Chapter 6-1

Lower Hudson Overview

Moving Dutchess 2 defines the Lower Hudson as the southwestern communities located along the Hudson River. The area includes the Towns of Poughkeepsie, Wappinger, and Fishkill; the Cities of Poughkeepsie and Beacon; and the Villages of Wappingers Falls and Fishkill – a total area of almost 95 square miles.

These communities share demographic, land use, and transportation characteristics that make them more likely to face similar challenges in the future. These include the most urban areas of the county, relatively large minority populations, high rates of out-of-county commuting, concentrations of low-income households and households without a vehicle, and above-average transit access. These shared characteristics also make it more likely that the communities will require similar transportation investments and planning to meet their challenges.

Demographics

Based on the 2010 Census, the Lower Hudson communities had a combined population of 140,773, which represented 47 percent of the county's total population. Since 2000, the area's population grew by 5.9 percent, or about 0.6 percent annually. The Lower Hudson's growth was slightly less than the county's overall growth of 6.2 percent over the ten year period. Growth in the area has increased slightly compared to the previous decade, in which the population grew by 5.7 percent.

The Village and Town of Fishkill and Village of Wappingers Falls had the highest rates of growth in the area, while the Towns of Wappinger and Poughkeepsie had the lowest rates of growth. Table 6-1-1 shows population change from 2000-2010 for the Lower Hudson communities.

Table 6-1-1. Total Population-Lower Hudson (2000-2010)

	2000	2010	Percent Change
City of Beacon	14,180	15,541	4.9
City of Poughkeepsie	29,871	32,736	9.6
Town of Fishkill	17,521	19,936	13.8
Town of Poughkeepsie	41,800	42,399	1.4
Town of Wappinger	22,322	22,468	0.7
Village of Fishkill	1,735	2,171	25.1
V. of Wappingers Falls	4,929	5,522	12.0

Source: U.S. Census Bureau, 2010 Census

In 2010 the Lower Hudson had a population density of 1,486 people per square mile, which was almost four times higher than the county's overall density of 374 per square mile. The City of Poughkeepsie had the highest population density in the area (and in the county), with 6,364 persons per square mile, while the Town of Fishkill had the lowest at 809 persons per square mile. Population density information is shown on the Lower Hudson Population Density Map.

In terms of race and ethnicity for the area as a whole, over 70 percent of residents classified themselves as White, 16 percent as Black, 5.2 percent as other, 4.6 percent as Asian, 3.5 percent as two or more races, and 0.4 percent as American Indian or Alaska Native; 14.5 percent classified themselves as of Hispanic or Latino origin. Racial makeup varied substantially by municipality. The White population ranged from 81 percent in the Town of Wappinger to 51 percent in the City of Poughkeepsie; the Black population ranged from 33.5 percent in the City of Poughkeepsie to 5.5 percent in the Village of Fishkill. Residents of Hispanic or Latino origin made up over 26 percent of the Village of Wappingers Falls population and less than 10 percent of the Town of Poughkeepsie population.

Table 6-1-2. Total Housing Units-Lower Hudson (2000-2010)

	2000	2010	Percent Change
City of Beacon	5,410	5,715	5.6
City of Poughkeepsie	13,153	13,984	6.3
Town of Fishkill	7,036	9,246	31.4
Town of Poughkeepsie	15,132	16,116	6.5
Town of Wappinger	10,144	10,908	7.5
Village of Fishkill	1,011	1,138	12.6
V. of Wappingers Falls	2,119	2,443	15.3

Source: U.S. Census Bureau, 2000 & 2010 Census

The Lower Hudson contained 59,550 housing units in 2010, a 10.3 percent increase from 2000. The area averaged over 555 new housing units per year from 2000-2010. The Town of Fishkill had the highest growth, in large part due to the Merritt Park development. Table 6-1-2 shows housing unit totals for the Lower Hudson communities.

The Lower Hudson contained 55,272 households in 2010, with an average household size of 2.5 persons, which was slightly lower than the 2.6 persons per household reported in 2000.

Age

Young people and older people have different transportation needs than others: they are less likely to drive, and therefore more likely to walk (both young and old), bicycle (young people), or use transit for transportation. The City of Poughkeepsie, Town of Wappinger, and Village of Wappingers Falls have slightly higher percentages of young residents (aged 16 and under) than the county average, while the Town and Village of Fishkill have slightly higher percentages of older residents (aged 65 and over). The Village of Wappingers Falls has a higher than average percentage of these young and older groups combined.

Table 6-1-3. Percent Young and Elderly-Lower Hudson (2010)

	% 16 and Under	% 65 and Over	Total % Under 16 and Over 65
City of Beacon	17	12	29
City of Poughkeepsie	20	13	33
Town of Fishkill	17	15	32
Town of Poughkeepsie	18	14	32
Town of Wappinger	20	13	33
Village of Fishkill	16	16	32

V. of Wappingers Falls	20	14	34
Dutchess County	**19**	**14**	**33**

Source: U.S. Census Bureau, 2010 Census

Income

Lower-income households are also more likely to walk, bicycle and use transit for everyday needs. Based on data from the U.S. Census Bureau's 2009-2013 5-year American Community Survey, the Cities of Beacon (at $48,440-$64,520) and Poughkeepsie (at $36,631-$42,331) had median household incomes below the county average of $71,192-$73,858; the City of Poughkeepsie had the lowest average income of all 30 municipalities in the county. In addition, the Cities of Beacon and Poughkeepsie had the highest percentage of families living in poverty across the county.

Vehicle Ownership

Households without a vehicle are much more likely to seek alternative transportation. Based on data from the U.S. Census Bureau's 2009-2013 5-year American Community Survey, the Cities of Beacon (at 9.8-16.4 percent) and Poughkeepsie (at 24.4-29.6 percent) had the highest percentages of zero vehicle households in the county, with Poughkeepsie well above the county average of 7.9-8.9 percent.

Centers & Destinations

The Lower Hudson is characterized by a mix of urban and suburban land use patterns, with some semi-rural areas. Land use is mainly residential and commercial, with some industrial uses and open space areas. The Lower Hudson Overview Map shows key centers and destinations in the area.

Centers

The Dutchess County Planning Department's Centers and Greenspaces Guide identifies existing and emerging centers in the Lower Hudson, based on concentrations of residential and commercial activity. The key existing centers are listed below. They are mostly tied to the area's two cities, two villages, and historic hamlets, and tend to be located along State highways.

1. City of Poughkeepsie: The City of Poughkeepsie is the major center in the area and in the county. It includes the downtown business district, with County and City offices, the Bardavon Theater, Civic Center, Adriance Library, and shops and restaurants; the waterfront, including the Poughkeepsie train station; Vassar Brothers Medical Center; the Walkway Over the Hudson State Historic Park and WRS Dutchess Rail Trail; schools, parks, and residential neighborhoods.
2. Arlington (Town of Poughkeepsie): Arlington includes Vassar College; the Arlington business district, with offices, shops and restaurants; and residential areas.
3. New Hamburg (Town of Poughkeepsie): New Hamburg includes the New Hamburg train station, historic residential areas, and parks.
4. Village of Wappingers Falls: the Village center includes the Village business district, with shops, restaurants, and

cultural facilities; Route 9 commercial plazas; Mesier Park; and residential areas.
5. Village of Fishkill: the Village center includes the Village business district, with Village offices, shops and restaurants; industrial businesses along the railroad tracks; commercial plazas along Route 9 and Route 52; and residential areas.
6. City of Beacon: The Beacon center includes the downtown business district, with City and County offices, shops, galleries, restaurants, and cultural facilities; the train station, waterfront, Long Dock Beacon, and DIA: Beacon; and residential areas.

Destinations

Outside of the centers, destinations that generate significant travel in the Lower Hudson include commercial plazas, colleges, hospitals, industrial and employment sites, large residential communities, and regional recreational areas, as outlined below:

1. Dutchess Community College in the Town of Poughkeepsie
2. Marist College in the Town of Poughkeepsie
3. Saint Francis Hospital in the Town of Poughkeepsie
4. Route 44 commercial plazas, including Stop & Shop and Adams in the Town of Poughkeepsie
5. Poughkeepsie Galleria, South Hills Mall, and Route 9 commercial plazas
6. IBM in the Town of Poughkeepsie
7. Castle Point VA Hospital in the Town of Fishkill
8. Dutchess Stadium in the Town of Fishkill (seasonal)
9. Downstate Correctional Facility and Fishkill Correctional Facility in the Town of Fishkill
10. Wal-Mart Supercenter and Sam's Club in the Town of Fishkill
11. Westage Business Center in the Town of Fishkill
12. Gap Inc. distribution center in the Village of Fishkill
13. Merritt Park development in the Village of Fishkill

Major Projects

The Transportation Council's 2013 Major Projects Report, which tracks large development projects in the county, identified over 3,000 new residential units and over 1.1 million square feet of non-residential space in the planning stages or under construction in the Lower Hudson. Major planned projects are listed below by municipality. The project details were updated based on the latest information available. However, all projects are subject to change.

City of Poughkeepsie
1. Highridge Gardens: 74 affordable residential units on Hudson Ave.
2. Highview at Falkill Creek: 120 condo/townhouse units on Milton St.
3. One Dutchess Ave.: 384 residential units and 13,800 sq. ft. retail on Dutchess Ave.
4. South Waterfront Development/Poughkeepsie Landing: 92,000 sq. ft. office, 32,000 sq. ft. retail, and hotel on Rinaldi Blvd.

Town of Poughkeepsie

1. Casperkill Country Club: 465 residential units on Route 9.
2. Emeritus at Poughkeepsie: 68,000 sq. ft. assisted living facility on Route 113 (Spackenkill Rd.).
3. Guardian Self-Storage Facility: 71,200 sq. ft. industrial on Love Rd.
4. Vassar College Science Building: 82,000 sq. ft. public/institutional on Route 376 (Raymond Ave.).

City of Beacon

1. Beacon 248 Development: 100 condo/townhouse units on Tioranda Ave.
2. Beacon Hip Lofts: 131 residential units and 12 affordable residential units on Front St.
3. Beacon Institute for Rivers & Estuaries: 40,000 sq. ft. public/institutional on Dennings Ave.
4. Highland Meadows: 68 senior units on Delavan Ave.
5. Roundhouse at Beacon Falls: 78 residential units and 35,800 sq. ft. hotel on East Main St.

Town of Fishkill

1. Chelsea at Waterfront: 350 residential units on Industrial Way.
2. Dutchess Marketplace: 100,000 sq. ft. retail on Route 9.
3. Highland Valley: 210 mobile homes on Route 9.
4. Marriott Residence Inn & Spring Hill Suites: 135,877 sq. ft. hotel on Westage Park Dr.

Town of Wappinger

1. DCH Toyota Service Center: 37,747 sq. ft. retail on Old Route 9.
2. La Fonda Del Sol: 37,800 sq. ft. office on CR 28 (Old Hopewell Rd.).
3. Regency at Wappinger: 225 senior residential units on CR 94 (All Angels Hill Rd.).

Transportation System

Roads

The Lower Hudson's roadway system consists of Interstate 84; major highways including Routes 9, 9D, 44, and 55; smaller State highways including Routes 9G, 52, 82, 113 (Spackenkill Rd.), 115 (Salt Point Turnpike), and 376; and major County roads including CR 28 (Old Hopewell Rd.), CR 77 (Vassar Rd.), CR 93 (Myers Corners Rd.), CR 94 (All Angels Hill Rd.); and CR 104 (New Hackensack Rd.).

According to the NYSDOT 2013 Highway Mileage Report, the Lower Hudson communities hosted 539 miles of State, County, and local roads. Table 6-1-4 shows the distribution of centerline mileage in the Lower Hudson communities.

Table 6-1-4. Centerline Mileage-Lower Hudson

	Total Centerline Mileage
City of Beacon	52
City of Poughkeepsie	72
Town of Fishkill	86
Town of Poughkeepsie	177
Town of Wappinger	130
Village of Fishkill	8
V. of Wappingers Falls	14

Each year, NYSDOT measures the pavement condition of State highways on a scale of 1 to 10, with 1 being the worst and 10 the best. A rating of 5 or less is classified as poor. Based on NYSDOT's 2014 Pavement Data Report, State-owned roadways in the Lower Hudson had an average surface rating of 7.3. Based on 2014 pavement data, the following State highway segments in the Lower Hudson had poor pavement surfaces (score of 5 or less):

1. Route 115 (Salt Point Turnpike) from Hudson Ave. to Innis Ave. in the Town of Poughkeepsie (0.3 miles).

The Dutchess County Department of Public Works also collects pavement quality data for County and local federal-aid roads. Based on 2014 data, none of the County roads in the Lower Hudson exhibited poor pavement conditions. However, a number of local federal-aid roads were in poor condition:

1. Academy St. between Cannon St. and Main St. in the City of Poughkeepsie (0.07 miles).
2. Market St. between Route 44 (Church St.) (eastbound) and Main St. in the City of Poughkeepsie (0.18 miles).
3. Reservoir Square between S. Clinton St. and S. Clinton St. in the City of Poughkeepsie (1.12 miles).
4. S. Grand Ave. between Fountain Brook Ave. and Town of Poughkeepsie line in the City of Poughkeepsie (0.40 miles).
5. De Laval Pl. between Innis Ave. and N. Grand Ave. in the City of Poughkeepsie (0.12 miles).
6. Van Wagner Rd. between Hornbeck Rd. and bridge PO-4 in the Town of Poughkeepsie (0.87 miles).
7. Market St. between the Town of Wappinger line and Fulton Ave. in the Village of Wappingers Falls (0.35 miles).

The Lower Hudson Transportation System Conditions Map shows pavement conditions for State and County roads.

The Transportation Council collects traffic count data for County and local roads and receives count data from NYSDOT for State highways. Based on a review of data from 2010-2014, the following roads had the highest Average Annual Daily Traffic (AADT) volumes in the Lower Hudson:

1. I-84 in the Town of Fishkill: 67,800
2. Route 9 in Poughkeepsie (Town): 63,800
3. Route 9 in Poughkeepsie (City): 49,300
4. Route 9 in Wappinger: 44,600
5. Route 44 in Poughkeepsie (Town): 42,300
6. Route 44/55 in Poughkeepsie (City): 36,600
7. Route 9 in Fishkill (Town): 35,100
8. Route 9 in Wappingers Falls: 35,400
9. Route 9 in Fishkill (Village): 32,600
10. Route 55 in Poughkeepsie (Town): 23,700
11. Route 9D in Beacon: 23,400
12. Route 113 in Poughkeepsie (Town): 22,800
13. Route 52 in Fishkill (Village): 17,700
14. Route 9D in Fishkill (Town): 17,500
15. Route 9D in Wappinger: 17,200
16. CR 77 (Vassar Rd.) in Poughkeepsie (Town): 17,000
17. CR 93 (Myers Corners Rd.) in Wappinger: 15,400
18. Route 52 in Fishkill (Town): 15,300

Congestion Management Process (CMP)

The Transportation Council completed a CMP Step 2 report in 2006, which identified roadway segments with severe, heavy, and moderate peak hour congestion. Severe congestion was defined as locations where volume exceeds capacity in the weekday peak hour (4:00-5:00 p.m.), based on the Council's Travel Demand Model. Of the top five most congested road segments, the following three are in the Lower Hudson:

1. Vassar Rd. between Spring Rd. and Jackson Rd., Town of Poughkeepsie
2. Route 376- between Degarmo Hills Rd. and New Hackensack Rd., Town of Poughkeepsie
3. Spring Rd. between Route 9 and Kerr Rd., Town of Poughkeepsie

The 2011 Travel Time Survey elaborated on the Step 2 report data by collecting travel time data on key routes during morning, mid-day, evening, and weekend periods. Based on the data collected, the following roadways in the Lower Hudson experience overall congestion (defined as having a ratio of peak-period travel time to non-peak travel time greater than 1.3):

a) Route 9 between I-84 and Route 55/44:
   - Northbound: Mid-day, PM, and Saturday
   - Southbound: PM and Saturday
b) Route 9 between Route 55/44 and Route 9G
   - Northbound: Saturday
   - Southbound: Saturday
c) Route 52 between I-84 and the Taconic State Parkway
   - Eastbound: PM
   - Westbound: PM
d) Route 9D between I-84 and Route 9
   - Northbound: AM and PM
   - Southbound: AM and PM

The Lower Hudson Transportation System Performance Map shows travel time data by roadway segment.

Bridges

The Lower Hudson has two major bridges that connect Dutchess and Ulster Counties: the Mid-Hudson Bridge, which connects Poughkeepsie to Highland, and the Newburgh-Beacon Bridge, which is part of I-84. Average daily traffic on the Mid-Hudson Bridge is about 37,500 vehicles; average daily traffic on the Newburgh-Beacon Bridge is about 68,000 vehicles. In addition, the area has a total of 100 road bridges, defined as a bridge structure with a span of more than 20 feet in length.

NYSDOT rates bridges from 1 to 7, with 7 being new condition and a rating of less than 5 being "deficient." A deficient rating indicates deterioration to a level that requires corrective maintenance or rehabilitation to restore the bridge; it does not imply that the bridge is unsafe. Bridges in the Lower Hudson have an average 2014 rating of 5.1. The Lower Hudson has 42 bridges that are classified as deficient under the NYSDOT rating system. Table 6-1-5 lists the number of bridges by municipality and their average State rating.

Table 6-1-5. Average Bridge Ratings-Lower Hudson

	Number of Bridges	Average NYSDOT Rating
City of Beacon	8	5.4
City of Poughkeepsie	35	5.0
Town of Fishkill	21	5.0
Town of Poughkeepsie	21	5.3
Town of Wappinger	15	5.4
Village of Fishkill	0	n/a
V. of Wappingers Falls	3	5.2

The Federal Highway Administration (FHWA) rates bridges on a scale of 1 to 9. The federal ratings are used to identify bridges that do not meet contemporary FHWA standards. Those bridges are classified as either "structurally deficient" or "functionally obsolete."

According to the FHWA, bridges are considered "structurally deficient" if significant elements are found to be in poor or worse condition due to deterioration and/or damage, the bridge has inadequate load capacity, or if repeated bridge flooding causes traffic delays. This does not imply that the bridge is unsafe or likely to collapse. A "structurally deficient" bridge, when left open to traffic, typically requires significant maintenance to remain in service and eventual rehabilitation or replacement. In order to remain in service, structurally deficient bridges are often posted with weight limits.

"Functionally obsolete" refers to a bridge's inability to meet current standards for managing the volume of traffic it carries, not its structural integrity. A bridge may be "functionally obsolete" if it has narrow lanes, no shoulders, or low clearances.

The Lower Hudson has six bridges classified by FHWA as structurally deficient and 39 classified as functionally obsolete. The number of each by municipality is listed in Table 6-1-6.

Table 6-1-6. Structurally Deficient & Functionally Obsolete Bridges- Lower Hudson

	Structurally Deficient Bridges	Functionally Obsolete Bridges
City of Beacon	1	4
City of Poughkeepsie	3	14
Town of Fishkill	1	9
Town of Poughkeepsie	1	7
Town of Wappinger	0	5
Village of Fishkill	0	0
V. of Wappingers Falls	0	1

The Lower Hudson Transportation System Conditions Map identifies bridges rated as structurally deficient and functionally obsolete based on federal standards, as well as those classified as deficient by NYSDOT.

Transit

The Lower Hudson has the highest concentration of transit service in Dutchess County. Rail service includes the Poughkeepsie, New Hamburg, and Beacon train stations, with Metro-North service to New York City (about 28 trains per day between 4:00 am and 11:00 pm) and Amtrak service from

Poughkeepsie to Albany and other points north. Metro-North's average weekday inbound boardings in 2012 were about 2,500 at Beacon, 1,800 at Poughkeepsie, and 1,000 at New Hamburg. Average weekend inbound boardings in 2012 were about 3,300 at Poughkeepsie, 2,900 at Beacon, and 1,000 at New Hamburg.

The Dutchess County Public Transit (DCPT) bus system operates four fixed bus routes and three RailLink routes that serve the Lower Hudson area:

1. Route A between Poughkeepsie and Fishkill (via Route 9): Monday-Friday service from 6:00 a.m. to 10:45 p.m., with 12 daily round trips between Poughkeepsie and Fishkill, plus four daily express buses (one morning, two afternoon, and one evening); Saturday service operates from 6:15 a.m. to 10:45 p.m., with 11 round trips between Poughkeepsie and Fishkill. Route A includes stops at IBM-Poughkeepsie, the Galleria Mall in Poughkeepsie, and Wal-Mart in Fishkill.
2. Route B between Poughkeepsie and Beacon (via Routes 9 and 9D): Monday-Saturday service from 5:30 a.m. to 10:03 p.m., with 12 daily round trips between Poughkeepsie and Beacon. Route B includes stops at IBM-Poughkeepsie, the Galleria Mall in Poughkeepsie, and downtown Beacon.
3. Route F between Poughkeepsie and East Fishkill (Hopewell Junction) (via Route 9 and 52): Monday-Saturday service from 6:00 a.m. to 9:40 p.m. with two daily round trips between Poughkeepsie and Hopewell Junction and five daily round trips between Beacon and Hopewell Junction; Saturday service operates from 8:00 a.m. to 4:45 p.m. with three daily round trips between Beacon and Fishkill.
4. Route G in the City of Beacon (via Route 9D and Main St.): Monday-Saturday service from 11:10 a.m. to 7:21 p.m. with 11 daily round trips in Beacon.
5. Beacon RailLink: Monday-Friday service to the Beacon train station from 5:30 a.m. to 8:05 a.m. (four morning buses) and 5:38 p.m. to 8:24 p.m. (six evening buses).
6. New Hamburg RailLink: Monday-Friday service, with 3 morning buses to the station and 3 evening buses from the station.
7. Poughkeepsie RailLink: Monday-Friday service, with 5 morning buses to the station and 7 evening buses from the station.

DCPT's three other fixed routes all leave from Market St. in Poughkeepsie: Route C between Poughkeepsie and Tivoli, Route D between Poughkeepsie and Dover, and Route E between Poughkeepsie and Pawling.

The City of Poughkeepsie bus system operates six fixed routes that serve the City and surrounding communities:

1. Main St. (Poughkeepsie train station to Route 44 Stop & Shop): hourly service Monday-Friday from 6:30 am to 5:30 pm and Saturday from 6:30 am to 2:30 pm.
2. Southside (Downtown to southside, Vassar Brothers Medical Center, and Route 9 Price Chopper and Stop & Shop): service Monday-Friday from 6:30 am to 6:00 pm and Saturday from 6:30 am to 3:00 pm. Service is every half-hour until 8:00 am and then hourly.

3. Northside (Downtown to DCC, Marist College, St. Francis Medical Center and Hyde Park Stop & Shop): service Monday-Friday from 6:30 am to 6:00 pm and Saturday from 6:30 am to 3:00 pm. Service is every 45 minutes until 8:00 am and then hourly.
4. Galleria (Downtown to Route 9 Price Chopper, Stop & Shop, and Galleria): hourly service Monday-Friday from 8:30 am to 3:30 pm and Saturday from 8:30 am to 2:30 pm.
5. Special (Poughkeepsie train station to Poughkeepsie Middle and High Schools): Monday-Friday service only, with two buses in the morning and one in the afternoon.
6. Shoppers Special (Downtown to Route 44 Stop & Shop and Adams): service Monday-Friday only, hourly from 9:30 am to 4:30 pm.

Ulster County Area Transit (UCAT) operates the Ulster-Poughkeepsie LINK bus, which provides weekday and weekend service between Rosendale, New Paltz, Highland and the Poughkeepsie train station. In addition, several private transit companies operate in the area. These include:

1. Leprechaun Lines: weekday commuter service between Beacon, Poughkeepsie, and Stewart Airport and between Poughkeepsie, Wappingers Falls, Fishkill, and White Plains (Westchester County). It also provides weekend service between Stewart Airport, Beacon, and New York City.
2. Coach USA/ShortLine: service between Rhinebeck, Poughkeepsie, Fishkill and New York City (via Newburgh and northern New Jersey), and between Poughkeepsie and Binghamton.
3. Trailways: service between Poughkeepsie and Albany, New York City, Long Island, and other destinations (via Kingston and Newburgh).

A variety of human service organizations also provide transportation services to the elderly, disabled, and low income populations the Lower Hudson:

1. Dutchess County Department of Mental Hygiene: transportation service is provided free of charge to low-income adults, seniors, general public and those pursuing counseling/substance abuse. The agency uses agency owned vehicles for appointments, job trips and educational trips.
2. Dutchess County Office for the Aging: transportation service to eight friendship centers throughout Dutchess County is provided free of charge using agency vehicles.
3. Castle Point Veterans Medical Center: the U.S. Department of Veterans Affairs at Castle Point is the transportation hub of this region's transportation service for injured and ill veterans.
4. Friends of Seniors: transportation is provided by volunteers who use their personal vehicles to bring elderly individuals to medical appointments and food shopping. Trips are coordinated by agency staff.
5. Gateway Community Industries: transportation is provided to clients for a variety of trip types.
6. PEOPLe, Inc.: transportation is provided to those who are disabled, low-income adults, seniors, veterans, those seeking employment or education, re-entry parolees, and those pursuing counseling for those on Medicaid.

7. Martin Luther King Cultural Center: transportation for seniors and disabled persons in Beacon, parts of Fishkill, and Wappingers Falls through their Dial-A-Van program.
8. Devereux New York: transportation for Dutchess County residents who have developmental disabilities.

Pedestrian & Bicycle Transportation

Sidewalk Systems

The Lower Hudson has approximately 330 miles of sidewalks, which represents over 75 percent of the sidewalks in the county. The majority are in the City and Town of Poughkeepsie and the City of Beacon. When considered on a per-resident basis, the Village of Fishkill has the most sidewalks per resident, followed by the City of Poughkeepsie, City of Beacon, and Village of Wappingers Falls. Sidewalk mileage by municipality and per resident is shown in Table 6-1-7 below.

Table 6-1-7. Sidewalks by Municipality - Lower Hudson

	Sidewalks (miles)*	Sidewalk Feet per Resident	County-wide Rank
City of Beacon	54.6	19.8	6
City of Poughkeepsie	117.2	19.9	5
Town of Fishkill	26.5	6.7	14
Town of Poughkeepsie	92.9	11.1	11
Town of Wappinger	10.0	2.4	19
Village of Fishkill	8.8	21.4	3
V. of Wappingers Falls	19.0	18.2	7

Trail Systems

The Lower Hudson boasts over 52 miles of trails.
Major recreational trails in the Lower Hudson include:

1. Hudson Highlands Trails, Town of Fishkill: 12.3 miles
2. Wappinger Greenway Trail, Towns of Poughkeepsie and Wappinger and Village of Wappingers Falls: 8.0 miles (includes portions on sidewalks)
3. Stony Kill Farm trails, Town of Fishkill: 5.2 miles
4. Vassar College and Farm trails, Town of Poughkeepsie: 4.8 miles
5. Bowdoin Park trails, Town of Poughkeepsie: 4.4 miles
6. Locust Grove trails, Town of Poughkeepsie: 3.7 miles

Shared-Use Paths

Two of the county's major shared use paths are in the Lower Hudson: the WRS Dutchess Rail Trail in the Towns of Poughkeepsie and Wappinger (13 miles), and the Walkway Over the Hudson in the City of Poughkeepsie (1.3 miles, partly in Ulster County). There is also a 1.2-mile long path along Wilbur Boulevard in the Town of Poughkeepsie.

Bicycling Facilities

The only on-street bicycle facilities in the Lower Hudson are shared-lane markings (sharrows) in the City of Beacon on Main St. from Route 9D to E. Main St., which were the first sharrows in the county.

Two of NYSDOT's signed State Bicycle Routes (SBR) pass through the Lower Hudson. SBR 9 passes through Fishkill, Wappinger, and the Town and City of Poughkeepsie using portions of Route 9, Middlebush Rd., Route 9D, Vassar Rd., Route 376, and local streets and continues north to Hyde Park, Rhinebeck, and Red Hook. SBR 17 connects with Bicycle Route 9 at the intersection on Route 9D and Middlebush Rd. in the Town of Wappinger, and follows Route 9D to the Newburgh-Beacon Bridge, which it crosses into Orange County.

NYSDOT also has several proposed State Bicycle Routes which connect to the area:

1. Proposed SBR 44, along Route 44 between SBR 9 in the City of Poughkeepsie and a proposed SBR 22 in the Town of Amenia.
2. Proposed SBR 55, along Route 55 between the proposed SBR 44 in the Town of Poughkeepsie and a proposed SBR 22 in the Town of Pawling.
3. Proposed SBR 52, along Route 52 between Route 9D in Beacon and Putnam County.
4. Proposed SBR 82, along Route 82 between a proposed SBR 199 in Pine Plains and the proposed SBR 52 in Fishkill.

Bicycle parking is provided at several of the area's key destinations, including the three colleges, the Poughkeepsie and Beacon train stations, Beacon's Main St., the Walkway Over the Hudson, Poughkeepsie's Adriance Library, and several schools, parks, restaurants and retail stores. A searchable online bicycle parking map includes more information for each location.

Accessibility

In 2010, NYSDOT identified a number of intersections and sidewalk segments on State roads that were not fully accessible under the Americans with Disabilities Act of 1990 (ADA). These include the following roads in the Lower Hudson:

1. Route 9: one intersection and one sidewalk segment in the Town of Poughkeepsie, and one intersection (at Scenic Dr) in the Town of Wappinger
2. Route 9D: one intersection (at Clinton St.) and one sidewalk segment in the Village of Wappingers Falls, and one intersection (Wolcott Ave. at Beekman St.) in the City of Beacon
3. Route 44: 11 locations in the City of Poughkeepsie and 14 in the Town of Poughkeepsie.
4. Route 52: three sidewalk segments in the Village of Fishkill
5. Route 55: one sidewalk segment in the Town of Poughkeepsie
6. Route 113: two intersections and two sidewalk segments in the Town of Poughkeepsie
7. Route 376: four intersections and three sidewalk segments in the Town of Poughkeepsie

The City of Poughkeepsie's 1992 ADA Transition Plan included an inventory of over 400 intersections and identified improvements needed to make curb ramps accessible. Since the 1992 plan, the City has incorporated many ramp improvements into street paving and repair projects.
For additional data on walking and bicycling patterns, see Walk Bike Dutchess, Chapter 5.1 (Lower Hudson).

Park-and-Ride Facilities

There is one park and ride facility in the Lower Hudson: on Route 9D at the Dutchess Stadium Intermodal Center. It has capacity for 100 vehicles.

Other Transportation Facilities

The only County-owned airport, the Dutchess County Airport, is located in the Town of Wappinger. The Newburgh-Beacon Ferry, which docks adjacent to the Beacon train station, carries between 300 and 400 passengers per year across the Hudson River.

Transportation Safety

The Transportation Council analyzed vehicle crash data from the NYS Governor's Traffic Safety Committee (GTSC), focusing on total crashes and crash rates based on road mileage. In 2013, the most recent data available, the GTSC reported that 1,039 crashes with fatalities or injuries occurred in the Lower Hudson; this was slightly lower than the 1,067 fatal and injury crashes reported in 2009 for *Moving Dutchess*. Compared to other communities in the county, the Town of Poughkeepsie continued to have the highest number of fatal/injury crashes in the county (321 in 2013). Table 6-1-8 shows the total number of reported crashes with fatalities or injuries by municipality for 2011-2013.

Table 6-1-8. Fatal & Injury Crashes-Lower Hudson (2011-2013)

	Fatal & Injury Crashes			3-Year Average
	2011	2012	2013	
City of Beacon	49	47	49	48
City of Poughkeepsie	252	265	277	265
Town of Fishkill	153	161	177	164
Town of Poughkeepsie	322	320	321	321
Town of Wappinger	165	150	138	151
Village of Fishkill	43	34	41	39
V. of Wappingers Falls	31	39	36	35

In 2013 the Lower Hudson communities had an average vehicle crash rate of 2.6 fatal and injury crashes per road mile, which was over three times higher than county's overall rate of 0.8 crashes per mile. Each municipality in the area was above the county average. At 6.4 crashes per mile, the Village of Fishkill retained the highest crash rate in the county for 2013, followed by the City of Poughkeepsie at 3.8 crashes per mile. Table 6-1-9 shows crash rates per mile from 2011-2013 by municipality.

Table 6-1-9. Crash Rate per Mile-Lower Hudson (2011-2013)

	Crash Rate Per Mile			3-Year Average
	2011	2012	2013	
City of Beacon	0.9	0.9	0.9	0.9
City of Poughkeepsie	3.5	3.7	3.8	3.7
Town of Fishkill	1.8	1.9	2.1	1.9
Town of Poughkeepsie	1.7	1.7	1.7	1.7
Town of Wappinger	1.3	1.2	1.1	1.2
Village of Fishkill	6.7	5.3	6.4	6.1

V. of Wappingers Falls	2.2	2.8	2.6	2.5

NYSDOT, in conjunction with NYSDMV and the Office of Cyber Security & Critical Infrastructure Coordination (CSCIC), maintains an online database of motor vehicle crashes called the Accident Location Information System (ALIS). The Transportation Council conducted an analysis of 2010-2014 ALIS crash data to identify general crash trends in the Lower Hudson. Based on this 2010-2014 data, the Transportation Council identified high-crash intersections and roadway segments in the Lower Hudson. The following Lower Hudson locations experienced some of the highest number of crashes/crash rates over the five-year period (see also the Lower Hudson Crash Analysis Map):

Intersections (Total Crashes)

1. Route 44 (Church St.) and Route 9 ramps in the City of Poughkeepsie (368 crashes).
2. Route 9 and CR 104 (New Hackensack Rd.) in the Village of Wappingers Falls (113 crashes).
3. Route 9 and Main St. in the Village of Wappingers Falls (98 crashes).
4. Route 9 and CR 93 (Myers Corners Rd.) in the Town of Wappinger (78 crashes).
5. Route 9 and CR 28 (Old Hopewell Rd.) in the Town of Wappinger (97 crashes).
6. Route 9 and Route 52 (Main St.) in the Village of Fishkill (113 crashes).
7. Route 9 and Elm St. in the Village of Fishkill (90 crashes).
8. Route 9 and Merritt Blvd. in the Town of Fishkill (156 crashes).
9. Route 44 (Columbus Dr.) and Main St. in the City of Poughkeepsie (103 crashes).
10. Route 44 (Church St.) and Jefferson Blvd. in the City of Poughkeepsie (101 crashes).
11. Route 44 (Church St.) (westbound) and Market St. in the City of Poughkeepsie (67 crashes).
12. Route 44 (Mill St.) (westbound) and Clinton St. in the City of Poughkeepsie (66 crashes).
13. Route 44 (Church St.) (eastbound) and S. Hamilton St. in the City of Poughkeepsie (61 crashes; one fatality in 2013).
14. Main St. and Innis/Worrall Ave. in the City of Poughkeepsie (67 crashes).
15. Columbus Dr. and Mill St. in the City of Poughkeepsie (69 crashes).

Roadway Segments (Total Crashes and/or Crashes per Mile)

1. Route 44 (Church St.) between the Mid-Hudson Bridge and Route 9 in the City of Poughkeepsie (59 crashes; 188 crashes per mile).
2. Main St. between the Route 9 northbound and southbound ramps in the City of Poughkeepsie (47 crashes; 1,598 crashes per mile).
3. Main St. between Civic Center Plaza and Academy/Catherine St. in the City of Poughkeepsie (56 crashes; 171 crashes per mile).
4. Route 9 (northbound) between Old Post Rd. and CR 28 (Old Hopewell Rd.) in the Town of Wappinger (84 crashes; 278 crashes per mile).

5. Route 9 (northbound) between the Alpine Commons Shopping Plaza and CR 93 (Myers Corners Rd.) in the Town of Wappinger (81 crashes; 277 crashes per mile).
6. CR 93 (Myers Corners Rd.) between Route 9 and Marshall Rd. in the Town of Wappinger (64 crashes; 317 crashes per mile).
7. Route 9D between CR 28 (Old Hopewell Rd.) and Ketchamtown Rd. in the Town of Wappinger (65 crashes; 217 crashes per mile).
8. Route 9D between I-84 ramps in the Town of Fishkill (48 crashes; 995 crashes per mile).
9. I-84 (westbound) between Newburgh-Beacon Bridge toll booths and Orange County line and (86 crashes; 90 crashes per mile).
10. I-84 (eastbound) between Orange County line and Newburgh-Beacon Bridge toll booths (150 crashes; 369 crashes per mile).
11. I-84 (westbound) between I-84 connector road (near Westage Business Center) and Route 52 exit ramp in the Town of Fishkill (56 crashes; 64 crashes per mile; one fatality in 2010).
12. I-84 (westbound) between Route 9 (northbound) exit ramp and Route 9 (northbound) exit ramp in the Town of Fishkill (99 crashes; one fatality in 2012).
13. Route 9 (southbound) between Route 44/55 (overpass) to the Route 9 Laurel St exit ramp in the City of Poughkeepsie (42 crashes; 717 crashes per mile).

In addition, the one High Accident Location (HAL) in the county, as designated by NYSDOT is the Route 44/55 corridor (eastbound arterial) through the City of Poughkeepsie from Market St. to Streit Ave. According to NYSDOT, this corridor has the following issues:

1. Pattern of rear end accidents occurring on eastbound approaches to intersections possibly due to small 8-inch traffic signal faces and morning sun glare.
2. Pattern of right-angle accidents occurring at signalized intersections where eastbound vehicles ran the red light, possibly due to small 8-inch signal faces.
3. Pattern of overtaking accidents occurring on eastbound approaches to signalized intersections.
4. Patterns of pedestrian and bicyclist accidents, notably when vehicles are making turns at intersections.
5. Pedestrian ramps do not meet ADA standards.

The HAL report recommends traffic signal upgrades, ADA compliant ramps, pedestrian and bicycle warning signs, and advance street name signs along the City's eastbound arterial.

Pedestrian & Bicycle Safety

The Transportation Council also analyzed the 2009-2013 crash data to determine pedestrian and bicycle crash rates per 1,000 people for each municipality. Based on this analysis, the Village of Fishkill and City of Poughkeepsie had the highest pedestrian crash rates in the county (1.11 and 1.04 respectively) and the only rates above one per 1,000 people. In addition, the Village of Wappingers Falls and Town of Poughkeepsie had pedestrian crash rates (0.43 and 0.34 respectively) above the county average of 0.29 crashes per 1,000 people.

For bicycle crashes, the Village of Wappingers Falls had the highest bicycle crash rate in the county at 0.68 crashes per 1,000 people. The City of Poughkeepsie and Village of Fishkill (0.42 and 0.37 respectively) also had bicycle crash rates above the county average of 0.15 crashes per 1,000 people (the Town of Poughkeepsie was slightly above average at 0.19 crashes per 1,000 people).

Walk Bike Dutchess also identified road segments with concentrations of bicycle and/or pedestrian crashes and a high crash rate per mile. For pedestrian crashes, nine of the top ten high-crash corridors were in the City of Poughkeepsie, and one was in both the City and Town of Poughkeepsie. Mansion St. in the City of Poughkeepsie experienced the highest crash rate in the county at almost 26 crashes per mile, while the highest number of pedestrian crashes (43 from 2007-2011) occurred on a 2.2-mile segment of Main St. in the City and Town of Poughkeepsie.

High-Crash Corridors: Pedestrian Crashes

1. Mansion St. from Columbus Dr. to Conklin St. in the City of Poughkeepsie (five crashes, 25.8 crashes per mile).
2. South Cherry St. from Main St. to Forbus St. in the City of Poughkeepsie (nine crashes, 23 crashes per mile).
3. South Clinton St. from Main St. to Route 44 (Church St.) in the City of Poughkeepsie (five crashes, 22.9 crashes per mile).
4. Montgomery St. from South Ave. to Hooker Ave. in the City of Poughkeepsie (seven crashes, 22.1 crashes per mile).
5. Worrall Ave./Route 115 from King St. to Mack Rd. in the City of Poughkeepsie (five crashes, 19.7 crashes per mile).
6. Main St. from N. Water St. to Fowler Ave. in the city and Town of Poughkeepsie (43 crashes, 19.4 crashes per mile).
7. Route 44 (Church St.) from Jefferson St. to Fountain Pl. in the City of Poughkeepsie (24 crashes, 19.2 crashes per mile).
8. Columbus Dr. from Mansion St. to Union St. in the City of Poughkeepsie (four crashes, 16.1 crashes per mile).
9. Academy St. from Main St. to Franklin St. in the City of Poughkeepsie (seven crashes, 15.7 crashes per mile).
10. North Clinton St. from Cottage St. to Route 44 (W. Maple St.) (westbound) in the City of Poughkeepsie (six crashes, 15.1 crashes per mile).

For bicycle crashes, four of the top ten high-crash corridors were in the City of Poughkeepsie, three were in the Town of Poughkeepsie, and three were in both the City and Town. Hamilton St. in the City of Poughkeepsie experienced the highest crash rate at 17 crashes per mile, while the highest number of crashes (20 from 2007-2011) occurred on a 2.6-mile segment of Main St. in the City and Town of Poughkeepsie.

High-Crash Corridors: Bicycle Crashes

1. Hamilton St. from Thompson St. to Route 44 (Church St.) (eastbound) in the City of Poughkeepsie (six crashes, 17 crashes per mile).

2. Collegeview Ave. from Raymond Ave. to Fairmont Ave. in the Town of Poughkeepsie (three crashes, 16.1 crashes per mile).
3. Fairmont Ave. from Main St. to Collegeview Ave. in the Town of Poughkeepsie (five crashes, 15.7 crashes per mile).
4. Catherine St./Academy St. from Mansion St. to Franklin St. in the City of Poughkeepsie (seven crashes, 8.7 crashes per mile).
5. Route 44 (Maple St.) (westbound) from Flannery Ave. to Springside Ave. in the City and Town of Poughkeepsie (four crashes, 8.2 crashes per mile).
6. Main St. from Clover St. to Burnett Blvd. in the City and Town of Poughkeepsie (20 crashes, 7.7 crashes per mile).
7. Route 44 (Church St.) (eastbound) from Jefferson St. to S. Grand Ave. in the City and Town of Poughkeepsie (11 crashes, 7.1 crashes per mile).
8. Washington St./North Rd. from W. Cedar St. to Mill St. in the City of Poughkeepsie (five crashes, 5.4 crashes per mile).
9. Smith St. from Weed St. to Thompson St. in the City of Poughkeepsie (three crashes, 5.2 crashes per mile).
10. Route 9 from Field Ct. to Van Siclen Dr. in the Town of Poughkeepsie (four crashes, five crashes per mile).

Local Comprehensive Plans

The Transportation Council reviewed the content and recommendations in each municipal comprehensive plan to identify issues and challenges relevant to *Moving Dutchess 2*. In the Lower Hudson, common goals and themes include developing mixed-use centers; requiring interconnected street systems; implementing access management; traffic calming; adding sidewalks and trail systems; increasing and coordinating transit service; and streetscape improvements.

City of Poughkeepsie

The City of Poughkeepsie's Comprehensive Plan was last updated in 1998. However, its goal for "User-Friendly Transportation Systems" and several recommendations are still relevant. These include the following:

Access:
1. Make the waterfront easily accessible by vehicles and pedestrians via the Main St. corridor.
2. Make the area in the vicinity of Main St. easily navigable for local traffic and visitors.

Streetscape: Consider Business Improvement Districts (BIDs) to support streetscape improvements on Main St. and lower Main St./Water St.

Transit:
1. Simplify access to the train station.
2. Increase coordination to maximize transit resources and serve residents working in outlying areas.
3. Post transit routes and schedules at bus stops.
4. Enhance transit service between Main St., housing areas, and the waterfront and train station.

Parking:
1. Create permit parking districts in some residential areas.
2. Review and adjust minimum parking requirements.

In addition, the plan's final recommendations and strategies include proposed land uses for three areas:

1. *Main St. and the Arterials*: Strengthen the Main St. retail core by locating offices and residential uses along the arterials.
2. *Cottage St. Business District*: Soften the edges of intensive businesses by providing commercial uses around the light manufacturing area and allowing residential uses on smaller lots.
3. *Waterfront Development Area*: Develop the DeLaval property, the old sewage treatment plant, and the area along North Water St. as mixed-use, including tourism, entertainment, commercial, and residential uses. Provide additional public open space.

Town of Poughkeepsie

The Town of Poughkeepsie's Comprehensive Plan was updated in 2007. Key transportation recommendations include the following:

Land Use-Transportation Planning

1. Focus development and community services in designated mixed-use centers and require all new development to reduce auto-dependence and accommodate pedestrians and bicyclists by providing sidewalks, walkways through parking lots, crosswalks, bike racks and other amenities.
2. Require interconnected roads within new subdivisions and avoid cul-de-sacs to provide more efficient traffic circulation and emergency response routes; require road connections between new adjacent subdivisions; and minimize vehicular access points to major roads.
3. Promote the use of traffic calming measures, such as street trees, curb extensions, center islands, crosswalks and on-street parking to control speeds on roads with pedestrian/bicycle traffic and where speeding has been identified as a problem.
4. Revise road and parking specifications to provide narrower street options for lower-volume or traffic calming situations, promote street tree buffers and sidewalks, and significantly reduce impervious asphalt coverage.
5. Manage access onto all roadways by strictly limiting access points to one per parcel, by limiting left turns, and by sharing and consolidating driveways and connecting commercial sites with access between rear parking lots.
6. Prevent the further commercialization of Routes 44 and 55, Salt Point Turnpike, Van Wagner Rd., Vassar Rd., Spackenkill Rd. and other primarily residential roadways outside of designated centers to maintain efficient traffic flow.
7. Consider an east-west connector across the northern section of the Town to help alleviate congestion and provide a more efficient connection between Route 9, Route 9G, Salt Point Turnpike and Van Wagner Rd.

Pedestrian & Bicycle Infrastructure

1. Wherever practicable, provide sidewalks and/or marked shoulders along roadways to facilitate and encourage safe pedestrian and bicycle travel, especially to centers and recreation areas.

2. Develop sidewalks or clearly marked shoulders for walkers and bikers along all collector or higher roads within the "no-busing" zones of schools to allow children to safely walk or bike to school, and require walkways/bikeways within these areas for all new development.
3. Establish an interconnected system of greenspaces and recreational sites through trails, paths, bicycle lanes, and sidewalks, including a trail along the Maybrook Corridor and greenway trails along the Town's major creek systems.
4. Prioritize the establishment of a continuous Hudson River Greenway Trail.
5. Pursue development of a trail along the abandoned rail spur from Morgan Lake, past Peach Hill, into Hyde Park, to West Rd. School in Pleasant Valley.
6. Pursue a trail along the Central Hudson utility corridor from Marist College east to the Hudson River Psychiatric Center property, accessing Quiet Cove Park, Violet Ave. School, Dutchess Community College, the Fallkill Creek, Peach Hill, and the abandoned rail spur noted above.
7. Work with the County and State to improve pedestrian and bicycle access in Red Oaks Mill by constructing bike paths and/or sidewalks on Vassar Rd., Spackenkill Rd., and Route 376.
8. Work with NYSDOT to provide sidewalks, bike paths, and landscaping along Route 44 in Rochdale.

Transit

1. Promote employee-sponsored and privately arranged ride sharing and increased use of commuter bus service with direct connections to the train stations. Additional bus shelters should be added to stops to protect users during inclement weather and thus encourage more use.
2. Work with the County and City to ensure that their bus systems provide convenient, coordinated access to designated centers and major employers within the Town.

Town of Wappinger

The Town of Wappinger updated its Comprehensive Plan in 2010. It includes the following transportation-related goals and recommendations:

1. Improve traffic conditions on Routes 9 and 9D.
   - Encourage NYSDOT to provide a third southbound lane on Route 9 from Mesier Ave. to Myers Corners Rd.
   - Pursue a new roadway on the southeast side of Route 9D in Hughsonville to create a one-way couplet.
2. Require service roads, internal connections and combined parking lots, where appropriate.
   - Implement plans to create a north-south service road on the east side of Route 9 with east-west links to Mesier Ave., East Main St. and Old Route 9.
3. Minimize the number of access points on major and collector roads.
   - Change the Town's Zoning Law to encourage coordinated use of vehicular access points along the major arterials of the Town.
3. Develop a sidewalk network and bikeway system connecting community facilities, centers and schools; review and expand requirements for the provision of sidewalks in conjunction with new commercial development.

- Pursue sidewalks on Route 9 and Old Hopewell Rd.; consider bicycle paths or lanes on Old Hopewell Rd., Myers Corners Rd., Route 376, and portions of New Hackensack Rd. and Widmer Rd. near Route 9.

4. Improve the appearance and pedestrian safety of Route 9 through median landscaping, sidewalks, street trees, lighting, signage and underground utilities.
5. Improve regional transit services, and consider expanded service to regional nodes including the New Hamburg train station, the airport, and park and ride stations.
6. Improve street connectivity between neighborhoods as new areas are developed.
7. Pursue traffic calming improvements on local roadways.
8. Encourage higher commercial density and mixed land use in commercial areas to support transit, reduce traffic, improve local identity, provide opportunities for public spaces, and promote pedestrian activity.

Village of Wappingers Falls

The Village of Wappingers Falls updated its Comprehensive Plan in 2001. It includes the following transportation-related goals and recommendations:

1. Encourage alternatives to the automobile such as walking, bicycling, public transportation, van or carpooling, and telecommuting, and provide safe circulation for these alternatives.
2. Install traffic calming devices throughout the Village, including enhanced crosswalks and streetscape designs, particularly along Route 9D.
3. Provide additional parking lots that are appropriately hidden and/or landscaped for residents, businesses and visitors in the Village core.
4. Enhance existing pedestrian facilities – crosswalks and sidewalks – and provide new facilities where necessary.
5. Review signs along Route 9D. Ensure “Yield to Pedestrians” signs and “Bikes Share the Road” signs are placed at all major intersections in the Village and along bike routes.
6. Create off-street walking and bike paths to link neighborhoods with the downtown.
7. Require connectors between commercial properties and encourage shared access where possible on future commercial development along Route 9.

City of Beacon

The City of Beacon updated its Comprehensive Plan in 2007. Transportation-related goals and recommendations include the following:

Land Use-Transportation Planning

1. Develop an urban design plan for the Waterfront/Train Station area that encourages the development of high density housing along Beekman St., includes mixed uses near the train station, and incorporates design elements that connect the waterfront area with Main St.
2. Develop long-term plans for improving Route 9D between Beekman St. and the intersection with Interstate 84 to handle increased traffic. Include an analysis of potential improvements to the interchange configuration.

3. Install traffic calming features such as raised crosswalks on major roads and collector roads, including Beekman St. and West Main St.
4. Improve the connectivity of local roads and collector roads.

Transit

1. Improve public transportation service, particularly the connection between the City's business district and the intermodal train/bus/ferry station and Waterfront/Train Station area (including Dia:Beacon).
2. Work closely with the County to identify new bus routes to Main St., the waterfront, and the prison for employee commuting, and identify opportunities to increase the frequency of bus service along Main St.
3. 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 St. and the train/bus/ferry station.
4. Explore the potential feasibility of establishing passenger service from the Beacon train station at the waterfront to the east end of Main St. via the Fishkill Creek railroad, using vehicles that can travel on both rail and road.
5. Advocate for the development and improvement of satellite commuter parking with bus service to the Beacon station.

Bikeways

1. Develop a bikeway system connecting greenways, community facilities, recreation areas, schools and Main St.
2. Determine the feasibility of using the easement area of the railroad tracks along Fishkill Creek for a bicycle and pedestrian path.
3. Consider developing bike lanes on Route 9D (I-84 to South Ave.), South Ave. (Route 9D to Tioranda Bridge to Grandview Ave. to Route 9D), Beekman St., Teller Ave., Fishkill Ave., and Verplank Ave.

Town of Fishkill

The Town of Fishkill updated its Comprehensive Plan in 2009. It included the following transportation-related goals and recommendations:

Connectivity

1. In new subdivisions, require roadway connections to existing streets and adjacent neighborhoods wherever feasible, discourage cul-de-sacs and dead-ends, create connections between existing cul-de-sac streets and adjacent areas in the community, and discourage the creation of gated communities.
2. Require that developers create internal service roads and interior access to connect parking lots on all future commercial development and redevelopment along Routes 9, 9D, 52, and 82.
3. Consolidate commercial entrances on roads where possible and use internal service streets as an alternative access.

Pedestrian & Bicycle Infrastructure

1. Create off-street walking and bicycling paths to link residential neighborhoods with each other and to nearby

commercial sites; create pedestrian networks and crosswalks for all commercial development and redevelopment; and require that all new site plan and subdivision applications include provisions for "complete streets" with sidewalks, pedestrian paths and, where appropriate, bicycle lanes.

2. Request that DOT install sidewalks on both sides of Route 52 from the Town Hall to the Village of Fishkill, and from the Village of Fishkill to the former A&P Plaza; and request that DOT install raised crosswalks and crosswalk signals along Route 52 where traffic lights are located and in areas where there are significant destinations.
3. Encourage the provision of on-street bike lanes and marked bike routes on collector roads and State and County highways consistent with applicable NYSDOT standards; and require bike racks for commercial sites, parks, schools, and public facilities.
4. Create a greenway trail along the Fishkill Creek to connect parks, neighborhoods and other important sites in the Town; work with the City of Beacon to extend the Fishkill Creek Trail to the Hudson River; work with the Village of Fishkill to extend a trail along the portion of the Creek that runs through the Village on the east side of Route 9; and connect the Fishkill Creek Trail with the Greenway Trail along the Hudson River and the County Rail Trail in East Fishkill.
5. Connect the community with a town-wide network of hiking trails and bicycle paths that link residential neighborhoods, parks, shopping areas, and regional trails. Ensure that new trails connect with existing trails on Stony Kill Farm, Mount Gulian, Scenic Hudson Land Trust lands, and other properties, and with regional trails including the Greenway and Blueway Trails and the County Rail Trail.

Traffic Calming

1. Consider traffic calming techniques on streets in the commercial districts, such as curb extensions, neck downs, on-street parking, and textured or raised crosswalks.
2. Consider narrowing overly-wide existing residential streets by providing sidewalks, bicycle lanes, and/or planting strips and street trees.
3. Consider the use of on-street parking in new residential subdivisions to slow traffic, provide a buffer between traffic on the road and pedestrians on the sidewalk, and reduce impervious surfaces.

Transit

1. Address the potential for public transit during Planning Board review of proposed residential and nonresidential development.
2. Create additional park-and-ride lots.

Village of Fishkill

The Village of Fishkill updated its Comprehensive Plan in 2009. Transportation-related goals and recommendations include:

Pedestrian & Bicycle Infrastructure

1. Continue to maintain, extend and complete linkages in the existing sidewalk system to facilitate safe pedestrian access.

2. Consider additional pedestrian connections to Sarah Taylor Park and the Westage Business Center, including safe pedestrian access from the west side of Route 9 to Sarah Taylor Park; from Sarah Taylor Park to Merritt Park Condominiums; a footbridge across Fishkill Creek; bicycle access from Jackson St. south into Westage Business Center; and sidewalks on the east side of Route 9.
3. Continue to provide pedestrian amenities such as benches, sidewalks, crosswalks, and bus shelters to encourage pedestrians to walk.

Access Management: Implement access management principles at every opportunity, including the consolidation of driveways, distribution of traffic to controlled intersections, provision of rear parcel access such as service alleys, elimination of multiple driveways, and provision of shared parking behind buildings.

Previous Transportation Council Studies

The Transportation Council has performed a number of planning studies in the Lower Hudson. A summary of each is included below. Complete documents are available on the Transportation Council's website.

Poughkeepsie Transportation Strategy (1997)

The Poughkeepsie Transportation Strategy was a cooperative effort of the Transportation Council, Dutchess County Planning Department, and the City of Poughkeepsie. In addition to addressing city-wide issues, the Transportation Strategy focused on three areas: the waterfront, city center, and northside. The following key goals were developed:

City-Wide

1. Develop a positive identity for Poughkeepsie as a destination and regional center.
2. Celebrate the city approaches and design a comprehensive sign program.
3. Direct industrial traffic around the city center, residential neighborhoods, and waterfront.
4. Learn from historic precedents to build on Poughkeepsie's unique qualities.

City Center

1. Redesign the Arterials from higher-speed barriers between the City Center and surrounding neighborhoods to more walkable boulevards.
2. Rebuild the Washington-Mill St. merging lanes as a more traditional intersection.
3. Restore two-way circulation with on-street parking on Main, Market, Catherine/Academy, and Hamilton Sts.*
4. Return Main Mall to Main St. with generous room for sidewalk activities and walkway connections to adjacent blocks and parking areas.*
5. Encourage mixed use development opportunities to break up large parking lots.

Northside

1. Expand the neighborhood commercial center along Smith and Cottage Streets.

2. Protect adjacent residential streets from through traffic by narrowing side street entrances.
3. Improve truck access to and within the industrial area, while maintaining rail service.
4. Redesign the Smith-Clinton-Arterial intersection to direct truck traffic away from Smith St. and create a new Clinton Square.
5. Improve the sidewalks, crosswalks, and landscaping along Smith and Cottage Streets.

Waterfront

1. Extend the park and promenade north to the Fallkill Creek with a centerpiece plaza/rink/performance space and continuous Greenway linkages north and south.*
2. Build a direct, prominent path between the railroad station and the waterfront.
3. Create a mixed use development district along Water St.
4. Adopt a phasing and parking program that provides a coordinated development framework, yet allows the district to grow incrementally.
5. Stress convenient connections to Mt. Carmel, lower Main St., and the bridges, creating a waterfront walking district within a 5-10 minute walk of the train station.

* These items have been partially implemented: Main St., Catherine St./Academy St., and Hamilton St. serve two-way traffic; the Main Mall was re-opened to vehicles; and the Waryas Park path extends to the Fallkill Creek. In addition, replacement of the Hoffman St. bridge, which was also recommended in the Strategy, was completed in 2013.

Wappingers Falls Transportation Plan (2001)

The Wappingers Falls Transportation Plan was a joint project of the Transportation Council, NYSDOT-Region 8, and the Village of Wappingers Falls. The team studied traffic volumes and speeds, truck traffic, and the pedestrian environment on Route 9D and on Route 9 from CR 28 (Old Hopewell Rd.) to Route 9D. The Plan included the following recommendations:

Short-term

1. Add high-visibility crosswalks at the following intersections:
   - South Ave. (Route 9D)/East Main St.
   - East Main St./Remsen Ave.
   - West Main St. (Route 9D)/Convent Ave.
   - West Main St. (Route 9D)/West St.
   - West Main St. (Route 9D)/School St.
   - West Main St. (Route 9D)/Church St.
   - Route 9 at 9 Plaza

2. Stripe parking spaces along West and East Main Sts.

Medium Term

1. Install distinctive markings or textured crosswalks at the following intersections:
   - East Main St./Market St./Mill St.
   - East Main St./West Main St.
2. Construct new sidewalks at the following locations:
   - Route 9 (east side) between shopping plazas and CR 77 (Vassar Rd.)
   - Route 9 (west side) between Mesier Ave. and 9 Plaza
   - Route 9D between the Village line and South Hills Mall
   - Mesier Ave. between Route 9 and Liss Rd.

3. Construct bulbouts at the following intersections:
   - East Main St./Market St./Mill St.
   - East Main St./West Main St.
4. Construct a right turn lane from East Main St. onto South Ave. (Route 9D).
5. Include a pocket park in front of the Grinnell Library as part of any design changes at the East Main St./Saterlee Place/Spring St. intersection.
6. Consider improving the intersection of Route 9 and Mesier Ave. to facilitate turns from southbound Route 9 onto Mesier Ave.
7. Add landscaping on Main St., including planting strips between the roadway and sidewalks, street trees, and a planted median on Route 9.
8. Conduct a parking survey of the business district to evaluate the need for new municipal parking.
9. Consider restricting access at the municipal lot behind the library to right-in/right-out only, and investigate an exit onto High St.

I-84 Commercial Vehicle Parking/Rest Area Study (2003)

The I-84 Rest Area Study was initiated by the Transportation Council at the request of NYSDOT. The project team developed planning-level criteria for a possible rest area location and analyzed potential locations for new commercial vehicle parking and/or rest areas along the I-84 corridor between the Hudson River and the New York/Connecticut border. Six potential sites in the Town of Fishkill were discussed, but none of were selected for further analysis.

Fishkill Traffic Analysis (2006)

The Transportation Council undertook the Fishkill Traffic Analysis at the request of NYSDOT and the Town and Village of Fishkill. The analysis focused on congestion in and around Route 52, including the use of local streets to avoid congested areas, speeding on residential streets, and safety. The project developed recommendations for six areas.

1. Cedar Hill Rd.: Provide separate turn lanes on Cedar Hill Rd. to facilitate right turns onto Route 52.
2. Colonial Ave./Shirley Ave. at Route 52: The project team recommended installing a traffic signal and turn pocket at one of the intersections and limiting the other to right-in right-out only to improve access to and from the neighborhood. However, based on concerns about increased traffic and property takings, residents preferred to make no changes.
3. Rapalje Rd.: Restrict left turns from Route 52 eastbound onto Rapalje Rd., and enhance Rapalje Rd. with sidewalks, lighting and other streetscape improvements, reduced lane widths, and a speed table to reduce speeds.
4. Broad St.-Smith St.-Elm St.: Reduce speeds and cut-through traffic by restricting the Route 52/Cary Ave. intersection to right-in/right-out only, installing speed tables on Broad St., and making the Smith St./Elm St. and Broad St./Jackson St. intersections all-way stop controlled. Define the Smith St./Elm St. intersection with striping and install pavement markings on Broad St., Smith St., and Elm St. to improve visibility.

5. Luyster Place-Cary Ave.-Weston Ave.: Reduce cut-through traffic by implementing half closures at the Wood Place/Luyster Pl. and Cary Ave./Weston Ave. intersections. Reduce speeds by installing speed humps along Florence Ave. and Weston Ave.
6. Route 52 between Jackson St. and I-84: Coordinate traffic signal timing to reduce congestion on Route 52 and allow gaps for turning traffic.

Fishkill Route 52 Alternatives Analysis (2007)

The Route 52 Alternatives Analysis was the second phase of the Fishkill Traffic Analysis. It evaluated the feasibility of extending West Merritt Boulevard to Route 52, between I-84 and Jackson St. This new road would create an alternative route around the Village. The analysis indicated that a connection via Jackson St. would meet the goals of relieving congestion, reducing cut-through traffic, increasing accessibility to the Village Center, and improving overall safety. However, this connection had little public support, and therefore the recommendation not pursued.

Route 9 Land Use & Transportation Study (2007)

The Route 9 Land Use and Transportation Study grew from concerns by the Town of Poughkeepsie, Marist College, and NYSDOT about pedestrian safety, traffic growth, and future development around Route 9 near Marist College. The study resulted in a final concept plan and recommendations matrix including the following:

Fairview Center

1. Establish a direct connection between the Mid-Hudson Plaza and Hudson Heritage east of the Winslow Gate traffic signal.
2. Develop and implement appropriate traffic calming measures that reinforce posted speed limits or reduce operating speeds on Route 9 between the Hyde Park Town line and Marist Drive, including a gateway treatment and speed limit reduction (to 30 mph) near Quiet Cove Park.
3. Require new uses and site development to be consistent with the Fairview Center concept in terms of location, use, scale, and design. The reuse of existing vacant buildings and potential development of the Fulton St. frontage are particularly important.

Future Land Development

1. Enact and enforce land use regulations through zoning and site plan reviews that are sensitive to the relative impact of different types of land uses on traffic, with particular attention to impacts at the Route 9/Fulton St. intersection.
2. Coordinate with the Town of Hyde Park, City of Poughkeepsie, and others to identify and address cumulative impacts of development through coordinated mitigation strategies.

Transit and Road Projects

1. Design and construct a new public road between Route 9 and Route 9G through the former Hudson River Psychiatric Center.
2. Establish a new local road along the CSX East Branch between Hudson Heritage and West Cedar St. (or Parker

Ave.). The road profile must accommodate pedestrians and bicyclists.
3. Expand public transit service between Fairview and nearby activity centers in the City of Poughkeepsie.

Pedestrian Improvements
1. Design and construct a pedestrian bridge over Route 9 between Fulton St. and Beck Pl. to link Marist College west and east campus complexes. Remove the Donnelly Hall pedestrian crossing and maintain at-grade crossings at other signalized intersections. Note: A pedestrian underpass (rather than a bridge) and the main gate reconfiguration were completed in 2011.
2. Construct a sidewalk on the west side of Route 9 from the Marist north gate to Quiet Cove Park.
3. Construct a multi-use trail on the CSX West Branch.
4. Build a continuous Hudson River Greenway trail along the waterfront in Poughkeepsie and Hyde Park.
5. Use the main CSX right-of-way for a non-motorized, multiuse trail connection to the Dutchess Rail Trail at Morgan Lake and to the Walkway Over the Hudson.
6. Extend sidewalks on the north side of Fulton St. east to Route 9G.
7. Maintain pedestrian safety and enforcement activities.

Access Management and Operational Improvements
1. Realign the Marist north gate intersection to the Winslow Gate traffic signal at the entrance to Hudson Heritage and the Mid-Hudson Plaza; maintain right-in/right-out movements at the existing Mid-Hudson Plaza driveway.
2. Align a new entrance to Hudson Heritage and Quiet Cove Park.
3. Reconfigure the Marist main gate to eliminate outbound traffic and reduce vehicle volumes at the Route 9/Fulton St. intersection.
4. Redesign access to the Mid-Hudson Plaza from Fulton St. to prohibit eastbound left-turns entering the plaza until main access can be constructed further east.
5. Examine potential use of a portion of the CSX West Branch for Route 9 access to the former Dutton Lumber site in the City of Poughkeepsie.
6. Deploy Emergency Vehicle Signal Preemption technology at major intersections along the Route 9 corridor, with Route 9/Fulton St. as the first priority.

Transit Development Plan (2009)

The Dutchess County Transit Development Plan (TDP) was a cooperative effort of the Transportation Council, Dutchess County Public Transit (DCPT), the City of Poughkeepsie, and NYSDOT. The TDP sought to improve the efficiency and operations of the two local bus systems (DCPT and City of Poughkeepsie) and improve connections to regional and inter-county services. The TDP included a passenger survey, extensive public outreach, and a detailed analysis of existing bus operations.

The service proposals identified in the TDP were developed under the premise that transit service should match the type of development it serves. The proposals supported the following goals: eliminating duplication between the two bus systems, creating seamless transit policies (e.g. parallel fare

structures), promoting more frequent service on major corridors, increasing user friendliness, improving efficiency, and improving service for specialty markets (e.g. colleges and tourist sites). The TDP included the following key recommendations related to the Lower Hudson:

1. Provide fixed route service every 30 minutes or less in the City and Town of Poughkeepsie.
2. Provide fixed route service every 60 minutes or less in the Towns of Wappinger and Fishkill (including the City of Beacon, Village of Wappingers Falls and Village of Fishkill).
3. Develop an integrated fare system and coordinated marketing between DCPT and City of Poughkeepsie.
4. Provide additional weekday evening, Saturday evening, and Sunday service (especially to the Galleria).
5. Establish timed transfers in downtown Poughkeepsie.
6. Improve transit service for college students and tourists.
7. Make the system more user-friendly.
8. Make capital improvements to both bus systems to include installing bus stop signs and shelters.
9. Improve marketing by creating an umbrella brand for both systems and redesign web related content.

Village of Wappingers Route 9 Planning Study (2011)

The Village of Wappingers Falls requested the Transportation Council and Dutchess County Planning Department to identify land use and transportation strategies to improve pedestrian access and safety along Route 9 and to integrate the Route 9 corridor with the Village center. Staff prepared design concepts for three areas: the Route 9 Corridor, the E. Main St./Route 9 intersection, and the E. Main St./S. Ave. (Route 9D) intersection. Key recommendations for each area are listed below.

Route 9 Secondary Street System

1. Create a secondary street system including a north-south street east of Route 9 to connect CR 104 (New Hackensack Rd.) to CR 93 (Myers Corners Rd.), east-west connections to E. Main St. and Old Route 9, and a northern connection from CR 104 (New Hackensack Rd.) to N. Mesier Ave. These streets would displace traffic on Route 9 and improve access to buildings east of Route 9.
2. Remove traffic signals, left turn lanes, and driveways on Route 9 to reduce conflict points from turning vehicles, improve traffic flow, and improve walkability. Install a planted median and street trees along Route 9.
3. Establish internal connections between businesses to reduce the need for individual driveways, reduce traffic on Route 9, and create additional frontage for new businesses.
4. Promote walkable, mixed-use development east of Route 9 and work with developers to help fund the secondary street system.

East Main St. Gateway

1. Create a four-way intersection at Route 9 and E. Main St. by providing a new connection on the eastern leg from Imperial Blvd. to E. Main St. Move the existing parking access on the northeast corner further from the intersection to reduce conflicts with turning vehicles.

2. Make the intersection more pedestrian-friendly by striping high-visibility crosswalks on all legs of the intersection, narrowing the travel lanes to allow for a planted median and pedestrian refuge islands, adding street trees, removing the right turn slip lane at the north-west corner and extending the curb to shorten the crossing and reduce conflicts between vehicles and pedestrians.
3. Design and install a sign on the northwest corner of the intersection to announce the entrance to the Village Center from Route 9.

Village Center Gateway

1. Improve pedestrian safety and calm traffic by narrowing the intersection along the northern edge. Add on-street parking on one side of E. Main St. to further calm traffic and provide parking for nearby businesses.
2. Consider one of the following options for the Zion Park property:
   - Mixed-use buildings with outdoor dining on E. Main St., a shared parking lot for residential units, commercial uses, and the church, and single-family housing on Andrews Pl. This option would provide economic benefits to Zion Church, which owns the property, and the Village, by making the land taxable.
   - Retain the existing park and parking area under the control of Zion Church.
   - Purchase the property or its development rights from Zion Church to allow the park to be maintained under Village control, and consider sharing the parking with commercial uses.

The design concepts and recommendations were incorporated into the Village's *Downtown and Waterfront Revitalization Strategy* that was adopted in 2011.

CR 93 Corridor Management Plan (2011)

The Town of Wappinger requested that the Dutchess County Department of Public Works and Transportation Council develop a Corridor Management Plan (CMP) for CR 93 (Myers Corners Rd.). The CMP's objective was to identify and recommend policies and projects to improve vehicular and non-vehicular travel along CR 93. The key recommendations are listed below:

Land Use & Zoning

1. Preserve the Meadowbrook Farm and open space and agricultural portions of the Reese property.
2. Pursue redevelopment opportunities at the Wappinger Plaza and adjacent areas, on the Reese property, and along the Route 9 corridor.
3. Implement access management along CR 93 by limiting the number of driveways, providing connections between sites, and encouraging shared parking.
4. Move buildings closer to the street and provide parking to the rear of buildings wherever possible.
5. Modify the Town's Zoning Law to require consideration of access management strategies and sidewalks and other pedestrian infrastructure in site plans.
6. Consider incorporating maximum parking requirements, reduced minimum parking requirements, and shared parking requirements into the Town Zoning Law.

7. Incorporate *Greenway Connections* principles into the Town Zoning Law where applicable and appropriate.

Short-Term Travel Improvements

1. Install turn pockets at key locations:
   - Left turn pocket on Route 9D southbound, right turn pocket on Route 9D northbound, and separate turn lanes on CR 93 at Route 9D.
   - Right turn pocket on CR 93 westbound at Major MacDonald Way.
   - Left turn pocket on Old Route 9 northbound.
   - Left turn pocket on Losee Rd. and right turn pocket on CR 93 eastbound at Losee Rd.
   - Left turn pocket on Spook Hill Rd. and left turn pocket on CR 93 westbound at Spook Hill Rd.
   - Left turn pocket on CR 93 westbound at Myers Corners Elementary School driveway.
   - Left turn pocket on CR 93 eastbound at DeGarmo Hills Rd.
   - Left turn pocket on Route 376 northbound and right turn pocket on CR 93 at Route 376.
2. Signal changes:
   - Signal phasing changes on CR 93 at Route 9D and Route 9.
   - Signal timing improvements on CR 93 at Route 9D, Route 9, Marshall Rd., Ketcham High School driveway, Laerdal Driveway East, and CR 94.
   - Signal equipment upgrades at Old Route 9, Ketcham High School driveway, and Laerdal Driveway East.
   - New traffic signal at Spook Hill Rd.
3. Access Management at Wappinger Plaza driveway (right-in/right-out), Blackthorn Loop West (right-in/right-out), and Laerdal Driveway West (right-in/right-out).
4. Advance school signage and “No Turn on Red” sign at Route 9D.
5. Install new or repaint stop bars on Major MacDonald Way, Wappinger Plaza driveway, Losee Rd., Robert Ln., Spook Hill Rd., Blackthorn Loop West and East, Ervin Dr., Kent Rd., Laerdal Driveway East and West, and DeGarmo Hills Rd.; and on CR 93 at Spook Hill Rd., and Route 376.
6. Improve intersection sight distance at Major MacDonald Way and Ervin Dr.
7. Improve pavement condition on CR 93 at Old Route 9.

Long-Term Travel Improvements

1. Install a roundabout at the CR 93/CR 94 intersection.
2. Intersection realignment at:
   - Route 9D and Randolph School driveway
   - Blackthorn Loop East and Ketcham High School driveway
   - Kent Rd. and Quaker Hill Rd.
3. Install new traffic signals at Route 9D/Randolph School driveway, Blackthorn Loop East/Ketcham High School driveway, Kent Rd./Quaker Hill Rd., Losee Rd., and DeGarmo Hills Rd.
4. Provide sidewalks between Route 9D and Ketcham High School on the north side of CR 93, and between Ketcham High School and Route 376 on the south side of CR 93.
5. Provide crosswalks on CR 93 at Route 9D, Major McDonald Way, Old Route 9, Route 9, Losee Rd., Spook Hill Rd.,

Blackthorn Loop West, Ketcham High School driveway, Kent Rd., Laerdal Driveway East, and DeGarmo Hills Rd.

6. Provide five-foot shoulders along CR 93 for bicycle use.
7. Transit:
   - Improve existing service by increasing frequencies
   - Consider a new fixed route on CR 93
   - Consider connections to Wappinger Plaza and the Laerdal property
   - Promote paratransit services
8. Transportation Demand Management:
   - Promote transit, carpooling, vanpooling, bicycling, and walking with the help of employers, schools, and shopping areas within the corridor.
   - Target large employers, educational institutions, and large shopping centers to encourage use of regional strategies.

Dutchess County Bus Service Expansion Feasibility Study (2013)

The Dutchess County Bus Service Expansion Feasibility Study was completed to determine the feasibility of expanding Dutchess County bus services within the City of Poughkeepsie, without adding additional costs to Dutchess County. The Bus Study also sought to determine the feasibility for Dutchess County to realize a positive financial return if it became the sole public bus operator in the City. The Study was administered by Dutchess County, through the Transportation Council and included a financial and operational review of the City of Poughkeepsie bus system. This review addressed topics such as staffing, capital equipment, and compliance with federal and State requirements. It also included a service analysis of the City of Poughkeepsie bus system, comparing it to services already provided by the County and recommending timetable and route adjustments to existing DCPT bus routes that would serve City residents without adding additional costs to Dutchess County.

The Bus Study proposed the creation of four new DCPT routes that would significantly expand its service in the Poughkeepsie area, while also replacing existing City routes:

1. Route H: providing service from the transit hub to Vassar College, Adams, Stop-and-Shop, and Kmart, using Main St., Fulton St., Collegeview Ave., Fairmont St., and Route 44.
2. Route I: providing service from the transit hub to Saint Francis Hospital, DCC, and the Poughkeepsie Housing Authority, using Washington Ave., E. Cedar St., Pendell Rd., Creek Rd., and Smith St.
3. Route J: providing service from the transit hub to Vassar Brothers Medical Center, Saint Simeon/Fox Hill housing developments, and Vassar College, using Jefferson St., South Ave., Montgomery St., Hooker Ave., and Raymond Ave.
4. Route K: providing service on lower Main St. from the transit hub to the Poughkeepsie train station, using Mansion St., Donegan Pl., and Main St.

Based on the operational estimates associated with the proposed new routes and the marginal operating costs for DCPT, the Bus Study determined that the County could expand its service in the City without adding costs – however, this

could only occur under a set of prearranged conditions, the most notable being the transfer of capital equipment at no cost to the County and the use of the City's share of federal transit funding.

Beacon Main Street Parking Analysis (2014)

Funded through the Transportation Council, the Dutchess County Planning Department completed an analysis of parking conditions in the area in and around the Main St. corridor in the City of Beacon. The Parking Analysis included an inventory of existing parking capacity and utilization, and an assessment of future needs based on planned development in the City.

The Parking Analysis indicated that, outside of specific street segments or lots at specific time periods, overall parking utilization rates did not exceed 85 percent. This indicated that capacity was sufficient to meet demand. However, the east and west ends of Main St. contained areas exceeding 85 percent utilization. In the east (the area east of Fishkill Ave.), the highest rates occurred on Saturday evenings. In the west (the area west of Elm St.), the highest rates occurred during weekday afternoons. The parking counts also indicated that there was underutilized capacity on side streets and lots around activity centers in the east and west ends of Main St. Most side streets, portions of Main St., and numerous lots remained well below the 85 percent rate.

The Parking Analysis recommended a variety of strategies to improve parking capacity and vehicle turn-over:

1. Increase shared use of private parking lots.
2. Develop additional on-street capacity along the Van Nydeck St. corridor in the eastern section of Main St.
3. Add parking at the Madam Brett House.
4. Encourage better parking utilization by striping parking spaces, closing defunct curb cuts, and adjusting access to and from Main St. (one-way/two-way streets).
5. Charge for parking and enforce parking regulations.
6. Develop a Center City Benefit Fund to implement parking and other center city transportation improvements.
7. Adjust parking regulations in the Zoning Code.
8. Install consistent wayfinding signs to public parking.
9. Improve the biking and walking environment of Main St.
10. Enhance Main St. bus service.

Natural & Historic Resources

The Transportation Council reviewed natural and historic resource information from the State and County to identify potential constraints relevant to transportation planning in the Lower Hudson area. This process started with an inventory of 100-year and 500-year floodplains, NYSDEC wetlands, federal, State, and locally designated parklands, agricultural lands, critical environmental areas, and designated historic districts. These resources are shown on the Lower Hudson Natural & Historic Resources Map.

Waterbodies & Watersheds

Major waterbodies in the area include the Hudson River;

Wappinger Lake in the Towns of Poughkeepsie and Wappinger and the Village of Wappingers Falls; Cobalt Lake in the Town of Poughkeepsie; Wappinger Creek; Fishkill Creek; Casperkill Creek; Fallkill Creek; Clove Creek; Oniad Lake in the Town of Wappinger; and Lake Valhalla in the Town of Fishkill.

The northern and western-most portion of the area, including the City of Poughkeepsie, most of the Town of Poughkeepsie, and the western half of the City of Beacon is part of the Hudson River watershed. The central portion of the area, including the Village of Wappingers Falls and most of the Town of Wappinger is part of the Wappinger Creek watershed. The southeastern portion of the area, including the Village of Fishkill, most of the Town of Fishkill, and the eastern half of the City of Beacon is part of the Fishkill Creek watershed.

Floodplains

Floodplains make up a large percentage of some Lower Hudson communities, as shown in Table 6-1-10. The Town of Fishkill has the highest percentage of land area within 100-year and 500-year floodplains of all municipalities in the county, and ranks first in the county based on acreage of land in 100-year and 500-year floodplains.

Table 6-1-10. Floodplains-Lower Hudson

	Total Floodplain Acreage	Percent of Land Area
City of Beacon	304	10
City of Poughkeepsie	443	12
Town of Fishkill	4,711	24
Town of Poughkeepsie	2,981	15
Town of Wappinger	2,027	12
Village of Fishkill	114	22
V. of Wappingers Falls	88	12

A number of transportation facilities in the Lower Hudson are subject to periodic flooding due to their location within designated 100-year and 500-year floodplains, NYSDEC wetlands, or adjacent waterbodies. These include:

1. Winnikee Ave., Pershing Ave., Mansion St., a portion of Mill St., and other areas adjacent to the Fallkill Creek in the City of Poughkeepsie.
2. Salt Point Turnpike in the Town of Poughkeepsie.
3. Tucker Dr. in the Town of Poughkeepsie.
4. Old Manchester Rd. in the Town of Poughkeepsie.
5. Old Hopewell Rd. between Route 9D and Route 9 in the Town of Wappinger.
6. Elm St. near Route 9 in the Village of Fishkill.
7. Route 9D in the Town of Wappinger.
8. Creek Rd. in the Village of Wappingers Falls.
9. Metro-North Railroad Hudson Line.

Agriculture & Open Space

The Dutchess County Planning Department's Centers and Greenspaces Guide identifies suburban development and areas susceptible to suburban development, defined as parcels under five acres that are outside of centers. These areas are concentrated in the eastern and southern portions

of the Town of Poughkeepsie, much of the Town of Wappinger, and the northern portion of the Town of Fishkill. The guide also identifies protected and agricultural lands, which are concentrated in the southern portion of the Town of Fishkill, northeast corner and eastern boundary of the Town of Wappinger, and southwestern corner of the Town of Poughkeepsie.

The Lower Hudson contains 1,449 acres of land that received agricultural value assessments in 2014. These assessments identify properties with active farms, nurseries, stables, or other agricultural operations. The agricultural assessed lands represent 2 percent of the area's total acreage. Table 6-1-11 shows the total acreage of agricultural assessed lands by municipality and its share of each municipality's land area.

Table 6-1-11. Agricultural Assessed Land-Lower Hudson

	Total Agricultural Assessed Acreage	Percent of Land Area
City of Beacon	0	0
City of Poughkeepsie	0	0
Town of Fishkill	48	<1
Town of Poughkeepsie	226	1
Town of Wappinger	1,174	7
Village of Fishkill	0	0
V. of Wappingers Falls	0	0

The Lower Hudson also contains 2,688 acres of land certified by the NYS Department of Agriculture & Markets as Agricultural Districts. These districts contain locally-designated parcels that currently serve or could serve agricultural purposes. Agricultural districts represent about 4 percent of the area's total acreage and include most of the agriculturally assessed lands. Table 6-1-12 shows total agricultural district acreage by municipality and its share of each municipality's land area.

Table 6-1-12. Agricultural Districts-Lower Hudson

	Total Agricultural District Acreage	Percent of Land Area
City of Beacon	0	0
City of Poughkeepsie	0	0
Town of Fishkill	423	2
Town of Poughkeepsie	588	3
Town of Wappinger	1,677	9
Village of Fishkill	0	0
V. of Wappingers Falls	0	0

Five open space areas in the Lower Hudson are protected under Dutchess County's Partnership for Manageable Growth:

1. Carnwath Farm (95 acres) in the Town of Wappinger.
2. Forbus Butternut (0.5 acres) in the City of Poughkeepsie.
3. Hiddenbrooke (88 acres) in the City of Beacon.
4. Locust Grove (29 acres) in the Town of Poughkeepsie.
5. Peach Hill (158 acres) in the Town of Poughkeepsie.

The Lower Hudson hosts 4,688 acres of major federal, State, and local parkland. Key parks include:

1. Waryas Park (5 acres) in the City of Poughkeepsie.

2. Walkway Over the Hudson State Park (10 acres) in the City of Poughkeepsie.
3. College Hill Park (106 acres) in the City of Poughkeepsie.
4. Quiet Cove Riverfront Park (32 acres) in the Town of Poughkeepsie.
5. Bowdoin Park (319 acres) in the Town of Poughkeepsie.
6. Dutchess Rail Trail (77 acres) in the Towns of Poughkeepsie and Wappinger.
7. Stony Kill Farm Environmental Education Center (731 acres) in the Town of Wappinger.
8. Hudson Highlands State Park (1,305 acres) and Mount Beacon (239 acres) in the Town of Fishkill.

Critical Environmental Areas

The Lower Hudson includes five locally designated Critical Environmental Areas (CEAs), which are recognized by NYSDEC as having significant impacts on the natural environment:

1. Dutchess Airport Landfill Site and Dutchess Airport Balefill (inactive landfills; toxic pollutants present).
2. Town of Fishkill aquifer protection areas (various sites; to protect public water supply).
3. Page Industrial Park on Route 55 (inactive dump, toxic pollutants present).
4. Schatz Federal Bearing Closed Landfill Site and FICA Landfill Site on Van Wagner Rd. (inactive landfill; toxic pollutants present).
5. Wappinger Lake (protection of natural resource).

The Draft New York State Open Space Conservation Plan of 2014 identifies the following Regional Priority Conservation Projects in the Lower Hudson:

1. Hudson Highlands State Park/Fishkill Ridge/Scofield Ridge.
2. Hudson River Corridor Estuary/Hudson River Estuary and Greenway Trail/ Hudson River School Art Trail/Quadricentennial Legacy Trail: Hudson River Access including the Brockway Brickyard, Beacon Long Dock, and the Poughkeepsie Pirate Canoe Club addition.
3. Hudson River Greenway Trail Links: Properties along the Hudson River that would establish a continuous trail from New York City to Saratoga County, including the Walkway Over the Hudson, the Dutchess County Greenway Trail, and the Hudson Fjord Trail.
4. Hudson Tributaries: Sites which protect habitat and provide access to stream banks of tributaries, including the Fishkill Creek, Wappinger Creek, Casperkill Creek, and Fallkill Creek.
5. Scenic Viewsheds: Sites which provide scenic vistas, including Scofield Ridge, Fishkill Ridge, Mt. Beacon, the Mid-Hudson Bridge, the Walkway Over the Hudson, and the Hudson River National Historic Landmark District.
6. Buffer, Access or Addition to Historic Sites, Conservation and Park Lands: Properties which protect the integrity of existing conservation lands or historic sites, including the Poughkeepsie Waterfront Trail, Stony Kill Farm Environmental Education Center, and Poughkeepsie Rural Cemetery lands.

7. Urban Waterfronts: Sites which implement a local plan for mixed use waterfront revitalization, including the Poughkeepsie Waterfront and Beacon Waterfront.

Historic Resources

The Lower Hudson includes a large number of designated Historic Districts:

1. Lower Main St. Historic District: several blocks of Main St. east of South Ave., in the City of Beacon (266 acres).
2. Academy St. Historic District: between Livingston and Montgomery streets in the City of Poughkeepsie (140 acres).
3. Balding Ave. Historic District: between Mansion and Marshall streets in the City of Poughkeepsie (40 acres).
4. Dwight St.-Hooker Ave. Historic District: Dwight St and Hooker Ave. between Dwight St. and Circular Rd. in the City of Poughkeepsie (60 acres).
5. Garfield Place Historic District: between Franklin and Montgomery streets, including portions of Montgomery and Barclay streets, in the City of Poughkeepsie (200 acres).
6. Mill St.-N. Clover St. Historic District: Mill and N. Clover streets, as well as parts of Davies Pl., N. Bridge St., Mansion St., Vassar St., Lafayette Pl., and Main St., in the City of Poughkeepsie (270 acres).
7. Union St. Historic District: Delano St., most of Union and S. Clover streets, and parts of Grand St., S. Bridge St., S. Perry St., Jefferson St., and Bellevue Ave., in the City of Poughkeepsie (18 acres).
8. Upper Mill St. Historic District: Mill St., Garden St., and Catherine St. in the City of Poughkeepsie (60 acres).
9. Main St. Historic District (New Hamburg): between Bridge St. and Stone St. in the Town of Poughkeepsie (10 acres).
10. Stone St. Historic District: between Division St. and Bridge St. in the Town of Poughkeepsie (10 acres).
11. Wappingers Falls Historic District: includes properties on Andrews Pl., Dutchess Ave., Dutchess Terr., E. and W. Main St., Givens Ave., High St., Market St., Mill St., N. and S. Mesier Ave., Park St., South Ave., and Upper Henry St., as well as the Dutchess Bleachery and Mesier Park, in the Village of Wappingers Falls (900 acres).
12. Wheeler Hill Historic District: includes the Obercreek, Elmhurst, Edge Hill, Suydam, Crosby and Carnwath Farms estates, in the Town of Wappinger (3200 acres).
13. Fishkill Village Historic District: includes Main St. and Broad St. and the roads connecting them in the Village of Fishkill (180 acres).

There are also many historic sites in the area, particularly in the cities of Beacon and Poughkeepsie, and villages of Fishkill and Wappingers Falls.

Transportation Needs

Based on a review of local comprehensive plans, previous Transportation Council studies, and transportation system data, the Transportation Council identified a series of transportation needs in the Lower Hudson. These needs were reviewed at two Lower Hudson public workshops and revised

based on feedback from the workshops and a public survey. The revised list of needs includes the following items:

Highway Maintenance (by municipality)

Multiple Municipalities

1. Inventory pavement conditions on local streets and repave based on condition ratings.

Reconstruct or repave the following road segments with poor surface scores based on NYSDOT and Dutchess County standards:

City of Poughkeepsie

1. Academy St. between Cannon St. and Main St. (0.07 miles).
2. Market St. between Route 44 (Church St.) (eastbound) and Main St. (0.18 miles).
3. Reservoir Square between S. Clinton St. and S. Clinton St. (1.12 miles).
4. S. Grand Ave. between Fountain Brook Ave. and Town of Poughkeepsie line (0.40 miles).
5. De Laval Pl. between Innis Ave. and N. Grand Ave. (0.12 miles).

Town of Poughkeepsie

1. Route 115 (Salt Point Turnpike) from Hudson Ave. to Innis Ave. (0.3 miles).
2. Van Wagner Rd. between Hornbeck Rd. and bridge PO-4 (0.87 miles).

Village of Wappingers Falls

1. Market St. between the Town of Wappinger line and Fulton Ave. in the Village of Wappingers Falls (0.35 miles).

Bridge Maintenance

Bridges rated as structurally deficient under FHWA standards or deficient under NYSDOT standards should be repaired or closed if necessary, with replacement priority given to the following bridges:

1. I-84 over Metro-North Railroad Beacon Line (BIN 1032481) in the Town of Fishkill.
2. Route 9D over I-84 (BIN 1006360) in the Town of Fishkill.
3. Route 9D over the Fishkill Creek (BIN 1006340) in the City of Beacon.
4. Route 9 over Railroad Plaza (BIN 1005319) in the City of Poughkeepsie.
5. Route 44 over Route 9 (BIN 1005290) in the City of Poughkeepsie.
6. High St. over Fall Kill Creek (BIN 2262690) in the City of Poughkeepsie.
7. Mansion St. over Fall Kill Creek (BIN 2262750) in the City of Poughkeepsie.
8. Washington St. over Fall Kill Creek (BIN 2262670) in the City of Poughkeepsie.
9. CR 43 (Degarmo Rd.) over Wappinger Creek (BIN 3358440) in the Town of Poughkeepsie (LaGrange town line).

If funding becomes available, the following low-volume, NYSDOT deficient bridge could be repaired:

1. Reed Ave. over Metro-North Railroad Hudson Line (BIN 2262890) in New Hamburg (Town of Poughkeepsie) (2012 AADT of 232).

Highway Capacity

1. As part of redevelopment of the former Hudson River Psychiatric Center, explore a new road between Route 9 and Route 9G and consider developing a secondary street along the CSX East Branch to connect the property to Fulton St. and Parker Ave., as recommended in the *Route 9 Land Use and Transportation Study* (Town of Poughkeepsie).
2. Add a slow-speed pedestrian- and bicycle-friendly street (such as a bicycle boulevard with sidewalks) east of Route 9 between Myers Corners Rd. and New Hackensack Rd., using Imperial Boulevard and the area behind Hannaford, west of Marshall Rd., consistent with the *CR 93 (Myers Corners Road/Middlebush Road) Corridor Management Plan*, the *Village of Wappingers Falls Route 9 Study*, and the Town of Wappinger's Comprehensive Plan. Include east-west connections to East Main St. and Old Route 9, and a northern connection from New Hackensack Rd. to North Mesier Ave. (Town of Wappinger/Village of Wappingers Falls).
3. Pursue innovative ways to increase capacity and reduce congestion at the Route 9D/CR 28 (New Hamburg Rd) intersection in the Hughsonville hamlet (Town of Wappinger.
4. Reduce congestion on the following State highways:
   a) Route 9 between I-84 and Route 55/44:
      - Northbound: Mid-day, PM, and Saturday
      - Southbound: PM and Saturday

      In particular, examine signal timing along Route 9 and identify ways to reduce congestion on the two-lane southbound segment (south of Mesier Ave.)

   b) Route 52 between I-84 and the Taconic State Parkway
      - Eastbound: PM
      - Westbound: PM

      In particular, examine signal timing or other changes to improve traffic flow on Route 52 through the Village of Fishkill.

   c) Route 9D between I-84 and Route 9
      - Northbound: AM and PM
      - Southbound: AM and PM

Traffic Operations (by municipality)

Multiple Municipalities

1. Limit the number of access points on state and county roads and require new commercial developments to share driveways and to internally link circulation or service roads between adjacent parcels.

City of Beacon

1. Improve Route 9D between Beekman St. and the intersection with I-84 to handle increased traffic.
2. Improve parking as detailed in the *Beacon Main Street Parking Analysis* (2014), specifically:
   - Increase shared use of private parking lots.

- Develop additional on-street parking along the Van Nydeck St. corridor in the eastern section of Main St.
- Add parking at the Madam Brett House.
- Encourage better parking utilization by striping parking spaces, closing defunct curb cuts, and adjusting access to and from Main St. (one-way/two-way streets).
- Charge for parking based on demand and enforce parking regulations.
- Develop a Center City Benefit Fund to implement parking and other center city transportation improvements.
- Adjust parking regulations in the Zoning Code.
- Install consistent wayfinding signs to public parking.
- Improve the biking and walking environment of Main St.
- Enhance Main St. bus service.

City of Poughkeepsie

1. Redesign the Route 9/44/55 interchange to improve traffic safety and operations.
2. Redesign Market St. to allow two-way traffic between Church St. and Mill St, as outlined in the *Main Street Economic Development Strategy*. Incorporate pedestrian crossing improvements, including marking a crosswalk across the west leg of Route 44/55 westbound (Mill St.). Consider a 'road diet' to reduce the number of lanes and add on-street parking and bicycle facilities.
3. Redesign Route 44/55 eastbound and westbound arterials between the City Center and surrounding neighborhoods to be walkable boulevards, as outlined in the *Main Street Economic Development Strategy*. Consider changing from three one-way lanes to either two one-way lanes and one lane the opposite direction, or two lanes with a median, bike lanes, or on-street parking on both sides. Reconfigure the curve behind the Civic Center to slow traffic and shorten the crossing distance at Main St.
4. Reconfigure the Washington-Mill St. merging lanes as a more traditional intersection to eliminate the curve behind the Civic Center, slow traffic and shorten the crossing distance at Main St, as shown in the *Poughkeepsie Waterfront Redevelopment Strategy*.
5. Replace or install traffic signals at the following intersections:
   - Washington St. and Parker Ave. (new signal)
   - Academy St. and Cannon St. (replace signal)
   - Mill St./N. Clover St./Donegan Pl. (replace signal)
6. Reconstruct the Creek Rd./Smith St./Little George St. intersection into a roundabout to improve safety and reduce congestion. Incorporate sidewalks and crosswalks across all legs of the roundabout.
7. Redesign the Route 44/55-Smith St.-Clinton St. intersection to improve safety, direct truck traffic away from Smith St., and create a new Clinton Square, as described in the *City of Poughkeepsie Transportation Strategy*.
8. Open Liberty St. (between Main St. and Cannon St.) to slow-speed, one-way traffic with a pedestrian walkway.
9. Improve Water St. to include on-street parking on one side, as shown in the *Poughkeepsie Waterfront Redevelopment Strategy*.
10. Add a southbound entrance to Route 9 south of the Hoffman Street Bridge.

11. Improve operations at the Main St/Grand Ave intersection.

Town of Poughkeepsie

1. Reduce evening peak hour congestion on:
   - CR 77 (Vassar Rd.) between Spring Rd. and CR 110 (Jackson Rd.).
   - Route 376 between DeGarmo Hills Rd. and CR 104 (New Hackensack Rd.).
   - Spring Rd. between Route 9 and Kerr Rd.
2. As part of redevelopment of the former Hudson River Psychiatric Center, establish a direct connection to the Mid-Hudson Plaza, and align the former Psychiatric Center entrance with Quiet Cove Park.
3. Realign the Marist north gate intersection to the Winslow Gate traffic signal at the entrance to the former Hudson River Psychiatric Center and the Mid-Hudson Plaza, and maintain right-in/right-out movements at the existing Mid-Hudson Plaza driveway.

Town and Village of Fishkill

1. Reconstruct the I-84/Route 9D interchange to reduce delays and improve safety. In the short-term, adjust the signal at I-84/Route 9D to provide more time for left turns out of the Beacon train station between 3-7 p.m., and/or add a second left turn pocket on Route 9D northbound onto the I-84 bridge.
2. Coordinate traffic signal timing on Route 52 between I-84 and Jackson St.
3. Provide separate turn lanes on Cedar Hill Rd. to facilitate right turns onto Route 52.
4. Reduce cut-through traffic on Florence Ave. by re-timing the signal at Route 52/Jackson St. to accommodate church traffic on Saturday evenings and Sunday mornings.
5. Reduce speeds and cut-through traffic by restricting the Route 52/Cary Ave. intersection to right-in/right-out only, installing speed tables on Broad St., and making the Smith St./Elm St. and Broad St./Jackson St. intersections all-way stop controlled.
6. Consider traffic calming on Route 9D near Dogwood Ln. and Chiappardi Pl.

Town of Wappinger

1. Widen approaches on CR 28 (Old Hopewell Rd.) at CR 94 (All Angels Hill Rd.) to accommodate turn lanes, improved shoulders, and channelization.
2. Implement access management on Route 9 by removing traffic signals where feasible, providing left turn lanes, consolidating driveways to reduce conflict points, and providing access between commercial parking areas.
3. Improve operations along CR 93 (Myers Corners Rd.) as detailed in the *CR 93 (Myers Corners Rd/Middlebush Rd) Corridor Management Plan (2011)*, specifically:
   i. Provide left turn pockets at various intersections on Route 9D, CR 93, and Route 376.
   ii. Provide right turn pockets at various intersections on Route 9D and CR 93.
   iii. Improve traffic signal timing at intersections on CR 93 including Route 9D, Route 9, Marshall Rd., Ketcham High School Driveway, Laerdal Driveway East, and CR 94 (All Angels Hill Rd.).

iv. Upgrade signal equipment on CR 93 at Old Route 9, Ketcham High School Driveway, and Laerdal Driveway East.
v. Install a traffic signal on CR 93 at Spook Hill Rd.
vi. Implement access management on CR 93 at Blackthorn Loop West, Laerdal Driveway West, and at DeGarmo Hills Rd.
vii. Consider construction of a roundabout at the CR 93 (Myers Corners Rd.)/CR 94 (All Angels Hill Rd.) intersection.
viii. Realign and signalize intersections on CR 93 at Route 9D and the Randolph School driveway; Blackthorn Loop East and the Ketcham High School driveway; and Kent Rd. and Quaker Rd. (if development occurs).

Village of Wappingers Falls

1. Create a four-way intersection at Route 9 and E. Main St. by providing a new connection on the eastern leg from Imperial Blvd. to E. Main St. Move the existing commercial parking access on the northeast corner further from the intersection, stripe high-visibility crosswalks on all four legs of the intersection, narrow the travel lanes to allow for a planted median and pedestrian refuge islands, and remove the right turn slip lane at the northwest corner and extend the curb to shorten the crossing and reduce pedestrian-vehicle conflicts. Add a high-visibility crosswalk with a pedestrian refuge island across Route 9 on the north side of E. Main St.

Safety (by municipality)

1. Improve roadway safety at high-crash locations identified in the *Moving Dutchess 2* crash analysis.
2. Improve pedestrian and bicycle safety at high-crash corridors identified in *Walk Bike Dutchess*.
3. Deploy Emergency Vehicle Signal Preemption technology at major intersections along the Route 9 corridor, with Route 9/Fulton St. in the Town of Poughkeepsie as a top priority.

City of Beacon

1. Install traffic calming elements, such as raised crosswalks, on Beekman St. and West Main St.

City of Poughkeepsie

1. Conduct a comprehensive safety assessment focused on walking and bicycling on Main St. and implement changes to improve safety.
2. Improve safety for people traveling by car or bicycle between the Dutchess Rail Trail at Morgan Lake and Creek Rd. In particular, improve sight distance for left turns onto Creek Rd and from Creek Rd to the rail trail.

Town of Poughkeepsie

1. Work with the Arlington School District and Town of Poughkeepsie to develop a Safe Routes to School Plan for Arthur S. May Elementary School (at the former Arlington Middle School site), defining recommended walking and bicycling routes to the school. Implement sidewalk and crossing improvements, as well as signage and signal

timing adjustments along the designated routes as needed. Incorporate education, enforcement and encouragement strategies to improve safety for students walking or bicycling to school.

Town of Wappinger

1. Improve horizontal alignment, sight distance and safety on CR 28 (Old Hopewell Rd.) from Route 9 to CR 94 (All Angels Hill Rd.).
2. Improve horizontal alignment, sight distance and safety on CR 93 (Myers Corners Rd.) from CR 94 (All Angels Hill Rd.) to Route 376.
3. Improve intersection sight distance on CR 93 at Major MacDonald Wy and Ervin Dr.
4. Increase safety for bicyclists and pedestrians on Route 9D.

Town & Village of Fishkill

1. Consider safety improvements on Merritt Blvd. to reduce crashes on this corridor.
2. Improve pedestrian safety and crosswalks at Route 9/Route 52 and at Route 9/Church St. (Shop Rite plaza).

Village of Wappingers Falls

1. Install curb extensions on Main St. at the Market St. corners (two); Mill St. corners (two); in front of the Knights of Columbus building (just west of Wheel & Heel bike shop); at Church Street; and just north of Givans Ave. while accommodating turning vehicles. Stripe new shorter crosswalks across Main St. on both sides of Mill St. and Market St., across Mill St., and across Market St., and continue enforcement and education efforts to improve pedestrian safety on E. Main St.
2. Consider high-visibility crosswalks, signage, and other pedestrian crossing improvements at the following locations: Route 9/CR 104 (New Hackensack Rd.), Route 9 at E. Main St., Route 9 at Old Route 9, Route 9 at McDonalds/Planet Fitness (between E. Main St. and Wenliss Terr.), W. Main St. (Route 9D)/School St., W. Main St. (Route 9D)/Convent Ave., and E. Main St./W. Main St..

Transit

1. Provide fixed route service every 15-30 minutes in the City and Town of Poughkeepsie, Towns of Fishkill and Wappinger, City of Beacon, and Villages of Fishkill and Wappingers Falls.
2. Develop an integrated fare system and coordinated marketing between Dutchess County Public Transit and the City of Poughkeepsie transit system.
3. Establish timed transfers between Dutchess County Public Transit and City of Poughkeepsie buses.
4. Improve coordination with Metro-North schedules.
5. In coordination with the City of Poughkeepsie, consider expanding Dutchess County Public Transit service to improve access to destinations and increase frequency and hours of service in the City of Poughkeepsie.
6. Add signs, bus stop shelters, route maps, timetables, and lighting to bus stops.
7. Provide better information about the bus routes and schedules, including making maps and schedules easier to use.

8. Develop real-time location/arrival information.
9. Improve transit access to local colleges.
10. Improve transit service to tourist destinations.
11. Consider expanded evening service, Sunday service, and holiday service.
12. Consider providing additional bus service to train stations.
13. Provide express service on key corridors like Route 9.
14. Establish frequent (every 15 minutes) transit service along Main St. in the City of Poughkeepsie to connect the waterfront and train station with businesses, neighborhoods, and Vassar College, as outlined in the Main Street Economic Development Strategy.
15. Consider a new fixed bus route on CR 93 (Myers Corners Rd.), with stops at the Hannaford Plaza and Laerdal property in the Town of Wappinger.
16. Provide a centralized, multi-floor parking facility for the Beacon Train Station.
17. Improve bus access to the New Hamburg Train Station from the Village of Wappingers Falls.
18. Improve pedestrian access to County bus service for Village of Wappingers Falls residents on the east side of Route 9.

Sidewalks/Pedestrian Facilities, including ADA projects (by municipality)

Multiple Municipalities

1. Provide consistent sidewalks on Route 9 south of Kingwood Park/IBM Road, particularly between IBM Rd. and Mesier Ave., and between CR 93 (Middlebush Rd./Myers Corners Rd.) and CR 28 (Old Hopewell Rd.) in the Town of Wappinger.
2. Set specific opening and closing hours on the Newburgh-Beacon Bridge walkway/bikeway and Mid-Hudson Bridge walkway, which could vary by season. Longer-term, extend the walkway/bikeway hours, ideally to 24 hours. Install lighting or other measures as needed for security.
3. Improve yielding for pedestrians at crosswalks through signage and education.
4. Improve sidewalks and intersections on State Roads to meet ADA standards, based on NYSDOT's inventory:
   - Route 9: one intersection and one sidewalk segment in the Town of Poughkeepsie, and one intersection (at Scenic Dr) in the Town of Wappinger.
   - Route 9D: one intersection (at Clinton St.) and one sidewalk segment in the Village of Wappingers Falls, and one intersection (Wolcott Ave. at Beekman St.) in the City of Beacon.
   - Route 44: 11 locations in the City of Poughkeepsie and 14 in the Town of Poughkeepsie.
   - Route 52: three sidewalk segments in the Village of Fishkill.
   - Route 55: one sidewalk segment in the Town of Poughkeepsie.
   - Route 113: two intersections and two sidewalk segments in the Town of Poughkeepsie.
   - Route 376: four intersections and three sidewalk segments in the Town of Poughkeepsie.

City of Beacon

1. Improve visibility at the I-84/Route 9D intersection by clearing vegetation near the intersection and relocating the fence at the northwest corner of the intersection. Consider supplemental signage to encourage turning drivers to yield to people in the crosswalk, and add a leading pedestrian interval to allow people on foot to start crossing before vehicles get a green signal.
2. Improve pedestrian access to the Beacon Train Station: provide a sidewalk on the northwest side of Beekman St. to complete the gap between West Main St. and the existing sidewalk south of River St. Create a new sidewalk or path south of City Hall between Beekman St. and Wolcott Ave./Route 9D to connect the train station and Main St. Consider a formal path or sidewalk connection between Ferry St. and Wolcott Ave./Route 9D, complete with stairs, handrails, and signage. Create a sidewalk or path along Red Flynn Dr. between the Beacon ferry dock and Riverfront Park.
3. Install a sidewalk on the east side of Route 9D from Hillside Rd. to the University Settlement Camp near Craig House Lane. Alternatively, mark crosswalks at appropriate crossing locations across 9D.
4. Improve access to Madam Brett Park: Mark a crosswalk on the east side of the Tioronda Ave./Wolcott Ave. intersection, and install a sidewalk or path on one side of Tioronda Ave. between Wolcott Ave. and South Ave. A path could continue south on South Ave. under the rail line and west to Madam Brett Park.

City of Poughkeepsie

1. Improve pedestrian access to Dutchess Community College: Install a sidewalk along Creek Rd. from Smith St. to the DCC entrance (at the crosswalk between the parking lot and Hudson Hall), including an extension of the sidewalk on the north side of Smith St. to Creek Rd., and possibly extending on Creek Rd. to Cottage Rd. Install crosswalks, pedestrian-activated signals, and other improvements to help people safely cross Smith St. and Creek Rd.
2. Fill sidewalk gaps along Innis Ave. north of Arnold Rd. to create a continuous network and extend sidewalks from Jackman Dr. north to Salt Point Turnpike. Extend the sidewalk on the south side of Salt Point Turnpike (Route 115) from Hudson Ave. to Innis Ave., and mark high-visibility crosswalks to connect sidewalks on opposite sides of the street and provide other crossing improvements as needed.
3. Mark shoulders or edge lines on Beechwood Ave. to slow vehicles and provide some space for walking. Consider other traffic calming improvements to reduce speeds and improve safety for people walking. Longer-term, extend the sidewalk at least on one side of the street to Route 9.
4. Install a crosswalk across Hooker Ave. on the west side of Wilbur Blvd. Install a ramp, signage, and other elements as needed. Extend the existing sidewalk on the south side of Hooker Ave. from east of Austin Court to the crosswalk on the east side of Raymond Ave. Long-term, extend the existing sidewalk on the north side of Hooker Ave. from Wilbur Blvd. east to the crosswalk at Raymond Ave.

5. Improve the walkways through Waryas Park to connect Main St. and the train station with the Walkway elevator, and install crosswalks across North Water St. to improve access for people walking between the Poughkeepsie train station and Waryas Park, Upper Landing Park, and the Walkway elevator.
6. Improve the sidewalks, crosswalks, and landscaping along Smith and Cottage streets.
7. Increase awareness of pedestrian access to the Mid-Hudson Bridge walkway via the ramp at Gerald Drive. Add Walkway Loop Trail signage. Remove the sidewalk between the Route 9 ramps on the south side of the bridge. Add signage, high-visibility crosswalks, and other pedestrian safety improvements at the Route 9 ramps on the north-side of the bridge, or remove the north sidewalk and install signs directing people to the Gerald Dr. ramp instead.
8. Redesign the Washington St./Brookside Ave./Verazzano Boulevard/North Bridge St. intersection to extend the curb at the northwest corner, narrowing the intersection and reducing the crossing distance. Mark high-visibility crosswalks and stop bars on all legs of the intersection, and install pedestrian signals.
9. Redesign the Mill St./Verazzano Boulevard/Mt. Carmel Pl. intersection to extend the curb at the southwest corner, reducing the crossing distance and removing the non-standard crosswalk, and install high-visibility crosswalks and pedestrian signals for all legs of the intersection.
10. Improve access by foot to the Walkway Over the Hudson. Improve pedestrian crossings with high-visibility crosswalks, signage, curb ramps (where needed), and stop bars (where applicable) at key intersections. Consider a sidewalk 'bus bulb' (curb extension) or widened sidewalk with a bus stop shelter on Washington St. near Parker Ave. Install a bicycle rack near the stairs to the Walkway on Washington St. and consider adding a bicycle ramp or ‘stair channel’ to enable people to roll their bicycles up the stairs to the Walkway.
11. Improve sidewalks on Main St, including replacing broken sections, improving lighting (particularly under the Route 9 overpass), providing benches, and planting more street trees.

<u>Town of Poughkeepsie</u>

1. Extend the sidewalk on Route 113 (Spackenkill Rd.) from Croft Rd. to Boardman Rd. to provide access between destinations on Route 9 and Spackenkill High School, Oakwood Friends School, and schools on Boardman Rd., and provide consistent four foot minimum shoulders on Route 113 (Spackenkill Rd.), particularly near Wilbur Blvd. Mark crosswalks and add pedestrian signals at crossings.
2. Extend the sidewalk on one or both sides of Fulton St. from the Mid-Hudson shopping center (across from Beck Place) east to Children’s Way to connect to the sidewalk to Violet Avenue Elementary School. Extend the sidewalk on the north side of Fulton St. from the elementary school entrance to Route 9G, and provide a crosswalk to connect to the sidewalk on the east side of Route 9G.
3. Provide consistent sidewalks on both sides of Route 44 between Raymond Ave. and Overlook Rd., particularly between Longview Rd. and Overlook Rd., and possibly extend to CR 43 (DeGarmo Rd.). Provide crosswalks and

pedestrian signals on all legs of the Route 44/Cherry Hill Dr. intersection and the Route 44/Burnett Blvd. intersection. Adjust signal timing as needed to allow sufficient time for people to cross intersections, and provide consistent four foot minimum shoulders for bicycling on Route 44.

4. Improve pedestrian access in Red Oaks Mill: add sidewalks along New Hackensack Rd. (Route 376) between Hogan Drive and Old Mill Rd., at least on the east side; provide sidewalks on CR 77 (Vassar Rd.) from Route 113 (Spackenkill Rd.) through the commercial area; consider a sidewalk on Route 113 (Spackenkill Rd.) between Boardman Rd. and CR 77 (Vassar Rd.); and add crosswalks and pedestrian signals at the Route 376/Route 113/CR 77 intersection.
5. Construct a sidewalk or separated path on the west side of Route 9 between Marist's north gate and Quiet Cove Park, and connect with the Greenway Trail as well as future sidewalks along Route 9 in Hyde Park.
6. Provide a sidewalk on Sheafe Rd. between the elementary school (Delavergne Ave.) and the baseball park just north of Cottam Hill Rd. As a second phase, extend the sidewalk south to Bowdoin Park. Longer-term, consider access to the New Hamburg train station.
7. Mark a high-visibility crosswalk across Fairmont Ave. at Collegeview Ave., and consider an all-way stop at the intersection. Install in-street pedestal style "Yield to Pedestrians" signs at uncontrolled crosswalks.

<u>Town & Village of Fishkill</u>

1. Install a sidewalk on the north side of Route 52 from near Jeannette Dr., under I-84, to the existing sidewalk west of Blodgett Rd., and install a sidewalk on Geering Way and Central Hudson Way from Route 52 to Geering Park. Add crosswalks and pedestrian signals as appropriate.
2. Create pedestrian connections to Sarah Taylor Park and the Westage Business Center, including safe pedestrian access from the west side of Route 9 to Sarah Taylor Park; from Sarah Taylor Park to Merritt Park Condominiums; a footbridge across Fishkill Creek; bicycle access from Jackson St. south into Westage Business Center; and sidewalks on the east side of Route 9.
3. Extend the sidewalk on Route 9D north from I-84 to Dutchess Stadium, connecting to the sidewalk on the northwest side of 9D at Brockway Rd. Provide a sidewalk connecting the ramp at the southeast corner of the Route 9D/stadium entrance intersection to the stadium entrance, and add crosswalks where needed to connect sidewalk segments.
4. Create a safe crossing for pedestrians and bicyclists on the I-84 overpass on Route 9D.

<u>Town of Wappinger & Village of Wappingers Falls</u>

1. Pursue a sidewalk, path, or wider shoulders along CR 28 (Old Hopewell/New Hamburg Rd.), particularly from Route 9 or Route 9D to the New Hamburg train station, and add appropriate signs to increase driver awareness of people walking and bicycling.
2. Install a sidewalk with a landscaped buffer on CR 93 (Myers Corners Rd.): on the north side between Route 9D

and the Ketcham High School driveway, and on the south side between the high school driveway and Route 376. Incorporate a sidewalk and/or shoulders as part of the replacement of the culvert over the Lake Oniad Stream.
3. Create a connection between CR 93 (Myers Corners Rd.) and the Dutchess Rail Trail via a sidewalk and/or wider shoulders on Route 376 and on the bridge over Sprout Creek.
4. Mark crosswalks at key intersections along CR 93 such as Route 9D, Major McDonald Way, Old Route 9, Losee Rd., Spook Hill Rd., Blackthorn Loop West, Ketcham High School driveway, Kent Rd., Laerdal Driveway East, and DeGarmo Hills Rd., in coordination with other improvements.
5. Evaluate the feasibility of installing a sidewalk on Route 9D between Middlebush Rd. and the existing sidewalks on Route 9D in the Village of Wappingers Falls.
6. Construct new sidewalks on Route 9D between the Wappingers Falls Village line and Route 9, and on Mesier Ave. between Route 9 and Liss Rd.
7. Pursue sidewalks on CR 104 (New Hackensack Rd).
8. Mark crosswalks across Route 9 and CR 93 (Meyers Corners Rd.) to help people walk to the Hannaford plaza.

Multi-Use Trails & Bicycle Facilities (by municipality)

City of Beacon

1. Install bike parking at destinations including City Hall, the Beacon Visitor's Center, Post Office, Library, Dutchess County Building, DIA-Beacon, Beacon High School, and along Main St., as well as recreational areas such as the park at the base of Mount Beacon, University Settlement Camp, Madam Brett Park, and Riverfront Park. Work with MTA to provide bicycle lockers at the Beacon train station.
2. Mark sharrows on Beekman St. and Red Flynn Drive between Route 9D and the Beacon train station and ferry dock; as well as on South Ave. between Main St. and Dennings Ave., and on Dennings Ave. to the rail line. Consider sharrows on Verplank Ave and sharrows or a bike lane on Route 52 (Teller Ave/Fishkill Ave).
3. Create wider shoulders for bicycling along Route 9D, including between Beacon and the Bear Mountain Bridge.
4. Create a shared-use Greenway Trail along the waterfront from the Beacon train station to the Newburgh-Beacon Bridge access road and north into the Town of Fishkill.
5. Work with Dia:Beacon to develop a walking trail or path from Dennings Ave. to Dia:Beacon for visitors coming from Dennings Point. A loop could be created between the Beacon train station, along the Klara Sauer Trail to Dennings Point, and DIA.
6. Reconstruct the South Ave. Bridge across the Fishkill Creek to allow access by people walking and bicycling, as well as driving. This could provide a connection to the Hudson Highlands Fjord Trail via the Slocum Rd. subdivision to Route 9D.
7. Create a rail trail on the old Beacon rail line.

City of Poughkeepsie

1. Work with property owners to complete the Hudson River Greenway Trail from Quiet Cove Park at the Hyde Park Town line south to the Locust Grove Historic Site. Include connections to the Walkway elevator and around Kaal Rock Point.

2. Implement the city's nine bicycle routes in coordination with street repaving and other planned projects. Mark streets as bicycle boulevards, with bicycle lanes or sharrows, or maintain as shared lanes, as appropriate. Identify the routes with wayfinding signs, and install bicycle racks at destinations along the routes, including racks and lockers at the Poughkeepsie train station.
3. Improve conditions for bicycling along Main St, including repairing pavement and removing recessed manholes.
4. Provide bike parking at destinations throughout the city, including long-term protected bike parking at the train station.

Town of Poughkeepsie

1. Establish greenway trails along the Town of Poughkeepsie's major creek systems.
2. Pursue development of a trail along the abandoned rail spur from Morgan Lake, past Peach Hill, into Hyde Park, to West Rd. School in Pleasant Valley.
3. Pursue a trail along the Central Hudson utility corridor from Marist College east to the Hudson River Psychiatric Center property, accessing Violet Ave. Elementary School, Dutchess Community College, the Fallkill Creek, Peach Hill Park, and the abandoned rail line. Pursue a connection to the Dutchess Rail Trail near St. Peter's cemetery.
4. Construct a multi-use trail on the CSX West Branch (near Route 9 and Marist College, between Kittredge Pl. and Winslow Gate Rd.) as part of development of the 1 Dutchess Avenue site.
5. Widen shoulders along Route 376 between Cedar Valley Rd. and Red Oaks Mill Rd. (CR 44) where feasible, and improve shoulder maintenance, including pavement repair and brush clearing, particularly between Route 113 (Spackenkill Rd.) and CR 93 (Myers Corners Rd.).
6. Widen the Wilbur Blvd. path to at least 12 feet and upgrade the path to meet ADA standards to the extent practicable. Improve driveway and intersection crossings based on current design standards, and provide a transition between the southern end of the path and Wilbur Blvd. for access to Spackenkill Rd. Consider signage, pavement markings, and other elements to direct people on bicycles between the street and the path and to alert drivers of their presence. Provide a crossing and signage at Croft Rd. to direct bicyclists to Todd Middle School. Consider a pedestrian/bicycle-activated flashing light at the crossing, similar to one installed on N. Grand Ave. in the Town of Poughkeepsie at the Dutchess Rail Trail crossing.
7. Create a shared-use path along the west side of Zack's Way/Boardman Rd. between Hooker Ave./New Hackensack Rd. and Spackenkill Rd., connecting Vassar College, the Arlington neighborhood, and the Vassar Farm with the Boardman Road library, Our Lady of Lourdes High School, Poughkeepsie Day School, and destinations on Spackenkill Rd. Connect the path to walking and bicycling facilities on Hooker Ave., and improve the traffic signal at Zack's Way/New Hackensack Rd. to detect bicycles.
8. Install a sidewalk or shared-use path along the north side of Overocker Rd. between Burnett Blvd. and the Dutchess Rail Trail, and install a sidewalk or shared-use path along the east side of Burnett Blvd. from Overocker Rd. to Route 44. Mark a crosswalk across Overocker Rd. at Burnett Blvd. to connect to new sidewalks on Overocker Rd. and Burnett

Blvd. Designate a bicycle route from Fairmont Ave. to the Rail Trail using Manchester Rd., the path and crossing at Burnett Boulevard, and Overocker Rd. Connect to State Bike Route 9 at Hooker Ave. via Collegeview Ave. and Raymond Ave., or Collegeview Ave., Raymond Ave., College Ave. and DeGarmo Place. Review the signal detection (southbound) and timing at the Route 55/Burnett Blvd. intersection and make improvements to better accommodate people on bicycles. Add wayfinding signage to assist people bicycling along the route.

9. Maintain 4 foot minimum shoulders (5 feet preferred) or construct bike lanes on common bicycling routes, including CR 77 (Vassar Rd.) and Route 376.
10. Provide facilities for bicycling along the Route 9 corridor south of IBM Road.

Town and Village of Fishkill

1. Construct the Hudson Highlands Fjord Trail, a nine-mile separated path or trail along Route 9D or the Hudson River shore connecting the Beacon train station to the Village of Cold Spring train station in Putnam County and providing access to Hudson Highlands State Park, Little Stony Point, and Mount Beacon.
2. Create a trail along the Fishkill Creek, either immediately adjacent to the Creek or as a rail trail using the Beacon (Maybrook) rail line right of way, or some combination. Extend the trail into the Town and Village of Fishkill, including to Jackson St., Sarah Taylor Park, Merritt Blvd., and Westage Business Center. Extend the trail through the City of Beacon to the Hudson River and connect to the Greenway Trail along the Hudson River and the Dutchess Rail Trail in Hopewell Junction.
3. Ensure that new trails connect with existing trails on Stony Kill Farm, Mount Gulian, Scenic Hudson Land Trust lands, and other properties, and with regional trails including the Greenway Trail and the Dutchess Rail Trail.
4. Develop a trail to connect the Beacon train station to the Wappinger Greenway trail along the Hudson River.
5. Create a bicycle path or bike lanes on Route 52 west of I-84 to Beacon.

Town of Wappinger and Village of Wappingers Falls

1. Continue development of the Wappinger Greenway Trail, including a pedestrian walkway or bridge along the west side of Route 9 crossing Wappinger Lake.
2. Pursue a connection between the Greenway Trail and the Dutchess Rail Trail to link the Village of Wappingers Falls to the Dutchess Rail Trail.
3. Evaluate the feasibility of converting CR 91 (Creek Rd.) to one way southbound with a shared-use, two-way walking/bicycling path on the creek side. The path could be part of the Wappinger Greenway Trail.
4. Evaluate the feasibility of adding wider shoulders (four foot minimum) along New Hackensack Rd. and Widmer Rd. and implement where feasible.
5. Add paved shoulders (5 feet if possible) on CR 93 (Middlebush Rd.) between Route 9D and Route 9 and improve pavement; and on CR 93 (Myers Corners Rd.) between Degarmo Hills Rd. and Route 376.

Travel Demand Management

1. Promote employee-sponsored and privately arranged ride sharing in the Lower Hudson area.
2. Promote commuter bus service to train stations through 511NY and other venues.
3. Evaluate needs for additional park-and-ride lots in the Lower Hudson area.

Planning Studies/Other

1. Complete a sidewalk inventory and sidewalk improvement strategy for the City of Beacon, City of Poughkeepsie, Village of Fishkill, Village of Wappingers Falls, and Town centers in the Lower Hudson.
2. Conduct a parking survey of the Village of Wappingers Falls business district to evaluate the need for new municipal parking and provide additional parking in the Village core if needed.
3. Conduct a parking study and develop a parking strategy for downtown Poughkeepsie, particularly Main St. and the waterfront, addressing on-street parking and access to surface lots.
4. Analyze speed patterns on County and local roads, using speed data from the PDCTC's traffic count program. Identify corridors with high percentages of 'high-end' speeders (e.g., 10 mph or more over the posted speed limit) and develop engineering, enforcement, and educational approaches to reduce speeding.
5. Develop a reasonable management strategy for commercial truck traffic on Route 9D in the Village of Wappingers Falls.
6. Create a Route 9D intermunicipal Task Force. Consider a Corridor Management Plan for Route 9D to determine the appropriate character and use of the road.
7. Address truck traffic on Route 52.
8. In new development, limit dead-ends and cul-de-sacs. Instead, ensure connected streets and several sources of egress, to distribute traffic and improve access for emergency service vehicles.
9. Improve communication and coordination between NYSDOT and local communities.
10. Investigate conversion of one-way streets in the City of Poughkeepsie to two-way.

Survey Summary

Of the more than 900 respondents to the *Moving Dutchess 2* survey, 382 were residents of Lower Hudson communities. This section summarizes their responses to the survey.

In terms of making Dutchess County a great place to live, Lower Hudson residents prioritize protecting air and water quality, improving public transportation, and creating walkable communities.

Major issues identified by residents include the condition of roads; the lack of sidewalks and crosswalks; the lack of bicycle lanes and road shoulders; the frequency and schedule of buses, and lack of information about bus service. Of a list of

potential problems, the lack of safe and accessible sidewalks was noted most frequently as a current problem, followed by road congestion, and the lack of safe bicycle paths/facilities.

When asked how well the transportation system meets your needs, the most common response was 'fair' (41%), followed by 'good' (34%). When asked about the ease of getting places you usually have to go, the most common response was 'good' (40%) followed by 'fair' (37%).

Over 73% of respondents sometimes or often walk for transportation; 39% sometimes or often bicycle for transportation; 30% sometimes or often use the bus for transportation; and 91% sometimes or often use the train for transportation.

Major barriers for walking include distance to destinations (67%) and lack of sidewalks (56%); for bicycling, inadequate shoulders, bike lanes and paths (55%); for bus transit, lack of bus service where you need to go (41%); and for train transit, the high cost (44%).

Type of travel: the survey asked residents to recall their trips over the past week and categorize them based on their destination and mode (drive alone, carpool, walk, bike, bus or other). Based on this information, we estimate that about 66% of trips are drive-alone; 11% are walk; 10% are carpool; 6% are bus; 5% are bike; and 3% are other. Most drive-alone trips are for work or school, followed by shopping; most walk trips are for socializing or recreation, followed by work/school; most carpool trips are for socializing/recreation, followed by shopping; most bike trips are for work/school, followed by socializing/recreation; and most bus trips are for work/school, followed by shopping.

To reduce congestion, residents expressed support for creating communities that are less reliant on driving and improving public transportation. 60% of residents said they would use buses more often if the stops and schedules were convenient.

Land use: Close to 90% of respondents thought that most development should be within cities, town centers and villages using vacant or underutilized land. There was similarly strong support (85%) for closely-spaced housing and buildings with sidewalks, even if that meant smaller homes and yards and less parking. 75% of respondents said that infrastructure and services should be expanded primarily in and around existing town and village centers.

Residents' top three investment priorities for the next 5-10 years are improving public transportation, maintaining roads, and improving sidewalks. When asked what they would support with tax dollars, residents said walking and bicycling improvements (57%), followed by improved bus service (46%).

Demographics: Most respondents live in the City of Poughkeepsie (36%) or Town of Poughkeepsie (36%). Others live in Wappinger (10%), Beacon (8%), Fishkill (6%), Village of Fishkill (2%) or Village of Wappingers Falls (2%). About half were aged 45-64, with 26% aged 25-44, 8% under 24, and 17%

aged 65 and over. 60% of respondents were female, and 40% were male.

About 40% of households use 2 cars on a daily basis, while almost 37% use 1 car. About 9% of households don't use a car regularly. Most residents who commute to work live within 5 miles of their job. About 30% of residents have a member of their household (age 16 and older) that doesn't drive.

The top three issues cited in comments were transit concerns, walking-related issues, and bicycling facilities. Transit concerns included requests for Sunday service, more frequent service, later evening service, better information about the routes and schedules, and bus stops with signage and shelters.

Comments related to walking focused on the need for more sidewalks, with several comments about the need for sidewalk snow removal. Bicycle-related comments focused on the need for safe, dedicated bicycle facilities (such as bike paths and bike lanes) to enable people to bicycle for transportation. Several people also commented on the need for better signal timing along Route 9.

Transportation Priorities

Based on discussions of the above needs at the public workshops, feedback from the survey, and a review of feasibility, the following top priorities were identified:

Highway Maintenance

Reconstruct or repave the following road segments with poor surface scores based on NYSDOT and Dutchess County standards:

City of Poughkeepsie

1. Academy St. between Cannon St. and Main St. (0.07 miles).
2. Market St. between Route 44 (Church St.) (eastbound) and Main St. (0.18 miles).
3. Reservoir Square between S. Clinton St. and S. Clinton St. (1.12 miles).
4. S. Grand Ave. between Fountain Brook Ave. and Town of Poughkeepsie line (0.40 miles).
5. De Laval Pl. between Innis Ave. and N. Grand Ave. (0.12 miles).

Town of Poughkeepsie

1. Route 115 (Salt Point Turnpike) from Hudson Ave. to Innis Ave. (0.3 miles).
2. Van Wagner Rd. between Hornbeck Rd. and bridge PO-4 (0.87 miles).

Village of Wappingers Falls

1. Market St. between the Town of Wappinger line and Fulton Ave. in the Village of Wappingers Falls (0.35 miles).

Bridge Maintenance

Repair bridges rated as structurally deficient under FHWA standards or deficient under NYSDOT standards, with priority given to the following bridges:

1. I-84 over Metro-North Railroad Beacon Line (BIN 1032481) in the Town of Fishkill.
2. Route 9D over I-84 (BIN 1006360) in the Town of Fishkill.
3. Route 9D over the Fishkill Creek (BIN 1006340) in the City of Beacon.
4. Route 9 over Railroad Plaza (BIN 1005319) in the City of Poughkeepsie.
5. Route 44 over Route 9 (BIN 1005290) in the City of Poughkeepsie.
6. High St. over Fall Kill Creek (BIN 2262690) in the City of Poughkeepsie.
7. Mansion St. over Fall Kill Creek (BIN 2262750) in the City of Poughkeepsie.
8. Washington St. over Fall Kill Creek (BIN 2262670) in the City of Poughkeepsie.
9. CR 43 (Degarmo Rd.) over Wappinger Creek (BIN 3358440) in the Town of Poughkeepsie (LaGrange town line).

Highway Capacity

1. Add a slow-speed pedestrian- and bicycle-friendly street (such as a bicycle boulevard with sidewalks) east of Route 9 between Myers Corners Rd. and New Hackensack Rd., using Imperial Boulevard and the area behind Hannaford, west of Marshall Rd.

Traffic Operations

1. Redesign the Route 9/44/55 interchange to improve traffic safety and operations.
2. Reconstruct the I-84/Route 9D interchange to reduce delays and improve safety. In the short-term, adjust the signal at I-84/Route 9D to provide more time for left turns out of the Beacon train station between 3-7 p.m., and/or add a second left turn pocket on Route 9D northbound onto the I-84 bridge.
3. Coordinate traffic signal timing on Route 52 between I-84 and Jackson St. and evaluate other opportunities to reduce congestion.
4. Redesign the Route 44/55 eastbound and westbound arterials between the Poughkeepsie City Center and surrounding neighborhoods to be walkable boulevards.
5. Reconfigure the Washington-Mill St. merging lanes as a more traditional intersection to eliminate the curve behind the Poughkeepsie Civic Center, slow traffic and shorten the crossing distance at Main St.
6. Redesign Market St. to allow two-way traffic between Church St. and Mill St. Incorporate pedestrian crossing improvements, including marking a crosswalk across the west leg of Route 44/55 westbound (Mill St.). Consider a ‘road diet’ to reduce the number of lanes and add on-street parking and bicycle facilities.
7. Reconstruct the Creek Rd./Smith St./Little George St. intersection into a roundabout to improve safety and reduce congestion. Incorporate sidewalks and crosswalks across all legs of the roundabout.

8. Implement access management on Route 9 by removing traffic signals where feasible, providing left turn lanes, consolidating driveways to reduce conflict points, and providing access between commercial parking areas.
9. Improve traffic signal timing along Route 9 to reduce congestion, particularly on the two-lane southbound segment (south of Mesier Ave).

Safety

1. Conduct a comprehensive safety assessment focused on walking and bicycling on Main St. in the City of Poughkeepsie and implement changes to improve safety.
2. Improve roadway safety at high-crash locations identified in the *Moving Dutchess 2* crash analysis.
3. Improve pedestrian and bicycle safety at high-crash corridors identified in *Walk Bike Dutchess*.

Transit

1. Provide fixed route service every 15-30 minutes in the City and Town of Poughkeepsie, Towns of Fishkill and Wappinger, City of Beacon, and Villages of Fishkill and Wappingers Falls.
2. Establish frequent (every 15 minutes) transit service along Main St. in the City of Poughkeepsie to connect the waterfront and train station with businesses, neighborhoods, and Vassar College.
3. Add signs, bus stop shelters, route maps, timetables, and lighting to bus stops.
4. Provide better information about the bus routes and schedules, including making maps and schedules easier to use.
5. Evaluate adding Sunday service, later evening service, express service, and holiday service.
6. Establish timed transfers between Dutchess County Public Transit and City of Poughkeepsie buses.

Sidewalks/Pedestrian Facilities

1. Provide consistent sidewalks on Route 9 south of Kingwood Park/IBM Road, particularly between IBM Rd. and Mesier Ave., and between CR 93 (Middlebush Rd./Myers Corners Rd.) and CR 28 (Old Hopewell Rd.) in the Town of Wappinger.
2. Install a sidewalk on the north side of Route 52 from near Jeannette Dr., under I-84, to the existing sidewalk west of Blodgett Rd., and install a sidewalk on Geering Way and Central Hudson Way from Route 52 to Geering Park. Add crosswalks and pedestrian signals as appropriate.
3. Improve pedestrian access to Dutchess Community College: Install a sidewalk along Creek Rd. from Smith St. to the DCC entrance (at the crosswalk between the parking lot and Hudson Hall), including an extension of the sidewalk on the north side of Smith St. to Creek Rd., and possibly extending on Creek Rd. to Cottage Rd. Install crosswalks, pedestrian-activated signals, and other improvements to help people safely cross Smith St. and Creek Rd.
4. Extend the sidewalk on Route 113 (Spackenkill Rd.) from Croft Rd. to Boardman Rd. to provide access between

destinations on Route 9 and Spackenkill High School, Oakwood Friends School, and schools on Boardman Rd., and provide consistent four foot minimum shoulders on Route 113 (Spackenkill Rd.), particularly near Wilbur Blvd.

5. Improve pedestrian access in Red Oaks Mill: add sidewalks along New Hackensack Rd. (Route 376) between Hogan Drive and Old Mill Rd., at least on the east side; provide sidewalks on CR 77 (Vassar Rd.) from Route 113 (Spackenkill Rd.) through the commercial area; consider a sidewalk on Route 113 (Spackenkill Rd.) between Boardman Rd. and CR 77 (Vassar Rd.); and add crosswalks and pedestrian signals at the Route 376/Route 113/CR 77 intersection.

Multi-Use Trails & Bicycle Facilities

1. Implement the City of Poughkeepsie's nine bicycle routes in coordination with street repaving and other planned projects. Mark streets as bicycle boulevards, with bicycle lanes or sharrows, or maintain as shared lanes, as appropriate. Identify the routes with wayfinding signs, and install bicycle racks at destinations along the routes, including racks and lockers at the Poughkeepsie train station.
2. Create a shared-use path along the west side of Zack's Way/Boardman Rd. between Hooker Ave./New Hackensack Rd. and Spackenkill Rd., connecting Vassar College, the Arlington neighborhood, and the Vassar Farm with the Boardman Road library, Our Lady of Lourdes High School, Poughkeepsie Day School, and destinations on Spackenkill Rd. Connect the path to walking and bicycling facilities on Hooker Ave., and improve the traffic signal at Zack's Way/New Hackensack Rd. to detect bicycles.
3. Work with property owners to complete the Hudson River Greenway Trail from Quiet Cove Park at the Hyde Park Town line south to the Locust Grove Historic Site. Include connections to the Walkway elevator and around Kaal Rock Point.
4. Create a shared-use Greenway Trail along the Hudson River from the Beacon train station to the Newburgh-Beacon Bridge access road and north into the Town of Fishkill, and connect to the Wappinger Greenway trail.
5. Construct the Hudson Highlands Fjord Trail.

Planning Studies

1. Complete a sidewalk inventory and sidewalk improvement strategy for the City of Beacon, City of Poughkeepsie, Village of Fishkill, Village of Wappingers Falls, and Town centers in the Lower Hudson.
2. Conduct a parking study and develop a parking strategy for downtown Poughkeepsie, particularly Main St. and the waterfront, addressing on-street parking and access to surface lots.
3. Analyze speed patterns on County and local roads, using speed data from the PDCTC's traffic count program. Identify corridors with high percentages of 'high-end' speeders (e.g., 10 mph or more over the posted speed limit) and develop engineering, enforcement, and educational approaches to reduce speeding.