<td>8 Mattie Cooper Square</td>
</tr>
<tr>
<td>Mt. Beacon Incline Railway and Power House</td>
<td>Howland Avenue and Wolcott Street</td>
</tr>
</tbody>
</table>
Figure 8-1: Historic Resources

State & National Registers of Historic Places
1. Eustatia
2. Bogardus DeWindt House
3. Lower Main Street Historic District
4. United States Post Office
5. DIA Beacon
6. Madam Brett Homestead
7. Howland Library
8. Beacon Engine House
9. Mt. Beacon Incline Railway & Powerhouse
10. Peter DuBois House
11. Tioronda Bridge
12. Reformed Dutch Church of Fishkill Landing

Legend
- Streams
- Fishkill Creek
- Waterbodies
- Historic District
According to the New York Office of Parks, Recreation, and Historic Preservation, many additional properties and areas are eligible for listing on the State and National Registers. These include the main building of the Craig House property, the Upper Main Street area (for which the City is in the process of applying for designation), Saint Luke’s Church, and 40 additional properties that were proposed for the State and National Registers in the 1980’s. A list of eligible properties based on the 1980’s proposal is included below:

| Table 8-1: Historic Resources (Properties Proposed for Register Listings) |
|---------------------------------|-----------------|
| St. Luke’s Episcopal Church     | 24 Fishkill Avenue |
| St. Andrew’s Episcopal Church   | 27 Liberty Street |
| 123 South Avenue                | 20 South Avenue  |
| 40 North Street                 | 19 Kent Street   |
| 48 North Street                 | 5 Willow Street  |
| 17 Church Street                | 45 Ferry Street  |
| 62 Fishkill Avenue              | 18 Oak Street    |
| 246 Fishkill Avenue             | 63 Tioronda Avenue |
| 33 Davis Street                | 86 Sargent Avenue |
| 34-36 Spring Valley Street      | 575 Wolcott Avenue |
| Hudson Fulton Monument          | 21 Kent Street   |
| Christie House                  | 75 Grove Street  |
| Tioronda/Craig House            | Zion Methodist-Episcopal Church St. John the Evangelist Catholic Church |
| 62 Rombout Street               | Beacon Salvage   |
| 29 Russell Street               | Wodenethe Gatehouse I |
| 7 Center Street                 | Wodenethe Gatehouse II |
| 22 South Avenue                 | 8 Dutchess Terrace |
| 88 Sargent Avenue               | 31 North Avenue  |

According to the U.S. Census\(^{13}\), approximately 36% of the housing units of the City were built in 1939 or earlier. While not all of these 2,133 homes and apartments are likely to be historically significant, the City has a large stock of housing with historic potential.

There are approximately 280 properties currently protected by the City’s Historic District and Landmark Overlay Zone, which was expanded in May of 2006 through a revision to the City Code. The overlay zone currently protects a total of approximately 597 acres of land in the City, which is approximately 20 percent of the City’s total land area. The City of Beacon adopted a local law regulating development within the newly created Historic District and Landmark Overlay Zone in 1991. The law, which

\(^{13}\) U.S. Census Bureau, American Community Survey, 5-year Estimates, 2010-2014
became Chapter 134 of City Code, was amended in 1999 to add five properties, and again in May of 2006 to add approximately 20 more areas. The Historic Preservation Chapter of the Code requires that all proposed exterior alterations within the overlay zone must receive a certificate of appropriateness from the Planning Board. The certificate is granted based on the historic or architectural value of the structure and the compatibility of the proposed exterior alterations within the district. As an incentive to assist property owners with the proper maintenance of these historic properties, properties within the overlay zone may, by special permit, be allowed to operate business uses, such as antique shops or artisans’ studios, restaurants, bed-and-breakfast establishments, professional offices, or residential uses including up to four apartments in the building. This is currently available to all properties within the overlay zone, regardless of the underlying zoning. As noted above, this section of the Code also allows an exemption from an increase in property taxes for ten years if property improvements are done according to the regulations of the Historic Preservation Chapter.

In addition to the many individual properties with historic value in the city, the overlay zone protects a number of areas comprised of many structures and properties which have been identified as having historic value. These areas include:

- The area around the Craig House and University Settlement at the southern gateway of the City on Wolcott Avenue;
- Upper Main Street from Teller to East Main Street and Leonard Street;
- South and North Streets, which are residential areas just north of Main Street;
- Lower Main Street between Wolcott and Willow on the north side, and between Wolcott and Elm on the south (this area is also on the State and National Register);
- A neighborhood between Rombout Avenue and Beekman Street overlooking the waterfront;
- A collection of Victorian homes along Tompkins Avenue, High Street, and a portion of North Avenue;
- The buildings and grounds of the former Matteawan State Hospital; and
- The collection of mill housing and mill buildings on and around Front Street near the City’s northern border with the Town of Fishkill.

The Beacon Historical Society has been actively documenting the City’s past and advocating for the preservation of its unique historic landmarks. The Society created a self-guided tour in 1992, called “Discover Beacon” which describes the historical significance of 36 sites in the City. Their offices recently moved to South Avenue, in a space formerly the rectory of St. Andrew’s Episcopal Church. With more than 2,000 feet, the office is nearly 10 times larger than its previous space, allowing the society to host its own exhibits and add a research library and storage space.
8.2. Historic Resources Goals and Recommendations

**HISTORIC RESOURCE GOAL:**

Encourage the preservation of historically and culturally significant buildings, landscapes, and neighborhoods.

**OBJECTIVES AND RECOMMENDATIONS:**

**A. Continue to provide incentives for the preservation of historic and older buildings**

The Code currently provides two incentives to property owners in historic districts, as discussed above. The first incentive is that properties within the overlay zone may, by special permit, be allowed to operate business uses or multifamily uses that would not ordinarily be permitted in the underlying zone. Another incentive is an exemption from an increase in property taxes if property improvements are done according to the regulations of the Historic Preservation Chapter.

**Regulations:**

- **8.1** Develop an effective regulation or other intervention that will encourage rapid redevelopment while protecting core historical aspects where feasible.
- **8.2** Revise Section 5 of Chapter 134 to provide clear standards for applicants and for the review process. The standards should explicitly account for variations in the overall historic value and potential architectural quality of the restored building.
- **8.3** For commercial and industrial properties with the Historic Overlay Zone – many of which for decades have been derelict and in need of major renovation and environmental clean-up – develop an effective regulation that will encourage the rapid redevelopment of such properties while protecting their core historical aspects where feasible.
- **8.4** Revise the historic preservation regulations to allow a limited range of special permit uses depending on the underlying zoning of the area. Currently, the special uses listed in the Historic Preservation Chapter are theoretically allowed in any zone. The Historic Preservation Chapter does require that any proposed uses be “compatible with the
neighborhood,” but the City should tailor what types of special permit uses would be acceptable in which underlying zones.

**Funding Opportunities:**

8.5 Consider providing public funding sources and/or tax incentives for property owners to assist with the maintenance of properties in historic districts. Public sources include City, County, State, and Federal sources. The City should explore non-profit or private funding sources as well. The City should develop a program whereby property owners apply for funding and their requests are evaluated based on need, merit, and available funds. Projects accepting such funding would need to perform the work according to an established timeline and at standards acceptable for work on historic properties.

8.6 Explore the feasibility of establishing a fund whereby fines for violations of historic preservation regulations and/or real estate transfer taxes help fund maintenance of historic properties and/or other historic preservation activities. Seek grants to fund this research, and include the Beacon Historical Society in the research work and/or oversight of the work.

**Other:**

8.7 Research and identify potential disincentives for property owners and the City of Beacon to participate in historic programs or designations and remove disincentives to the extent possible. Seek grants to fund this research.

8.8 Provide brochures and internet-based information for owners of property within the Historic Overlay District.

**B. Revise and update Historic District regulations and State and National designations.**

**Regulations:**

8.9 Revise historic preservation regulations to refine and clarify the principles regarding the regulation of the character of new construction in historic districts. New construction should generally not imitate or try to duplicate an historic building, but should be compatible with its surroundings as related to; footprint (site and setting), roofline, building envelope (size, scale and mass), exterior material usage, and window and door proportion. The criterion guiding these principles should be itemized in a thorough breakdown of each item in a publicly accessible format, resulting in more predictable and efficient applications.
8.10 Revise historic preservation regulations to include landscapes and address the need to protect historic landscapes.

8.11 Develop an effective regulation that will enforce minimum standards of maintenance for historic buildings and potentially historic buildings in order to prevent ‘demolition by neglect.’

Inventory and Analysis:

8.12 Maintain and improve the City’s inventory of historic trees.

8.13 Periodically compare existing catalogues of historic resources in the City with the current list of City properties within the Historic District and Landmark Overlay Zone; identify properties that should be included within the overlay zone. In particular, the City should consider which properties in the Fishkill Creek corridor should be protected within the Historic Overlay Zone. Seek grants to fund this work, and include the Beacon Historical Society in the work and/or oversight of the work.

8.14 Periodically compare existing catalogues of historic resources in the City (particularly those already within the City’s Historic Overlay Zone) with properties listed on the State and National Registers of Historic Places; identify properties that should be included within the State and National Registers. Seek grants to fund this work, and include the Beacon Historical Society in the work and/or oversight of the work.

8.15 Compare the City’s existing historic preservation ordinance with the model historic preservation ordinance of the Certified Local Government (CLG) program of the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP). If the City’s ordinance is within the parameters of the model ordinance, the City should apply for acceptance to the Certified Local Government (CLG) program, which is a federal program administered through the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP). Certification through the CLG program would provide a direct link to state and federal preservation programs, including a range of municipal support programs and government grants. Currently, approximately $100,000 is available annually for historic preservation activities of local governments, and only 50 communities in New York State are certified.
Other:

8.16 Develop an expedited review process for emergency alterations related to lead abatement where the property is occupied and one or more of the residents has elevated levels of lead present in the blood.

8.17 Consider the creation of a Historic Building Committee to work with the Beacon Historical Society on building preservation research and advocacy.

C. Preserve historic properties owned by the City and support the work of the Beacon Historical Society.

8.18 Assist the Historical Society in its efforts to establish a suitable space for the preservation and display of historic artifacts.

8.19 Develop a bridge across Fishkill Creek at South Avenue that is consistent with the design elements of the historic Tioranda Bridge at that location (see Transportation Chapter).
Section 9: Recreation and Community Facilities

The quality of recreational and other community facilities available in Beacon contributes significantly to the quality of life in the community. For recreation, Beacon has a mix of large and small parks, with a range of active and passive recreational opportunities. As stated in the 2007 Plan, Beacon residents are proud of the high school, and are generally satisfied with the education provided by the school district. Cultural institutions, with Dia:Beacon as the most prominent, further enrich the community. The City has many opportunities for further development of the range of its facilities, including the Fishkill Creek corridor for trails or jitney service and the restoration and reuse of the Incline Railway.

The Public Opinion Survey from the 2007 Plan showed that Beacon residents agree on the importance of public safety and emergency preparedness and a medical facility with emergency services located in the City. Parks and recreation opportunities are also important to residents. The survey showed that there is substantial support for a new youth/community center, and for the continued support of arts and culture in the city, particularly through meeting a widely perceived need for a movie theater and a performance theater. A theater is currently under construction at the old theater site on Main Street.

Potential new pedestrian access to the Fishkill Creek, Hudson River, Mt. Beacon and/or other open space also received high marks among the survey. Common themes were to add more or improved parks, a swimming pool, a youth center, a senior center, bike paths, and a marina/waterfront facilities. Boating and marina facilities were also supported by respondents.

The visioning workshops conducted by the Comprehensive Plan Committee and its consultants in June 2006 showed that Beacon residents enjoy and value the parks, trails, and various cultural facilities and events in the City, and have a lot of enthusiasm for potential improvements, including expanded recreational use of the Fishkill Creek corridor and restoration of the Incline Railway. Many workshop participants would also like to see a Community Center on Main Street with expanded youth programs and senior programs, and an emergency services facility or a hospital in the City.

Workshop participants expressed a strong appreciation for the nature trails, hiking opportunities, and parks in and around the City. The smaller ‘pocket parks’ and neighborhood parks were valued for the good opportunities they provide for community interaction. Some suggestions regarding City parks were to install more amenities in the existing parks, such as benches; acquire or preserve open space in such a way that it maximizes opportunities to link recreation sites, including pocket parks, passive and active recreation areas with each other; and create a new park, or town square, in the central portion of Main Street. Also, citizens involved in the ongoing planning process have suggested that there is a need for more active recreational areas for City residents.
Figure 9-1: Community Facilities
Participants wished to see improved bicycle paths and improved signage indicating bike routes, the improvement and extension of the Fishkill Creek trail (some suggested San Antonio’s Riverwalk could be an appropriate model for portions of the trail). Participants discussed the importance of using the tracks along Fishkill Creek as either a walking and bicycle trail, a route for a steam engine-driven excursion train, or a route for a jitney service that can travel on both rails and road. This rail line was seen as an opportunity to connect Denning’s Point to the central part of Beacon.

Dia:Beacon was seen as an important institution in the community, along with the Madam Brett Homestead and Park, the Sloop Club and the Howland Cultural Center. There was a general consensus on the desirability of restoring the Mount Beacon Incline Railway, so that it could be used again as a destination for visitors and a place for environmental education.

Theatre and performance spaces were seen as a desirable addition to the City of Beacon. The arts community’s arts events and festivals that take place in the City over the course of the year were important to the community. Events like ‘Second Saturdays,’ the Spirit of Beacon Day, and the Hat Day Parade were all identified by the residents. Residents expressed a desire for the City to foster the sense of community that makes Beacon special by encouraging block parties and other similar social opportunities at a small scale throughout the city.

Other facilities that workshop participants desired included a hospital or health care facility and power plants for alternative energy sources, such as a Fishkill Creek hydroelectric power station, wind or solar power generation facilities. Many residents were in favor of creating a Community Center on Main Street for both youth and seniors. Residents identified the need for programs for teenagers at the community center. In addition, the Beacon Community Resource Center on 23 West Center Street is not in the kind of central location favored by workshop participants. The former municipal building County office building across from Citizen’s Bank on Main Street may be a potential site for the new Community Center.

Residents suggested the City work to improve dissemination of information to the public. Participants also suggested improvements for the police department, including better communication, more foot or bike patrols on Main Street, more detectives, and more attention to youth issues in the city.

Recreation Study

In addition to the information presented herein, the City is currently undertaking a Recreation Study. The purpose of the study is to evaluate the City’s existing conditions of parks and open space. It will also evaluate the allocation of recreational fees associated with new development, given Beacon’s current recreational needs and anticipated population growth. Recommendations will address identified deficiencies, including areas where the acquisition of land or creation of new facilities would enhance existing recreational sites, create a network of recreational sites and open spaces via improved connections, or provide new facilities to areas of the City that are currently underserved. Rough cost...
estimates will be developed for implementation of the recommended improvements. The ‘Town of East Fishkill Recreation Study’, conducted by BFJ Planning (May 1999) will serve as a case study reference for the City of Beacon Recreation Study.

**Development of Metro-North’s Beacon Line**

Metro-North Railroad's Beacon Line is a non-active line which provides an east-west connection to the railroad’s Hudson Line, Harlem Line, and the Danbury Branch of the New Haven Line. In October 2016, the Metropolitan Transportation Authority (MTA) and Metro-North Railroad issued a Request for Expressions of Interest” (“RFEI”) for the development of the abandoned Line which includes 27.6 miles of track running from Beacon to the Dutchess-Putnam county line. The unused line begins at the Metro-North Line then parallels Fishkill Creek and continues through the Town of Fishkill at Route 9. The trail offers scenic views of the Creek, the Hudson Highlands and Mount Beacon.

The City is working with Dutchess County and the Town of Fishkill to develop the railroad right of way as a rail trail, maintaining the potential future use for light-rail passenger service should the need arise. The rail trail could connect with the Dutchess Rail Trail that runs from Hopewell Junction to the Walkway over the Hudson in Poughkeepsie, and also to Brewster, Nyack and the Westchester County rail trail system.

Developing the rail for recreational (biking and hiking) purposes could be a large driver of tourists to Beacon. Beacon is one of the only locations along the rail trail that can be directly accessed from Metro-North. This would also help to generate revenue for Metro-North through increased ridership, without the entity’s need to maintain new rails, bridges and trains.
9.1. Recreation

PARKS AND OPEN SPACE

Approximately 11 percent of the City’s land area, or 335 acres, is devoted to publicly accessible active and passive recreational uses. The amount of land in the City devoted to recreational uses has increased steadily over the past 45 years. Figure 9-2 shows park and open space resources in the City.

The City of Beacon has numerous recreation opportunities that are managed by the Recreation Department, advised by the Recreation Committee. The Recreation Department has offices at Recreation Center located on West Center Street. The City employs three staff year round, two full time and one part time to manage Recreation Department activities. Recreation activities include sports programs, holiday events and senior activities. These programs are available to Beacon residents, and to all schoolchildren in the Beacon School District (which includes portions of the Town of Fishkill and the

<table>
<thead>
<tr>
<th>Park</th>
<th>Land Area</th>
<th>Percent of Recreational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiddenbrooke Property</td>
<td>103.3</td>
<td>30.82%</td>
</tr>
<tr>
<td>Denning’s Point</td>
<td>64.23</td>
<td>19.16%</td>
</tr>
<tr>
<td>University Settlement Camp</td>
<td>51.25</td>
<td>15.29%</td>
</tr>
<tr>
<td>Memorial Park</td>
<td>49.23</td>
<td>14.69%</td>
</tr>
<tr>
<td>Long Dock Park</td>
<td>23.29</td>
<td>6.95%</td>
</tr>
<tr>
<td>Mount Beacon Park*</td>
<td>15.2</td>
<td>4.53%</td>
</tr>
<tr>
<td>Hammond Park</td>
<td>8.92</td>
<td>2.66%</td>
</tr>
<tr>
<td>South Avenue Park</td>
<td>6.74</td>
<td>2.01%</td>
</tr>
<tr>
<td>Riverfront Park</td>
<td>5.97</td>
<td>1.78%</td>
</tr>
<tr>
<td>Madam Brett Park*</td>
<td>5.65</td>
<td>1.69%</td>
</tr>
<tr>
<td>Green Street Park</td>
<td>1.42</td>
<td>0.42%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>335.2</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

* Private park; Scenic Hudson is responsible for maintenance

The City of Beacon Department of Public Works maintains all City-owned parks, including Memorial Park on Wilkes Street, South Avenue Park on South Avenue, Riverfront Park on Red Flynn Drive, and Flannery Park on Green Street. The City’s park system includes three softball and three baseball fields, one football field, one soccer field, two tennis courts, three basketball courts and three playgrounds. The City also maintains two picnic pavilions, walking paths, and a public pool. The Department marks fields for all recreation programs. The City also has three privately owned parks: Long Dock Park, the Madam Brett Homestead, Scenic Hudson’s Long Dock Park and Mount Beacon Park.
FIGURE 9-2: OPEN SPACE AND RECREATION
CITY OF BEACON COMPREHENSIVE PLAN UPDATE
Pete and Toshi Seeger Riverfront Park

Pete and Toshi Seeger Riverfront Park, a 10 acre park located on Red Flynn Drive, on a peninsula jutting out into the Hudson River, is a very active recreational facility which hosts numerous events during the summer months. Pedestrian links from the waterfront to the Main Street corridor and downtown business area are not strong. The visual and physical barrier resulting from the change in elevation from the water to Main Street has been highlighted previously. The underpass from the waterfront to the train station provides a pedestrian way for walkers, but the vast parking lots at the train station further erode the relationship between the two areas.

Memorial Park

Memorial Park located in the center of the city, adjacent to Rombout Middle School and serves as the city's "Central Park". It is the city's primary park and many civic events are hosted there.

Mount Beacon

From 1902 to 1975, The Mount Beacon Incline Railway was one of the steepest incline railways in existence (a 65% grade). It took an estimated 3 million people up to the 1,540-foot summit of Mount Beacon, until fire and vandalism destroyed the incline railway.

In order to bring Beacon's unprecedented renaissance full circle, an effort has been underway since 1996 to restore the Mount Beacon Incline Railway by a local grass roots organization. This one time unique experience brought thousands of visitors to Beacon to ride the steepest incline railway in the world. At the top was the Beacon Crest Hotel and a dance hall which treated visitors to spectacular views of the Hudson River. For many years the Incline Railway was Beacon's primary tourist attraction and a constant source of enjoyment for local residents. (read more at www.inclinerailway.org)

Today there are trails that lead to the summit of Mount Beacon and along the Fishkill Ridge, providing spectacular views. Scenic Hudson estimates that Mount Beacon Park receives approximately 750 visitors per month during the 6 warm weather months of the year and approximately 250 visitors per month during the 6 cold weather months of the year. During summertime an average of 20 visitors enter the park on weekdays, with this number increasing to an average of 60 visitors per day at weekends. Parking at the Mount Beacon trailhead is reportedly an issue during peak periods. The City should consider extending the walking trail from Mount Beacon Park to the Settlement Camp with a trailhead and parking lot. This parking lot would also serve increased use of the camp over time.
**Long Dock Park**

Scenic Hudson’s Long Dock Park is a 15-acre opens space situated on the Hudson River in close proximity to the train station. Long Dock once contained a rail ferry terminal, warehouses and other buildings. More recently, it was home to an oil terminal, salt-storage facility and junkyard. Scenic Hudson has cleaned up the area to create a riverfront destination with a kayak pavilion and beach for launching boats, rehabilitated wetlands and meadows that attract wildlife. While the park is private, it is generally open to the public. The park's restored, historic Red Barn, now Scenic Hudson's River Center, hosts arts and environmental-education activities and is home to the American Center for Folk Music. Scenic Hudson has plans to expand the park to include a plaza, boardwalk, walking path, seating pavilions and a new parking area. An area has also been designated for food trucks to operate on-site. Figure 9-3 shows a site plan with Scenic Hudson’s proposed changes at Long Dock Park.

![Figure 9-3: Proposed Site Plan for Long Dock Park (2016)](image_url)

*Source: Scenic Hudson*
**Madam Brett Park**

Scenic Hudson also acquired 12-acres of land along the Fishkill Creek, from the old Madam Brett’s Mill to the confluence with the Hudson River, and named it “Madam Brett Park”. The area presently provides access to the Fishkill Creek and to limited hiking trails.

**Hiddenbrooke Property**

In 2015, the City, in partnership with Dutchess County, purchased the 103.3 acre Hiddenbrooke property to permanently preserve the area as open space. To purchase the property, the City contributed $1.1 million and the County contributed $550,000 through its Partnership for Manageable Growth Open Space and Farmland Protection Matching Grant Program. Other funding included $350,000 from the New York State Environmental Protection Fund and $250,000 from the Archdiocese of New York.

**Denning’s Point Park**

Denning’s Point Park, which is part of Hudson Highlands State Park, is home to both a park and the Center for Environmental Innovation and Education (CEIE), part of the Beacon Institute for Rivers and Estuaries. The Center restored one of the abandoned buildings, from the old Denning’s Point Brickworks factory, which is now used as both the visitors’ center and for educational programs, events, and environmental workshops. Other remnants of the site’s industrial past remain present on the site. The park has accessible walking and biking paths which feature the rich cultural and archaeological history.

**University Settlement Camp**

In 2009, the City of Beacon signed an agreement with the State of New York to take responsibility for the operation and maintenance of the 100-acre University Settlement Camp property as a resource for recreation, education and conservation purposes. The 100-acre property was established as the University Settlement Camp in 1910 as a residential camp facility that served as an outdoor recreational opportunity for New York City youth. The property was sold to the New York State Department of Parks and Recreation in 2008. The City of Beacon was later arranged to manage and maintain the property.

There are a number of historic wooden structures on the property, many of which have fallen into disrepair largely due to varying types and qualities of foundations (e.g. concrete pylons versus stacked stones) and the infiltration of moisture; however several of these buildings have been maintained by the City of Beacon for adaptive reuse (e.g. art and nature education and studio spaces, music/theater and flexible event spaces. The City of Beacon Parks & Recreation Department also plans to construct an indoor artificial rock climbing gym inside one of the buildings as well.

Other programming for the USC includes film festivals and community gardening on a volunteer basis. The park also includes a popular Frisbee golf course that draws visitors from nearby States year round. The swimming pool is another considerable asset to University Settlement Camp, which attracted
11,000 visitors last summer 2016. The City of Beacon Parks Department plans to add concession stands to generate revenue that could be allocated toward further improvements, such as new restrooms, changing rooms, and ping pong tables.

As discussed above, the city should consider extending the walking trail from Mount Beacon Park to the Settlement Camp with a trailhead and parking lot. This parking lot would also serve increased use of the camp over time.

**TRAILS**

**Hudson Highland Fjord Trail**

Scenic Hudson has led a cross-jurisdictional effort to develop a 9-mile non-motorized shared-use trail connecting the Village of Cold Spring and the City of Beacon via the Hudson Highlands State Park Preserve. The project also proposes roadway improvements along Route 9D that encourage bicycling and pedestrian activity. A draft Master Plan for the Hudson Highlands Fjord Trail has been developed and is illustrated in Figure 9-4. The project is subject to environmental review before implementation.

**Fishkill Creek Greenway & Heritage Trail (FCGHT)**

In 2003, the City, in cooperation with a Greenway Trail committee, developed a master plan for the FCGHT (Figure 9-5). The proposed trail connects the Beacon Metro-North train station to the town of Fishkill through the City of Beacon. The purpose of the trail is to reconnect residents and visitors to this critical natural resource. The trail is part of a larger open space vision for the greater Hudson River Valley trail network that encourages positive engagement with the natural and historical landscape. The FCGHT Plan proposes a location for the path, trail heads, points-of-interest, and many other interesting details that would make this trail a unique feature of Beacon.

**Replacement of Tioronda Bridge (South Avenue Bridge)**

As discussed in the Transportation Chapter, the City is in the design phase of a project to reconstruct the Tioronda Bridge at South Avenue. The bridge would be a multi-use bridge for pedestrians, bicyclists, and vehicles. The former Tioronda Bridge on South Avenue was dismantled several years ago due to structural and safety issues. Currently a utility bridge, which carries water and sewer lines occupies the bridge site.

The multi-use bridge proposed by the City would provide direct access to the Hudson River waterfront, Denning’s Point State Park, Madam Brett Park and Trail, Mount Beacon, Hudson Highlands Trail system and the Fishkill Creek Greenway which also provides access to the central business district. The City is
currently in the process of developing survey, engineering, design and construction documents for the South Avenue Bridge.

With regard to the design of the bridge, the City intends to incorporate elements of the historical trusses that have been stored since the original bridge was taken down by integrating design elements of the historical bridge. The City has information of previous plan and design information of the existing utility bridge for use in the design of the new bridge.

**Potential Beacon Line Rail-to-Trail**

As discussed earlier in this chapter, the City has expressed interest in developing the non-active Beacon Line into a rail-to-trail corridor with the potential for future commuter service. The unused line begins at the Metro-North Line then parallels Fishkill Creek and continues through the Town of Fishkill at Route 9. The trail offers scenic views of the Creek, the Hudson Highlands and Mount Beacon.
Figure 9-4: Hudson Highlands Fjord Trail Master Plan

- **Existing trail network**: Route trail along existing paths
- **MNR Causeway**: Multi-use trail over the existing, unused MNR causeway
- **Brickyards Parkland**: Multi-use trail through wooded area to the Fishkill Creek
- **Brickyards Parkland to Dutchess Junction Park (eastern upland route)**: Multi-use trail at grade passing over two streams on bridges, benched into slopes or on structure over extremely steep grades
- **Breakneck Ridge Station to Brickyard Parkland**: Buffer-separated multi-use trail along west side of Route 9D, requires new roadway alignment
- **Breakneck Connector (2014 CFA application)**: Multi-use trail partly on structure and partly at grade
- **Bike-Ped bridge over railroad tracks**: ADA compliant crossing over the railroad tracks
- **Breakneck Headlands/Shoreline**: Multi-use path at grade; scramble and/or stair connection to Breakneck Ridge trail
- **Shoreline between Little Stony Point and Breakneck Ridge**: Multi-use path along river’s edge including at-grade asphalt path and structures over water
- **Cold Spring Station to Little Stony Point**: Shared lane markings, sidewalks, signage; Multi-use path at grade in Little Stony Point

For planning purposes: Concepts not based on survey
Figure 9-5: Fishkill Creek Greenway & Heritage Trail (FCGHT)

Source: Fishkill Creek Greenway and Heritage Trail Master Plan

City of Beacon Comprehensive Plan Update

BFJ Planning
9.2. Community Facilities

**EDUCATION**

Educational land uses consist of approximately 106 acres and 9 properties. The City of Beacon School District (CBSD) includes all of the area of the City of Beacon, plus a portion of the Town of Fishkill in the area north of the City. The CBSD is one of the 13 school districts that are affiliated with the Dutchess County Board of Cooperative Extension Services (BOCES), a government-funded agency that provides local school districts with a variety of educational services for adults and children. The district has one high school, one middle school, and four elementary schools: J.V. Forrestal, Sargent, South Avenue, and Glenham (which is located outside of the City of Beacon). The district offers bus transportation for students who reside more than 1.5 miles from school. The locations of the schools are shown on the map, Community Facilities. According to records maintained by the school district, 3,476 students were enrolled in public schools in the district in 2003-2004. Between 2005 and 2015, school enrollment has decreased, from 3,601 to 2,994 students. In addition to the seven schools that are part of the school district, the City of Beacon also has one private school, the Oasis Christian School.

**Public Schools**

*Beacon High School*

Beacon High School is a secondary grade organization that houses students in grades 9 through 12. It is located at 101 Matteawan Road in Beacon. 924 students were enrolled in the school in 2014-2015 school year.

*Rombout Middle School*

Rombout Middle School is a middle grade organization and houses students in grades 6 to 8. It is located at 84 Matteawan Road in Beacon. 695 students were enrolled in the school in the 2014-2015 school year.

*J.V. Forrestal School*

J.V. Forrestal School is an elementary grade organization and houses students in grades PK to 5. It is located at 125 Liberty Street in Beacon. 281 students were enrolled in the 2014-2015 school year.
Sargent School

Sargent School is an elementary grade organization and houses students in grades K to 5. It is located at 60 South Avenue in Beacon. 381 students were enrolled in this school in the 2014-2015 school year.

South Avenue School

South Avenue School is an elementary grade organization and houses students in grades K to 5. It is located at 29 Education Drive in Beacon. 364 students were enrolled in this school for the 2014-2015 school year.

Private Schools

Oasis Christian School

Oasis Christian School is comprised of students in grades K through 12 and is located at 7 Delavan Avenue in Beacon.

EMERGENCY AND PROTECTION SERVICES

The City’s Police Department, located at 1 Municipal Center in Beacon, has 37 full time police officers and 3 civilian clerical staff. The department handles approximately 14,000 calls for service a year. The Police Department is divided into three divisions: Patrol Division, Detective and Juvenile.

Patrol Division

The Patrol Division is the uniform division that is responsible for responding to any calls for service of crimes in progress 24 hours a day. The Patrol Division is further divided into the K-9 Unit, Traffic Enforcement, and Bike Patrol Unit.

Detective Division

The Detective Division is responsible for case preparation and criminal prosecution and receives all felony investigations that are reported. The units is also responsible for all adult narcotic investigations.

Juvenile Division

The Juvenile Division is responsible for all juvenile crimes (crimes committed by people under the age of 16 years old), crimes against juveniles, all reported sex crimes and all child protective cases reported.

Fire Department
Established in 1913, the City of Beacon’s Fire Department is a volunteer and career fire department that provides fire and rescue services with a staff of roughly 40 volunteer firefighters, 13 full-time career firefighters and 3 part-time support personnel. The department operates out of three fire houses that house 6 fire-fighting vehicles, with over 1,700 calls a year, while boasting the County’s fastest response time.

The Fire Department operates out of two stations and the department headquarters:

- **Station 1 (Beacon Engine Co.):** Beacon Engine Company runs out of its historic 1889 station house and is located at 57 East Main Street in the City of Beacon.

- **Station 2 (Lewis Tompkins Hose Co.):** Lewis Tompkins Hose Company operates out of the city’s newest 1982 station which is located at One South Avenue in the City of Beacon.

- **Fire Headquarters (Mase Hook and Ladder Co.):** Mase Hook and Ladder Company has a large 3-story 1911 station house which is located at 417-419 Main Street in the City of Beacon.

In 2014, the City of Beacon commissioned an implementation plan that optimizes fire service, developed by System Planning Corporation that recommends consolidating the fire department operations to one new single station location at Cannon Practice Field. The City of Beacon Fire Department is part of Battalion 7 of the Dutchess County Emergency Response Unit.

The City of Beacon Fire Department is divided into other support divisions including: Fire Prevention Division, Fire Police Unit, and Fire Investigation Unit.

**Fire Police Unit**

The Beacon Fire-Police Unit is an eleven person unit that is known as the “Safety Unit of the Fire Department.” This unit serves as many of the same functions as police officers at fires and other emergency scenes. These Fire Police officers are volunteers, but carry the same authority and powers as police at any location to which they are dispatched or requested to serve.

**Fire Investigation Unit**

This is a joint unit between the City’s Fire and Police Department. This is a seven person unit with three New York State Certified Fire Investigators. This unit investigates all aspect of fires that occur throughout the city.

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Fire Prevention Division

This unit is responsible for implementing the Department’s various fire prevention events including extending invitations to groups to visit the various stations in the city.

EMERGENCY SERVICES

In addition to its "traditional" firefighting duties, the City of Beacon Fire Department responds with at least two Emergency Medical Technicians (EMT’s) to all life threatening medical calls within the city with the local ambulance providers, Beacon Volunteer Ambulance and Alamo EMS. The Fire Department is also trained and capable of commanding a wide-variety of emergency situations including auto accidents, hazardous materials incidents or natural disasters.

Volunteer Ambulance Corps

The Beacon Volunteer Ambulance Corps, with its headquarters located at 1 Arquilla Drive, runs a fleet of three modern, fully equipped, New York State Certified ambulances, a Basic Life Support First Response vehicle and a Mass Casualty Incident Trailer. The BVAC responds approximately 2,500 calls per year, which makes it one of the busiest volunteer services in the county.

HEALTH SERVICES

Hospitals

The City of Beacon currently has no facility for emergency health services or a hospital. Beacon residents in need of emergency medical services generally travel to Vassar Hospital in Poughkeepsie or St. Luke’s Cornwall Hospital in Newburgh.

Nursing Homes

The City has two nursing homes for those individuals who are in need of skilled nursing care or supervision on a 24 hour per day basis. Fishkill Health Center, located at 22 Robert R. Kasin Way, is a for-profit corporation that has 160 certified beds and houses 155 residents. Wingate at St. Francis, located at 10 Hastings Drive, is a for-profit organization that has 160 certified beds and houses 149 residents.

Adult Care Facilities

The City also has two adult care facilities. Adult Care Facilities are one of the two types of adult homes recognized by the New York State. These facilities are licensed by the New York State
Department of Social Services and are monitored locally by the Dutchess County Department of Social Services. The City’s two adult care facilities are Hedgewood Home (200 beds), at 355 Fishkill Avenue, and McClelland’s Home for Adults (70 beds) at 126 Old Castle Point Road.

CULTURAL FACILITIES AND PROGRAMS

The **Beacon Community Resource Center** is located at 23 West Center Street. The Center provides a range of on-site and off-site programs for youth and seniors.

There are number of private organizations, including businesses and non-profit institutions, which contribute significant resources to the cultural life of the community. Most prominent among these is the **Dia:Beacon**, located at 3 Beekman Street, which houses the Dia Art Foundation’s renowned collection, comprising art from 1960s to the present, in a nearly 300,000 square-foot art museum (a historic printing factory). What follows is a brief inventory of some of the other major cultural institutions of the City.

The **Beacon Institute for Rivers and Estuaries** has an office located at 199 Main Street. The Institute’s mission is to create a global center for interdisciplinary research, policy-making and education regarding rivers, estuaries and their connection with society. The Institute has an education center and research facility on Denning’s Point. In 2011, the Beacon Institute for Rivers and Estuaries entered into a strategic alliance with Clarkston University and is now a subsidiary of Clarkson.

The **Howland Cultural Center** is located at 477 Main Street in Beacon. The center promotes the arts and serves the community by welcoming groups to use the Center for their special events, i.e.: meetings, recitals, rehearsals, fundraisers, etc. The Howland Cultural center building was listed on the National Register of Historic places in 1976.

The **Martin Luther King Cultural Center**, Inc., located at 19 South Avenue, supports cultural awareness and civil rights. The center offers a library and provides community services for youth and seniors.

The **Howland Public Library** is located at 313 Main Street. In 2015, the library hosted 120,000 visitors and has a circulation of 99,273 items. The library host a wide-variety of public events and workshops for all ages.

The **Madam Brett Homestead**, located at 50 Van Nydeck Avenue is an important historic site that is open to the public on the second Saturday of the month April through December. The building has 17 furnished rooms, as well as period gardens. The house was built in 1709 and is the oldest home in Dutchess County.