

TRANSPORTATION COUNCIL

Better ways from here to there

April 2023

DISCLAIMER

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There is no power for change greater than a community discovering what it cares about. - Margaret Wheatley

Great things happen when engaged Town of Dover residents work with skillful Dutchess County professionals to develop a plan and implement actions for the greater benefit of their communities- this publication is living proof. The Dover Plains Pedestrian Plan that follows is the product of the fruitful collaboration between the Dutchess County Transportation Council (DCTC) and Town of Dover residents and officials to improve and enhance the safety, walkability and aesthetics of the Town's historic Dover Plains hamlet.

The Town sincerely thanks Senior Planner Emily Dozier, Junior Planner Tara Grogan and Transportation Program Administration Mark Debald of the Dutchess County Transportation Council for their technical expertise and dedication that inspired and encouraged us through the yearlong process of plan development.

We also extend our heartfelt appreciation to the following town residents who generously volunteered their time and feedback serving on the Dover Plains Pedestrian Plan Task Force:

Supervisor Rich Yeno
Highway Superintendent Jason Sartori
Tracy Andersen
Jill Fieldstein
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We extend our sincere thanks to the NYS Department of Transportation and Metro North Railroad/Metropolitan Transportation Authority for their reviews of the draft Plan.

Lastly, we thank the following residents who assisted with pedestrian and bicycle counts of streets and intersections in the hamlet in the fall of 2022: Tracy Andersen, Marie Kaatz, Lynn Martin, Jeri Smith, and Janet Pickering.

- Supervisor Richard C. Yeno and the Dover Town Board



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Part I: Overview & Background

Infrastructure for walking plays a critical role in building healthy, vibrant communities. When we think of places we like to visit, they are usually those that are easy and enjoyable to walk around. We also know that local businesses do best where there is consistent foot traffic. People are much more likely to stop in a store if they are walking by, instead of driving down the street. The prevalence of walking is a key indicator of community vitality: lots of people walking is a clear sign of a healthy business district.

To support communities in their efforts to become more walkable, the <u>Dutchess County Transportation Council (DCTC)</u> assists local municipalities with pedestrian plans. This report is intended as a proactive tool for the Town to improve pedestrian safety and access, and demonstrates the Town's commitment to improve safety. It is not expected that all recommendations will be implemented, but that the Town will do what it can with available resources in a reasonable time period.

As the designated Metropolitan Planning Organization (MPO) for Dutchess County, the DCTC is tasked with carrying out a cooperative and comprehensive multimodal transportation planning process for the county, which includes developing and promoting accessible walking and bicycling facilities.

The Dover Plains Pedestrian Plan is the seventh DCTC-supported pedestrian plan, after studies in the Village of Rhinebeck (2011), Town of Hyde Park (2013), Town of Pine Plains (2014), Arlington Town Center (2017), Village of Millerton



Mill St in Dover Plains (looking west).

(2018), and Village of Pawling (2019). The plan was requested by the Town (see Appendix A for the Town Resolution).

In accordance with the provisions set forth in 23 U.S.C. 134, this study is funded by federal planning funds from the Federal Highway Administration (FHWA), which are programmed and administered by the DCTC. No local funds were used to complete this study.

a. Scope of Work

Representatives from a Town-designated volunteer Task Force worked with DCTC staff to develop a scope of work to guide the study (see list of members in Appendix B). The scope identified three primary goals:



- 1. To improve pedestrian access between the Dover Plains hamlet and key destinations, including Ketcham Park, Dover Stone Church, Dover Elementary School, the Dover Plains train station, the Tabor-Wing House, local businesses, churches, and residential areas.
- 2. To improve pedestrian safety, reliability, and equity in the hamlet, especially along and across Mill St and Route 22.
- To encourage local economic development by supporting local businesses and attracting new businesses.

The scope addressed Task Force roles, defined the sidewalk inventory area, listed data to be collected during the inventory, outlined key elements to include in the plan, and suggested a basic schedule, including Task Force meetings and public outreach.

The team decided that the inventory area should be bounded by Midfield Ln to the north, Lime Kiln Rd/Poplar Hill Rd to the east, Seven Wells Brook Rd to the south, and the Route 22 plazas to the west. The team also decided that the plan should focus on three key locations (see Map 1 - Study Area):

- 1. Mill St between Route 22 and the train station
- 2. Route 22 at School St.
- 3. Route 22 at Dover Village Plaza/CVS/Dollar General

b. Background

The Dover Plains hamlet is in the northern part of the Town of Dover, which is on the eastern side of Dutchess County. Its two

main streets are Route 22, which runs north-south on the west side of the hamlet, and Mill St, which runs east-west through the center of the hamlet.

Land use in the hamlet is mainly single-family residential, mixed with commercial spaces along Route 22 and Mill St. The Metro-North train station, located off Mill St in the center of the hamlet, provides connections to the New York City metro area. Dover Stone Church, located west of Route 22, is a popular tourist destination. Other key destinations include Dover Elementary School, in the center of the hamlet, and Ketcham Park, on the east end of Mill St.



Outdoor dining at Kelly's Creamery on Route 22.

With its compact size, access to transit, and local destinations, the hamlet is well suited for walking. However, Dover Plains faces several challenges to walkability. While the train station



could be a catalyst for walkable, transit-oriented development, the station area is unattractive and unwelcoming, with large swaths of asphalt and limited sidewalks. Route 22 is another barrier, with high vehicle speeds and volumes, including many trucks, and only one signalized pedestrian crossing.

Past land use decisions have also added barriers to walkability. The train station area used to be home to a post office, bank, grocery store, and other local businesses. The post office and bank left the hamlet center in the 1990s, followed by the grocery store in the mid-2010s. The plazas south on Route 22 are now the hamlet's retail hub, with a post office, CVS, two banks, a Dollar General, Dunkin', McDonald's, and other businesses.

Dover Plains is seeing some new development, including an approved residential project west of Route 22 and some new businesses. Additional infill development would add walkable destinations and allow residents to enjoy the hamlet on foot. The Town is also working on an economic recovery plan and branding initiative and pursuing various grants to upgrade infrastructure and highlight local history.

Improving walkability in Dover Plains will enable the hamlet to improve safety for residents and visitors and support existing and future local businesses.

c. Demographics

According to the latest Census data, 1,322 people live in Dover Plains. Almost 27 percent of the population is either younger than 18 (four percent) or 65 and older (22.5 percent). Residents in these age groups are less likely to drive and more likely to walk for transportation. They are also particularly vulnerable to injury in vehicle crashes—for children, due to their small size, and for older adults, due to their less resilient bodies.



An older person walking down Mill St.

Based on our estimates, more than 40 percent of the hamlet population (about 550 people) lives within a quarter mile or five-minute walk of the center of the hamlet, while almost 90 percent of the Village population (about 1,170 people) lives within a half mile or ten-minute walk. All hamlet residents (and

¹ Accessed via <u>data.census.gov</u> for the Dover Plains Census-Designated Place (CDP)



about 500 others) live within a mile or 20-minute walk of the hamlet center (see Map 2 – Population Density).

In terms of vehicle ownership, the most recent five-year Census estimates show that more than ten percent of households have no vehicle, and more than 45 percent have only one vehicle available.²

d. Traffic Volumes

Route 22 is the busiest road in the hamlet by far, carrying 8,000 to 10,000 vehicles per day. Mill St carries about 1,700 vehicles per day, while Maple Ln (the continuation of Mill St east of the Ten Mile River) carries about 1,200 vehicles per day. On the eastern side of the hamlet, Lime Kiln Rd carries about 900 vehicles per day and Poplar Hill Rd (County Road 4) carries about 500 vehicles per day. Other streets in the hamlet are low-volume (see Map 3 - Average Daily Traffic Volumes).

The traffic volume, vehicle speeds, and lack of marked crossings on Route 22 create a barrier between destinations on the west side of the road and those on the east.

e. Comprehensive Plan & Town Code

The Town's Comprehensive Plan and Town Code provide guidance on where and how to improve walking and bicycling conditions in Dover Plains. Key elements of each are summarized below.



Trucks on Route 22.

Town of Dover Comprehensive Plan Update 2022

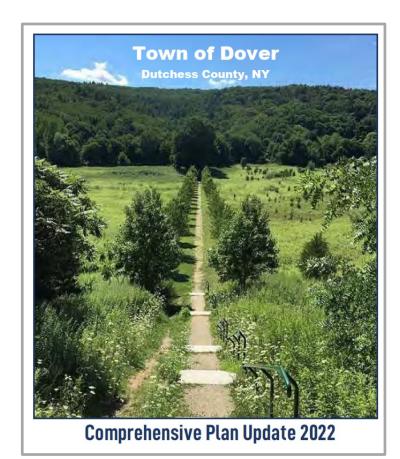
The Town adopted an updated Comprehensive Plan in December 2022. The plan describes the following issues and goals related to walking in Dover and Dover Plains:

Housing (p. 11):

Action items include: "...encourage walkable residential neighborhoods by providing quality walkways, sidewalks, and increase ADA accessibility" and "...help attract new walkable residential projects."

² 2016-2020 American Community Survey 5-year estimates, accessed via <u>data.census.gov</u>. Note that these estimates include relatively large margins of error at small geographies such as Dover Plains.





Transportation (p. 20):

Action items include: "Develop a plan to restore and expand sidewalks within the Dover Plains Halmet, including an exstension along the east side of Route 22 south of School Street" and "Promote the use of our existing Train Stations... as assets for the Town."

The results of the 2017 Town of Dover Community Survey related to transportation improvements (p. 28) notes: "The highest priority response was upgrading and **building new**

sidewalks in Dover Plains and Wingdale, with 55% of respondents ranking this improvement a high priority."

A section on Walkability related to housing (p. 51) states: "The Town of Dover should be placing greater emphasis and developing infrastructure which will **promote greater** walkability between its hamlet and residential areas. Increased walkability in the form of enhanced sidewalks... and other forms of pedestrian infrastructure contributes to a healthier lifestyle for a community's residents, and increases economic viability of its downtown hamlet areas."

A discussion of Land Use in the Dover Plains Hamlet (p. 59) notes: 'Existing pedestrian infrastructure, while present, could use significant improvements in the form of **enhanced** sidewalks and street lighting."

A review of the Route 22 Opportunities Analysis (p. 67) notes "the high opportunity for creating a dense, walkable, mixed-use district around the train stations."

Under Road Conditions and Improvement Plans, Pedestrian Connection (p. 105), the plan states "While road infrastructure will always remain important, it is equally important for the Town to continue to improve and expand pedestrian access, especially within its Dover Plains and Wingdale hamlets. Sidewalks, bike paths, crosswalks, street lighting, public parking, open spaces, signage etc. are all important components in developing accessible pedestrian areas" and "Dover should work to provide better pedestrian infrastructure in and around these [train station] areas." The plan specifically notes that Dover Stone Church "can be a difficult attraction to



promote, due to inadequate signage, poorly defined public parking, and aging sidewalks, which connect the site to parking areas, and most notable, the Dover Plains train station."

Town Code

The <u>Town Code</u> specifies certain procedures that are relevant to improving walking conditions, as listed below.

Greenway Connections (§88)

In 2000, the Town adopted Dutchess County's Greenway Compact Program and Guides. The code states: "To the extent the town amends its current, or enacts new, land use laws and regulations, such new or amended laws and regulations, where appropriate, will be designed to be consistent with the Greenway Connections." The Zoning Code (§145-7) and the Subdivision Code (§125-5) both refer to Greenway connections, stating that "In its discretionary actions under this chapter, the reviewing agency shall be guided by said statement of policies, principles, and guides."

Zoning (§145)

- §145-3.M: Authority and purposes: "To reduce traffic congestion on major roads by establishing a pattern of settlement and circulation that reduces the need for driving, provides alternate routes between destinations, and encourages walking, bicycling, and the use of commuter rail and other forms of public transportation."
- §145-65.D(3): Site plan review criteria: "Roads, driveways, sidewalks and off-street parking and loading space shall be safe and shall encourage pedestrian movement; Vehicular

and pedestrian connections between adjacent sites shall be provided to encourage pedestrian use and to minimize traffic entering existing roads."

Subdivision of Land (§125)

- §125-11.G: Permanent dead-end streets. "...the Planning Board may require the reservation of a twenty-foot wide easement to accommodate pedestrian traffic or utilities."
- §125-11.I: Improvements. "Streets shall be graded and improved with pavement, street signs, sidewalks, streetlighting standards, curbs, gutters, trees,... except where the Planning Board may waive, subject to appropriate conditions, such improvements..."
- §125-13.D: Reserved areas; easements. "The Planning Board may require, in order to facilitate pedestrian access from streets to schools, parks, playgrounds, or other nearby streets, perpetual unobstructed easements of at least 50 feet in width."

Streets and Sidewalks (§121)

This section discusses the requirement for prior written notice about a sidewalk defect. It also requires abutting property owners to keep sidewalks free of snow and ice. If they do not, the Town may clear the snow or ice and add the cost as a lien on the property.

Highway Standards (§93); Additional Requirements

 §93-28: Curbs: "Ramps... shall be provided at each curbed intersection and midblock crosswalk where curbs are constructed."



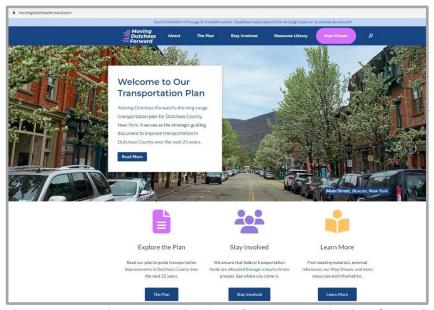
- §93-29: Sidewalks: "Whenever used, the developer shall construct sidewalks on both sides of streets as shown on Figures 2 and 4, Appendix B. Sidewalks shall be constructed of portland cement-concrete or asphalt concrete... Asphalt concrete sidewalks may be constructed only in residential areas."
- <u>Table 2</u>, Summary of Highway Specifications, shows sidewalks and curbs as required on Commercial/Industrial Streets, and 'As required by Planning Board' for Major/Through Streets and Rural/Suburban Streets.
- Table 2A, Summary of Highway Specifications for Country Roads, shows sidewalks and curbs as 'As required by the Highway Superintendent and the Planning Board.'
- Appendix B (amended 2008) includes figures showing typical sections for various street types. These include Figure 2 for Commercial/Industrial Highways, which includes a 12' driving lane, 8' parking lane, 5' buffer, and 4' sidewalk, and Figure 4 (Curb and Sidewalk Details), which includes sidewalk and buffer dimensions for Major/Through Streets and Rural/Suburban Streets (4' sidewalk, and 4'3" and 8' buffer, respectively). Figure 13 shows sidewalk ramp details.

f. DCTC/County Planning Guidance

DCTC's long-range Transportation Plan and our Pedestrian & Bicycle Plan include relevant recommendations for the Dover Plains hamlet. Each is summarized below.

We completed our current long-range metropolitan transportation plan, Moving Dutchess Forward, in 2021. The plan recommends policies and projects to address transportation priorities for the next 25 years, with a vision that "By 2045, Dutchess County's transportation system will be safer, more reliable, resilient, and equitable."

Sections include Learn (demographic, travel, economic and other trends); Assess (barriers to safe access, reliable access, and basic needs, as well as transportation equity); Advocate (best practice policies); and Invest, which estimates the funding available and needed, and presents a series of transformative investments.



The Moving Dutchess Forward website (www.movingdutchessforward.com).

Moving Dutchess Forward



The plan's <u>Map Viewer</u> includes a series of maps, including several that illustrate the barriers described in the Assess section. Those that pertain to Dover Plains include:

- Barriers to Reliable Access: this map shows the limited sidewalk network in Dover Plains as well as the lack of bus service.
- Barriers to Basic Needs: this map shows that the Census tract for Dover Plains has a moderate housing cost burden, with about 44 percent of households spending 30 percent or more of their income on housing. It also has low job density. Finally, the map shows limitations for accessing key destinations, such as the post office, CVS, a health clinic, the elementary school, and parks.
- Transportation Equity: Based on this map, the Census tract
 for Dover Plains has an equity score of 7, which is above the
 county average of 5. This is based on a variety of 'focus
 populations', particularly low-income and Hispanic
 residents, as well as persons with a disability, foreign-born
 residents, and youth.

The <u>Advocate</u> section includes a series of questions for local municipalities to consider, with best practice policies to address them. Topics include walkability and accessibility, subdivision codes and street standards, sidewalk maintenance, and capital planning.

In terms of <u>investments</u>, the plan includes Walking & Bicycling Improvements (including implementing recommendations from local pedestrian plans) and Train Access Improvements

(including sidewalks and wayfinding signage) as 'Transformative Packages.'

Walk Bike Dutchess

In 2014, we completed a Pedestrian and Bicycle Plan for Dutchess County, titled Walk Bike Dutchess. Walk Bike Dutchess provides a 20-year



vision for improving walking and bicycling conditions in Dutchess County, especially in our cities, villages, and town centers. While conditions have changed in the past eight years, many elements of the plan are still relevant.

Chapter 5.5 focuses on the Harlem Valley. The chapter notes that the Town of Dover ranks 18th among the 30 Dutchess County municipalities in terms of sidewalk feet per resident (2.5, compared to a county average of 7.7) (p. 246). It also states that the Town slightly exceeds the county-wide average pedestrian crash rate, with 11 pedestrian crashes over a five-year period, and notes that Dover Plains is a key area for improving pedestrian safety (see p. 249-251). [Note: The most



recent five years of crash data shows only two pedestrian crashes in the town (one in Dover Plains)].

Recommendations for Dover Plains include extending the sidewalk on Route 22 south and adding a crosswalk to the post office (HV-2, p. 250-252); widening shoulders on Route 22 where needed for bicycle safety (HV-5, p. 252); evaluating speed limits on Route 22 and implementing traffic calming where needed (HV-9, p. 254); and creating a trail network, including linking Nellie Hill Preserve to the hamlet center and creating a trail along the Ten Mile River (HV-13, p. 255).

<u>Chapter 6</u> of the plan sets countywide goals; the most relevant to Dover Plains include:

- Incorporate Walking and Bicycling Facilities in Road
 Improvement and Maintenance Projects: Encourage
 County DPW, New York State Department of Transportation
 (NYSDOT), and local municipalities to continue to
 incorporate walking and bicycling facilities into road
 improvement and maintenance projects where feasible.
- Provide facilities for walking in centers: Work with municipalities, County DPW, and NYSDOT to provide facilities for walking in designated centers. Consider sidewalks, marked crosswalks, pedestrian signals, other design features, and maintenance practices based on the guidance in Chapter 3 (Design Guidelines).
- Inventory Local Sidewalks, Crosswalks and Pedestrian
 Signals: Local municipalities, in coordination with DCTC and NYSDOT as needed, should inventory and review conditions

at existing sidewalks and crosswalks on their streets. Municipalities that do not have an ADA Transition Plan for their streets and sidewalks should develop one, identifying improvements needed to make all streets accessible per ADA standards and a timeframe for implementing those improvements.

Route 22 Opportunities Analysis (2018)

This plan, by Kevin Dwarka LLC and the Pace Land Use Law Center for the Town and Dutchess County, reviews socio-economics, real estate trends, and land use conditions, and outlines several opportunities for Dover Plains.

The analysis finds that Dover Plains has several under-utilized areas along Route 22 and near the train station and could absorb transit-oriented development (TOD), including multifamily housing and retail space. It asserts that consumer buying power could be captured within Dover Plains if it diversifies its retail offerings and expands its residential population through multi-family housing development. It encourages the Town to designate most of Dover Plains as a TOD District and establish design and development guidelines to streamline land use approvals.

The appendix includes model planning and zoning language to encourage TOD.

Route 22 Corridor Management Plan (2002)

DCTC and the Harlem Valley Partnership developed the Route 22 Corridor Management Plan to guide municipalities and



NYSDOT in making decisions about future land use, site access, and transportation proposals along Route 22. The following are the most relevant of the recommendations for Dover Plains:

- Village/hamlet cross-section guidelines (p. 16 and A-18):
 These guidelines for Route 22 within the hamlet include onstreet parking and sidewalks on both sides of the street.
- Access Management (p. 17 and A-41-49): Incorporate
 access management tools into site plan review and
 subdivision regulations. Encourage shared driveways,
 shared parking lots, and internal parking lot connections.
 Establish parking on the rear or side of buildings.
- Pedestrian/Bicycle Safety & Mobility (p. 19 and A-52-56):
 - Require sidewalk construction with new development and redevelopment of existing parcels, incorporate sidewalk construction into roadway improvement projects, and create an annual program of sidewalk construction focusing on a limited amount of land acquisition and construction each year.
 - Consider traffic calming measures including onstreet parking, gateway treatments, special pavement treatments, pedestrian signage, modern roundabouts, raised crosswalks, and curb extensions at corners.
 - Provide a pedestrian connection between Dover Plains and the Tally-Ho mobile home park.
- Municipal Strategies, Dover (p. 40-42):

- Provide sidewalks within priority growth areas (which includes Dover Plains).
- Mill Street capacity improvements (signal timing/phasing, possible separate left turn and right turn lanes; see also p. A-23 and A-26)
- Traffic calming, including on-street parking, gateways, signage, raised crosswalks, and curb extensions
- Safety improvements along Route 22 between the (former) Grand Union and McDonalds (see also p. A-39), and between Dover Plains and the Tally-Ho mobile home park.



Part II: Sidewalk Inventory & Data Collection

DCTC staff conducted an inventory and assessment of existing sidewalk conditions to inform recommendations and help establish priorities for improvements. The inventory included the following items:

- Sidewalks (width, material, and condition; buffer width and material; curb material)
- Sidewalk issues (broken, lifted, uneven, obstructions, insufficient clearance, drainage, missing sections, or other issues)
- Crosswalks (type; condition)
- Curb ramps and detectable warnings
- Curb extensions
- Pedestrian crossing signals
- · Stop signs and pedestrian or bicycle-oriented signs
- Utility poles and other objects that affect the sidewalk
- Commercial driveways (width; whether sidewalk continues across the driveway or not)
- Street furniture (benches, trash cans, pedestrian-scale lights, bicycle parking, and outdoor seating areas)
- Street trees (type, condition)
- On-street parking (parallel, perpendicular, or other; time restrictions)
- Railroad crossings
- Streets with no sidewalks (including shoulder width)

The inventory was completed in May 2022 and included photos to highlight issues that were identified (see Appendix C for summary tables).

Five elements were of particular importance: overall sidewalk coverage and conditions; sidewalk material, width, and buffers; sidewalk issues; accessibility (including curb ramps, detectable warnings, and crosswalks); and the walking experience. These are summarized below.

a. Sidewalk Coverage and Conditions

Sidewalk Infrastructure	Length (ft)	Length (miles)	Percent
Existing Sidewalk	12,773	2.4	15%
No Sidewalk	70,054	13.3	85%
Total Area Inventoried	82,827	15.7	100%

Table 1. Sidewalk Infrastructure

All streets within the study area were inventoried, totaling 15.7 miles (based on both sides of each street). Fifteen percent of the total street length (2.4 miles) had a sidewalk, while 85 percent (13.3 miles) had no sidewalk (see Table 1). There are only five streets with sidewalks: Route 22, Mill St, School St, Market St, and Wing Ave. (Note: the north end of Route 22 has several curbed concrete islands. For the inventory, we classified these as sidewalks since they could function as such if they were wider and had ramps).

Several street segments have a sidewalk on only one side. Within the study area, sidewalk coverage on these streets is about 80 percent on Mill St, 60 percent on Route 22, 50 percent on School St, 40 percent on Market St, and 20 percent on Wing Ave.



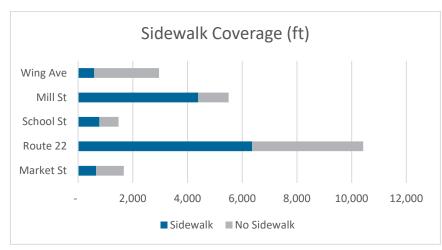


Figure 1. Sidewalk Coverage

The inventory used three ratings (Good, Fair, and Poor) to measure the condition of sidewalks. The condition ratings focus on the sidewalk surface and assume adequate width (some segments were quite narrow, as discussed below). The categories were defined as:

- 1. Good: None or a few improvements needed. A person in a wheelchair or other mobility-impaired person could safely use the sidewalk.
- 2. Fair: Significant improvements needed. It would be possible but difficult for a person in a wheelchair or other mobility-impaired person to safely use the sidewalk.
- Poor: Impossible for a person in a wheelchair or other mobility-impaired person, and difficult for a person with no mobility impairments to safely use the sidewalk.
 Sidewalk should be replaced.

Sidewalk Condition	Length (ft)	Length (miles)	Percent
Good	12,224	2.32	96%
Fair	118	0.02	1%
Poor	431	0.08	3%
Total Sidewalk	12,773	2.4	100%

Table 2. Sidewalk Conditions

While there were only 2.4 miles of sidewalks, 96 percent were rated as good, with one percent rated as fair and three percent rated poor (see Table 2). Fair conditions exist on a very short segment of Route 22 and two short segments on Mill St, while poor conditions are found on two segments of Wing Ave and two segments of Mill St.

The percentage of good condition sidewalks is 99-100 percent on Route 22 and Market St; 94 percent on School St; 93 percent on Mill St, and 73 percent on Wing Ave (see Map 4 – Sidewalk Conditions).



This bluestone sidewalk on Mill St is in poor condition.





Figure 2. Sidewalk Condition

b. Sidewalk Material, Width, and Buffers

More than 95 percent of the sidewalks were concrete; two percent were asphalt (on Wing Ave and Mill St), and two percent were bluestone (on Mill St). The non-concrete sidewalks were in poor or fair condition (see Map 5 – Sidewalk Material).

Many sidewalks were narrow—54 percent were narrower than five feet, which is NYSDOT's and Dutchess County Planning's preferred width.³ More than 30 percent were 4 to 4.5 feet wide, while 24 percent were narrower than four feet. Most of the wider sidewalks were on Route 22; very few of the sidewalks on local streets were five feet or wider (see Map 6 – Sidewalk Width).

Only 28 percent of sidewalks had buffers, and these were all on the west side of Route 22. About 90 percent of the buffers were brick and just 1.5 feet wide (see Map 7 – Sidewalk Buffers). Dutchess County Planning recommends at least five-foot buffers for pedestrian safety and comfort and to provide room for street trees.

c. Sidewalk Issues

In addition to general sidewalk conditions, the inventory identified



A narrow sidewalk with limited clearance.

location-specific issues. These were grouped into the following categories:

- 1. Broken/Cracked: Cracked pieces in the sidewalk.
- 2. Lifted: Pieces of sidewalk lift up so that the surface is uneven.
- 3. Uneven: The sidewalk surface is not flat.
- 4. Obstruction: Utilities, signs, or other fixed objects are in the sidewalk, limiting access.
- 5. Clearance: Insufficient room to walk due to branches, bushes, trash, or other easily removed objects.

³ See the NYSDOT Highway Design Manual, Chapter 18, page 21.



- 6. Removed/Missing: Sidewalk sections have been removed or are missing.
- 7. Drainage: There is standing water (or evidence of it) on the sidewalk.
- 8. Other: Any issue not captured above.



A utility pole and bush create an obstruction and limit clearance on the Mill St sidewalk near Route 22.

These issues identify specific areas in need of repair and lower-cost improvements to enhance access, such as removing tree branches or patching small sidewalk sections. They can capture locations on sidewalks that may be rated good overall but have isolated sections in need of repair.

A total of 53 issues were identified during the inventory, with cracks making up almost one-third of the issues, followed by obstructions, with almost 20 percent (see Table 3). Many of the issues were concentrated on the northern portion of Route 22

on the west side, the Route 22/Mill St intersection, and the Mill St/Wing Ave/Market St area.

Sidewalk Issues	Number	Percent
Broken/Cracked	17	32%
Obstructions	10	19%
Clearance	8	15%
Other*	7	13%
Lifted	7	13%
Uneven	3	6%
Drainage/Ponding	1	2%
Total Issue Locations (points)	53	100%
* pitted texture, loose gravel, lip at curb, missing pipe cap, etc.		

Table 3. Sidewalk Issues

The inventory indicated a rate of one issue per 243 feet of sidewalk, which is better than rates we found in the Village of Millerton (one per 205 feet), Pine Plains Town Center (one per 107 feet), and Village of Rhinebeck (one per 121 feet), though not as good as the Village of Pawling (one per 385 feet). Map 8 – Sidewalk Issues shows the location of all the issues identified.

d. Accessibility

Several issues related to accessibility were identified during the inventory, as outlined below:

Crosswalks: There were only five marked crosswalks in the study area: two at Route 22/Mill St, one at Route 22/School St,



one in front of the Elementary School, and one within the train station area (across the tracks). None of the intersections had crosswalks across all legs of the intersection (see Map 9 – Marked Crosswalks and Pedestrian Signs).

Unmarked crosswalks (the extension of two sidewalks without a striped crosswalk) are legal crossings, but marked crosswalks encourage people to cross the street at consistent locations and raise drivers' awareness of the potential for people crossing.

There were no curb extensions, which shorten the distance to cross, help pedestrians see oncoming traffic, and help drivers see people waiting to cross.

Pedestrian signals & pushbuttons: There is only one signalized intersection in the study area (at Route 22/Mill St), and it has pedestrian signals. The buttons are not responsive (there is no light or sound when they are pressed) but the signals do include countdown timers.

Curb ramps: Ten locations were missing ramps, making the sidewalk inaccessible. These included locations at the end of a sidewalk, at a crosswalk, and at driveways. In addition, 10 curb ramps (about 20 percent of all ramps) were missing a detectable warning, which alert people (especially those with vision impairments) that they are entering the roadway. See Map 10 - Curb Ramps.

e. The Walking Experience

While infrastructure such as sidewalks, curb ramps, and crosswalks are critical for pedestrian access, a walkable



A curb ramp on Route 22 with no detectable warning.

environment also requires a pleasant sidewalk experience. We inventoried several elements related to the walking experience, including street trees, streetscape amenities, and driveways.

Street trees: There are no street trees (along sidewalks) in the hamlet. This is largely because few of the sidewalks have buffers, and the buffers that exist are narrow. In addition to providing shade, street trees serve as a buffer between traffic and people walking (when planted along the curb), and have been shown to reduce vehicle speeds, improving safety.

Streetscape Amenities: There are no pedestrian-scale lights, outdoor tables, benches, or trash receptacles along sidewalks in the hamlet. These amenities would make walking more comfortable and inviting.



There was one bike parking rack and set of bike lockers, both at the train station. Adding bicycle parking at other locations would provide security and convenience for people bicycling.

Driveways: We identified 51 commercial driveways along sidewalks in the study area, totaling 1,760 linear feet (see Map 11 - Parking Lots and Commercial Driveways). This equates to about eight percent of the frontage along the five streets with sidewalks. This means that for every 100 feet one walks, eight feet are across a driveway. Driveways are more concentrated on Route 22, where commercial driveways make up ten percent of the street frontage. Each driveway represents a potential



The Route 22 crosswalk at School St lacks a ramp on the west side.

conflict point, with cars entering and exiting, which decreases pedestrian safety and comfort.

At more than 60 percent of the commercial driveways that are along sidewalks, the sidewalk stops rather than continuing across the driveway. Best practice is to continue the sidewalk across driveways to visually prioritize walking access and to alert drivers that people may be walking across the driveway.

Pedestrian Signs: We inventoried a total of 26 pedestrian-related signs (see Map 9 – Marked Crosswalks and Pedestrian Signs). More than half were 'Slow, Children at Play' or 'Watch for Children' signs (some quite old) in residential areas. These indicate a desire for lower speeds on these streets, which could be addressed through traffic calming.

Bicycle Facilities: There were no bicycle facilities in the study area, though there were three 'Share the Road' signs (see Map 10). Based on the volunteer pedestrian-bicycle counts (described below), about half of bicyclists rode on the sidewalk. Bicycles on the sidewalk are a safety issue for people walking and thus a challenge to creating a walkable environment.

f. Summary of Field Observations

Based on the fieldwork, we noted the following key findings:

Sidewalk Conditions

- The hamlet has about 2.4 miles of sidewalk. Sidewalks are on five streets: Route 22, Mill St, School St, Market St, and Wing Ave.
- 96 percent of sidewalks are in good condition.



- The most common sidewalk issue is cracks, followed by obstructions.
- The majority of sidewalks are concrete. All the non-concrete sidewalks are in poor or fair condition.
- More than half of sidewalks are narrower than 5 feet, and almost one-quarter are narrower than 4 feet.
- Only 28 percent of sidewalks have a buffer; all the buffers are on Route 22 and most of them are just 1.5 feet wide.

Accessibility

- Ten locations are missing curb ramps.
- Ten curb ramps are missing detectable warnings.
- There are only five marked crosswalks. No intersections have full crosswalks (across each leg).
- There are no curb extensions.
- There is only one location with pedestrian signals: the Route 22/Mill St intersection.

Walking Experience

- There are no street trees along sidewalks.
- There are no streetscape amenities (benches, outdoor tables, trash receptacles, pedestrian-scale lights) along sidewalks.
- At more than 60 percent of commercial driveways on streets with sidewalks, the sidewalk stops, rather than continuing across the driveway.
- Commercial driveways represent eight percent of the frontage on streets with sidewalks and ten percent of the street frontage on Route 22.
- There are 26 pedestrian-related signs, including many old 'Slow, Children at Play' or 'Watch for Children' signs.

g. Pedestrian-Bicycle Counts

To better understand the amount of walking and bicycling in the study area, we conducted manual (volunteer) two-hour counts at five locations, as well as video counts of people walking and bicycling at five locations. The manual counts were done on a weekday and a Saturday in September 2022, and the video counts were done on a weekday and a Saturday in October 2022. Count locations included:

Manual (2-hour, weekday 4-6 pm and Saturday afternoon):

- 1. Route 22 near Kelly's Creamery
- 2. Route 22/Mill St
- 3. Route 22/School St
- 4. Route 22 near the Village Plaza
- 5. Mill St near Market St

Video (12-hour, 7 am to 7 pm, weekday and Saturday):

- 1. Route 22/Mill St
- 2. Route 22/School St
- 3. Mill St/Wing Ave
- 4. Mill St/Park Dr
- 5. Maple Ln east of Benson Hill Rd

The video count data are summarized in Map 12 – Pedestrian & Bicycle Count Data. The full data are included in Appendix D. Key findings are as follows:

Walking

 Weekday pedestrian activity was highest at Mill St/Wing Ave (about 150 people in 12 hrs), followed by Route 22/Mill St (about 120 people in 12 hrs).



- Saturday pedestrian activity was highest by far at Route 22/School St (about 540 people in 12 hrs), followed by Route 22/Mill St (about 170 people in 12 hours).
- The locations further east had lower pedestrian volumes:
 40-65 people in 12 hrs at Mill St/Park Dr and 15-30 people in 12 hrs on Maple St near Benson Hill Rd.
- The two-hour manual counts show substantial variation by day of week and time of day: 38 people walked along Route 22 near Kelley's Creamery on a weekday evening, but only 2 on a Saturday afternoon. North of the Village Plaza, only 3 people were counted on a weekday evening, but 12 people were counted walking on a Saturday afternoon.

Bicycling

- Weekday bicycle activity was highest at Mill St/Wing Ave (about 30 people in 12 hrs), followed by Mill St/Park Dr (about 20 people in 12 hours). The other locations had fewer than ten people bicycling in the 12 hr weekday period.
- Saturday bicycle activity was also highest on at Mill St/Wing Ave (15 people in 12 hrs). The other locations had between 4 and 10 people bicycling in the 12 hr period.
- The two-hour manual counts showed the most bicycle activity on Saturday afternoon near the Village Plaza, with 8 bicyclists in two hours (4 people riding out and then returning). There were 3 to 4 bicyclists on Mill St near Market St in the two-hour period.

Based on the automated counts, the train station area has the most walking and bicycling activity on weekdays, while on Saturdays, the School St/Route 22 area is busiest for walking

(likely due to Stone Church visitors), and the train station area is busiest for bicycling.

h. Crash Data

We reviewed ten years of crash data (2012-2021) to identify any pedestrian-related crash patterns. Over the ten-year period, there were three reported pedestrian crashes (this does not include crashes that were not reported or any 'near misses'). One was at the Route 22/Mill St intersection (no description, but pedestrian error was cited, and it resulted in a serious injury), one was near Brady Ln on Route 22 (driver inattention—the driver turned right into a gas station, hitting someone walking on the sidewalk and causing a serious injury), and one was on Mill St east of Reimer Ave (no description, but unsafe speed and pedestrian error were cited). See Map 13 — Crash Data.

i. Public Outreach

Dover Day

DCTC staff had a table with information about the Pedestrian Plan at Dover Day on Saturday, September 17, 2022. We described the project and asked people to prioritize potential improvements using dot stickers on a large board with photos. Participants were also encouraged to write specific concerns and ideas on post-it notes. The vote totals are below; a full summary is included in Appendix E.

Priority Project concepts (listed in order of 'votes' for each):

- 1. School St/Route 22 crosswalk improvements (36)
- 2. Ketcham Park sidewalk, crosswalk, & signage (27)



- 3. Route 22/Mill St crossing improvements (24)
- 4. Hamlet-wide improvements: wayfinding signage, street trees, street furniture, infill development (21)
- 5. CVS Plaza sidewalk to Dollar General (20)
- 6. Railroad crossing area/Mill St crosswalks, curbing, and parking improvements (11)
- 7. Mill St Bridge south sidewalk (9)
- 8. Mill St centerline, sidewalk improvements, and parking (7)
 Train Station area sidewalks and aesthetic improvements (7)
 Maple Ln centerline, speed tables, & speed feedback device
 (7)
 - Village Plaza Entrance crosswalk with beacons or signal (7)
- 9. School St to Tabor-Wing House sidewalk (5)

Town Board Presentation

DCTC staff presented the project and suggested improvements to the Town Board and public at a Town Board meeting on December 14, 2022. Attendees were interested in the project and supportive of the ideas presented. Questions included how curb extensions are plowed and where street furniture could be placed.

Partner Meetings/Calls

Throughout the project, we had coordination calls and a field visit with NYSDOT-Region 8 to discuss issues and recommendations on Route 22, and calls with MTA/Metro-North to discuss concepts related to the train station area. See Appendices F and G for meeting/call notes.

Final Draft Outreach

In early 2023, we circulated the draft plan to the Task Force, NYSDOT-Region 8, and MTA/Metro-North for feedback. Based

on feedback, we revised a few of the recommendations, updated the priorities in the Recommendations Summary table, and made minor edits to the text. In April 2023, we presented the final plan to the Town Board at a public meeting.



DCTC staff at Dover Day.



Part III: Recommendations

These recommendations are intended to assist the Town in setting priorities for infrastructure investments and seeking funding to improve walkability in and around the hamlet. We developed the recommendations through our analysis of existing conditions, discussions with the Task Force, review of previous plans, feedback from NYSDOT, Metro-North Railroad/MTA, and County DPW, and input from the public.

Given the cost and complexity associated with achieving all the recommendations, we recommend a 'build when ready' strategy, whereby the Town or other responsible entity implements recommendations as local conditions and funding opportunities permit. This allows the responsible entity to capitalize on various funding programs, changes in property ownership, or redevelopment opportunities that may arise.

Each recommendation is assigned a phase (1, 2, 3, or a combination of phases), which relates to its complexity and cost: the easiest and lowest-cost recommendations are listed as Phase 1, while those that are more complex or costly are listed as Phase 2 or 3. Items that were identified as a priority by the Task Force are starred (*). The Plan purposely does not specify a timeframe for accomplishing the recommendations, since implementation will rely on the availability of funding and managing competing priorities. However, Phase 1 recommendations should be viewed as short-term, Phase 2 as medium-term, and Phase 3 as long-term.

Appendix H provides a list of all the recommendations by location or topic, with their phase, the responsible entity and partners, and the relevant map and/or image reference. Map 14 – Infrastructure Recommendations shows their locations.

The recommendations are organized by location (items 1-8) and then by topic, as follows:

- 1. Route 22/School St
- 2. Route 22/Mill St
- 3. Mill Street Corridor
- 4. Train Station Area
- 5. Ketcham Park
- 6. Maple Lane
- 7. Lime Kiln Road
- 8. Route 22 Corridor
- 9. Hamlet-wide Infrastructure
- 10. Bicycle Access
- 11. Policies & Programs

1. Route 22/School St

The Route 22/School Street intersection was the Task Force's top priority for improvements. It has only one crosswalk (on the north leg of the intersection), which is uncontrolled, and there is no curb ramp on the west side. School children, tourists, and others use this crosswalk, so making sure that drivers yield is important for safety. The Task Force discussed the possibility of a signal but preferred flashing beacons.

a. *Add flashing beacons at the Route 22/School St intersection (Phase 1-2)



In the immediate-term, NYSDOT agreed to update the crosswalk warning signs, which they did in late 2022.

In the short-term, the Town plans to pursue grant funding for flashing beacons. This includes:

- Extend the sidewalk across the northern Fire Station driveway and realign the crosswalk to be as short as possible.
- Construct curb ramps on both ends of the crosswalk.
- Install Rectangular Rapid Flashing Beacons (RRFBs) at the crosswalk and update signage.

These improvements are shown in Rendering 1 and would be coordinated with NYSDOT.



An example of Rectangular Rapid Flashing Beacons on Route 9 in Red Hook.

Longer-term, depending on the effectiveness of the RRFBs, the Town could pass a Resolution asking NYSDOT to evaluate a traffic signal at the intersection.

b. Upgrade the School St playground crosswalk (Phase 1)

This crosswalk lacks a curb ramp on the north side, has nonstandard markings, and has no signage. Improvements would include:

- Construct
 a curb
 ramp on
 the north
 side of the
 crosswalk.
- Upgrade the crosswalk to standard highvisibility ladder striping.



The Elementary School crosswalk lacks a curb ramp.

Add pedestrian crossing signs (W11-2, with an arrow pointing to the crosswalk -- see MUTCD Section 2C.50).



2. Route 22/Mill St

The Route 22/Mill Street intersection is the only signalized intersection in the hamlet. It has crosswalks on two of the three legs of the intersection. The Mill St crossing is very wide (about 78 feet), which enables drivers to turn at higher speeds and makes it harder to cross on foot. At the same time, the intersection must accommodate trucks.



The western crossing at Route 22/Mill St is quite long.

a. *Add curb extensions and a crosswalk at the Route 22/Mill St intersection (Phase 2)

This project would include:

 Construct curb extensions on the northeast and southeast corners to shorten the crossing. The design should accommodate truck turns. The stop bar locations should be adjusted as needed. See Appendix I for notes about drainage, snow plowing, and truck turning at curb extensions.

- Mark a crosswalk across the south leg. This would involve adding curb ramps and upgrading the traffic signals to include pedestrian signals.
- Restrict right turns on red for westbound Mill St (as already in place for northbound Route 22) to help protect people who are crossing. Signs reminding turning drivers to yield to people in the crosswalk could also be installed.

These improvements are shown in Rendering 2 and would be coordinated with NYSDOT.

3. Mill St Corridor

The Task Force identified the Mill St corridor as a focus area for this plan. It is the principal east-west street in the hamlet, connecting Route 22, the train station, commercial businesses, residential areas, and Ketcham Park. It has a significant amount of walking activity, but the sidewalks are narrow and there are few marked crosswalks.

a. *Stripe a centerline (Phase 1)

A centerline would visually narrow the street, which encourages slower speeds. The Town can piggy-back on the County DPW's striping contract. The Town's engineer could develop a striping plan; see MUTCD Section 3B.01 for striping options.

b. Use a speed feedback device (Phase 1)



The Town purchased a portable radar speed feedback device, which shows drivers their speed, collects speed data, and can also take photos. These devices encourage drivers to slow down. This can be used on Mill St and other areas as needed.



A centerline on Mill St could help slow speeds.

c. Review and revise on-street parking (Phase 1)

Currently, some portions of Mill St are used for on-street parking, especially on Sundays for church. To optimize use of the street and enable the sidewalks to be widened, the Town could pursue alternate parking locations, such as the train station area, or create designated drop-off zones. In addition, the Town code and street signage could be revised to clarify where parking is allowed or prohibited (see Map 15 – Parking Restrictions).

d. Narrow wide intersections (Phase 1-2)

Several intersections along Mill St are very wide, particularly those at Park Dr, Powell Dr, and in the train station area (discussed below). Wide intersections encourage higher speeds and take longer for people to cross, resulting in more exposure to potential conflicts. These intersections could be narrowed, either with curbing or with paint and striping. For example:

 At Powell Rd and Park Dr (in coordination with the road owner), stripe a centerline (see <u>MUTCD Section 3B.01</u>), continuous edge lines, or edge lines near the intersection. Longer term, consider curbing to narrow the intersections.

e. Widen sidewalks (Phase 2-3)

The sidewalks on Mill St are quite narrow – in many places 2.5 to 3 feet wide. To meet <u>accessibility standards</u>, the Town should widen the sidewalks to 5 feet (4 feet is permitted with a 5x5 foot passing space every 200 feet) and if possible, add buffers. Sidewalks should be constructed with minimal cross-slope, including across driveways. The travel lanes could be reduced to 10 feet wide to maximize the space available for sidewalks. The Town could also hire a surveyor to determine the Town's right of way along Mill St in case the sidewalks could be widened away from the roadway (which would not require new curbing and drainage).

f. Consider a south sidewalk on the Mill St Bridge (Phase 3)

The Mill St Bridge has a sidewalk on the north side, but people were observed walking across the bridge on the south side. It appears that the bridge is wide enough to accommodate a south sidewalk of 5-5.5 feet. However, due to cost, this would



likely only occur when County DPW replaces the bridge, which could occur around 2030.

4. Train Station Area

The train station and railroad crossing area on Mill St is the traditional heart of the hamlet, and the first place that many visitors to Dover see. MTA has grant funding to improve the atgrade crossings within the station area and on Mill St, though the scope of work has not yet been drafted. MTA has agreed to coordinate with the Town during development of the scope and to incorporate some of the recommendations below, as feasible. Other items would be done by the Town in coordination with MTA. See the MTA call notes in Appendix G for details.

a. *Mark crosswalks and refresh Railroad Crossing markings (Phase 1)

At the time of our field work, there were no marked crosswalks in the station area, despite the number of people using the train station and walking in this area. Marked crosswalks clarify where people should cross and help drivers anticipate people crossing. In addition, the Railroad Crossing pavement markings were faded.

- Mark crosswalks across Market St, Railroad St, and Railroad Ave at Mill St. (The Town did this in late 2022).
- Mark crosswalks across Mill St on the west side of Market St and east side of Railroad St. Select precise locations based on where people currently cross, where visibility is good, and where conflicts with turning vehicles are minimized.

- Install pedestrian crossing signs (W11-2, with an arrow pointing to the crosswalk) on each uncontrolled approach to a marked crosswalk (see <u>MUTCD Section</u> <u>2C.50</u>).
- Refresh the Railroad Crossing pavement markings and stop bars on both approaches on Mill St, based on MUTCD standards (see <u>Chapter 8</u>). MTA will do this as part of their grant-funded project, but the Town could refresh them in the interim.

b. Clarify parking on Market St (Phase 1)

The parking on the south end of Market St is not marked or signed. The spaces on the west side are on privately-owned parcels, while spaces on the east side are on an MTA-owned parcel, but it is not clear if they are intended for train commuters. In addition, the spaces on the west side allow parked vehicles to encroach on the sidewalk.

- Add parking curb stops for the west-side parking facing buildings, so that vehicles do not encroach on the sidewalk.
- Mark parking spaces to clarify where parking is allowed and to maximize the efficient use of the space. Ensure that parking does not block visibility of people crossing Market St.
- Add signage to clarify the ownership and any use or time restrictions of the parking spaces. See <u>MUTCD</u> <u>Sections 2B.46-48 (Parking, Stopping, and Standing</u> <u>Signs)</u> for guidance.

c. *Improve station area aesthetics (Phase 1-2)



The station area is not particularly attractive, with a long guide rail on the east side, a concrete barrier on the west side, limited landscaping, and wide swaths of undefined asphalt. These improvements (or some portion thereof) may be able to be rolled into MTA's grant-funded projects:



Parked cars on the west side of Market St encroach on the sidewalk.

- Replace the guiderail with decorative fencing.
- Replace the concrete barrier with a gate or other treatment.
- · Add landscaping.
- Consider pedestrian-scale lighting.
- Construct a sidewalk on Mill St along the frontage of Gaby's mini market; extend the curb past the parking area and provide a ramp to align with the new crosswalk.

- Define parking areas and intersections with curbing, particularly at the south ends of Market Street and Railroad St and the north end of Railroad Ave. This would also shorten the crossings at these intersections.
- Install a STOP sign (with STOP bar) on southbound Market St at Mill St to protect people crossing (like on Railroad St and Railroad Ave).



Railroad St would benefit from aesthetic improvements and better access for people walking to and from the station.

d. Encourage Transit Oriented Development (Phase 1)

The 2018 Route 22 Opportunities Analysis (cited above) recommends that the Town designate a Transit Oriented Development (TOD) zone around the station area. This would incentivize higher-density housing and commercial development to re-enliven the station area.



e. *Add sidewalks on Market St & Railroad St (Phase 2)

There are limited and discontinuous sidewalks within the train station area. The Task Force agreed that improving sidewalks was important for safety, access to nearby destinations, and to improve the image of the hamlet. This would include:

- Fill the sidewalk gap on the east side of Market St (on the MTA parcel) and extend the sidewalk to Mill St.
 Mark crosswalks to connect to the existing sidewalk on the west side of the street.
- Add a sidewalk on the west side of Railroad St (by the guiderail); move parking away from the guiderail to make room.



Adding a continuous sidewalk on Market St would improve safety for people walking to and from the station.



This diagram shows proposed sidewalks, crosswalks, curbing, and other improvements in the station area.

5. Ketcham Park

Ketcham Park is a key asset within the hamlet, and the Town has invested in improvements including a community center, walking track, new pavilion, and upgraded playground. However, at the time of our fieldwork, signage to the park was



unclear and cluttered. In addition, the driveway was unpaved and rutted, there was no crosswalk to the park entrance, and no sidewalk into the park.

a. *Improve signage to Ketcham Park (Phase 1)

- Install a large, clear sign for the park entrance on Mill St and reduce sign clutter at the entrance. Coordinate the design with other wayfinding signage in the hamlet (see Hamlet-wide Infrastructure). A temporary improved sign was installed in late 2022.
- Enhance the park entrance with landscaping.



This improved sign was installed by the Town in late 2022.

b. *Improve pedestrian access to Ketcham Park (Phase 2)

- Pave the driveway into the park and add a sidewalk on the east side, to avoid conflicts with the residential driveway. Mark a crosswalk across the driveway, with a stop sign for traffic approaching Mill St. Coordinate with the road owner (the Fire Company) as needed.
- Fill the sidewalk gap on the north side of Mill St and add a curb ramp



This diagram shows a paved driveway, sidewalks, crosswalks, and stop sign at the park entrance.

and crosswalk across Mill St to the sidewalk.

6. Maple Ln

Residents expressed concern about speeds on Maple Lane, which is the extension of Mill St east of the bridge and serves several neighborhoods. Based on 2022 data, the street carries about 1,200 vehicles per day and 85th percentile speeds are almost 42 miles per hour, despite a 30 mph speed limit. The



street is wide, straight, and open, which encourages higher speeds.

a. *Stripe a centerline (Phase 1)

A centerline would visually narrow the street, which encourages slower speeds. See the <u>MUTCD Section 3B.01</u> for guidance on striping.



Like Mill St, a centerline on Maple Ln could help slow drivers.

b. *Use a speed feedback device (Phase 1)

The Town purchased a portable radar speed feedback device, which shows drivers their speed, collects speed data, and can also take photos. These devices encourage drivers to slow down. This should be used on Maple Ln and rotated to other areas as needed.

c. Consider speed tables (Phase 2)

<u>Speed tables</u> are traffic calming devices that work well on collector roads such as Maple Ln. If the speed feedback device is not sufficient to reduce speeds, a physical change such as speed tables can be more effective. The Town could install temporary rubber speed tables first and then determine whether permanent ones are desired.



Speed tables are effective for slowing speeds on streets like Maple Ln.

 d. On side streets: Use a speed feedback device (Phase 1); consider speed humps (Phase 2); upgrade/remove signs (Phase 1)

The side streets off Maple Ln have many 'Watch out for Children' and 'Children at Play' warning signs, which indicate a desire for slower speeds and concerns about traffic safety. However, many of the signs are old and may no longer attract attention. Signs also lose their effectiveness when they are installed broadly.

Recommendations include:



- Use the portable radar speed feedback device on side streets as needed to encourage slower speeds.
- As a more physical measure, install <u>speed humps</u>. The Town could install temporary rubber speed humps first and then determine whether permanent ones are desired.
- Review the existing warning sign locations, upgrade signs to one standard design where needed, and remove those that are no longer needed or effective. Town Highway staff could use our mapping data to create a map-based inventory of pedestrian-related (and other) signs. This would help keep track of where signs are and when they are installed and replaced.

7. Lime Kiln Rd

Lime Kiln Rd has no striping, and residents expressed concern about high speeds. Based on 2020 data, 85th percentile speeds are about 49 mph (the speed limit is 40 mph). On the north side of Maple Ln, Poplar Hill Rd (County Rd 4) has a solid double centerline, striped shoulders, and a clear stop bar.

a. Stripe a centerline, stop bar, and consider shoulders (Phase 1)

These elements would visually narrow the street and encourage slower speeds:

- Stripe a centerline (see <u>MUTCD Section 3B.01</u>).
- Mark (or refresh) the stop bar at the intersection with Maple Ln.
- Consider marking shoulders, ideally for the full length of the road, but at least near the intersection.

• Use the portable radar speed feedback device to encourage drivers to slow down.



Lime Kiln Rd (lower photo) would benefit from striping, such as on Poplar Hill Rd (top photo).



8. Route 22 Corridor

The Route 22 Corridor was of concern to the Task Force due to high speeds and limited pedestrian access, particularly to and from the plazas on the south end of the corridor.

a. Encourage slower speeds on Route 22 (Phases 1-3)

While Route 22 through the hamlet has a 35-mph speed limit, many drivers at the southern end of the corridor exceed this, which makes walking along the street feel unsafe and unpleasant. Slowing speeds requires several strategies. These could include:

 Install the portable radar speed feedback device at various locations to encourage drivers to slow down. (If the Town wanted a permanent radar speed feedback



The northbound speed limit on Route 22 changes to 35 mph partway down the hill into the hamlet.

device on Route 22, they would need a Highway Work Permit from NYSDOT).

- Work with NYSDOT to evaluate the speed limits on Route 22 and adjust limits and/or emphasize the speed limit as appropriate.
- Create gateways to the hamlet at the north and south ends on Route 22.
 This could include planting street trees and/or other



Radar speed feedback devices encourage drivers to slow down.

landscaping, installing gateway signs, or other treatments to alert drivers that they are entering a hamlet (see NYSDOT's gateway signing and landscaping policy and Highway Design Manual Chapter 25, Traffic Calming).

 Consider future crosswalks across Route 22 in coordination with NYSDOT as development occurs, sidewalks are extended, and safe crossing locations are defined. Crosswalks may need to be signalized for safety.

These measures are most effective when supported by a walkable development pattern (see Policies & Programs below).

b. Mark crosswalk across Dollar General driveway (Phase 1)



The Dollar General driveway has sidewalks and curb ramps on both sides, but no marked crosswalk. A crosswalk should be added and the stop bar and STOP sign shifted away from Route 22 so that stopped vehicles do not block the crosswalk.



This diagram shows proposed sidewalks, crosswalks, and walkways at the CVS plaza.

c. Extend east sidewalk to the Tabor-Wing House (Phase 2)

The east sidewalk, which ends at the north side of School St, could be extended along Route 22 to the Elementary School parking lot's southern driveway and then connect to the existing sidewalk leading to the Tabor-Wing House. The sidewalk design will need to accommodate the drain near the parking lot's southern driveway.

d. Create walkways within CVS Plaza (Phase 2)

There is no walkway between the end of the sidewalk on Route 22 and the interior of the CVS plaza, though there are marked crosswalks between the bank and CVS and bank and parking area. Sidewalks should be constructed to connect the existing (and future) sidewalk and the parking areas, and walkways should be marked between the parking areas and buildings. This would be done by the plaza owner.

The project team talked to NYSDOT about the CVS northern driveway signage, which is confusing for drivers. The plaza owner could add a second 'No Left Turn' sign for northbound drivers, and/or increase signage directing northbound drivers to use the southern entrance. If/when the plaza is redeveloped, the northern driveway could be closed or redesigned.

e. Extend west sidewalk from CVS to Dollar General (Phase 3)

The west sidewalk ends at the CVS northern driveway and begins again just north of the Dollar General. Filling this gap is important but would likely be a longer-term project. An engineering study would help determine the best alignment: either east of the utility poles (closer to Route 22) or west of



them, closer to the plaza. The culvert south of the plaza would likely need to be extended to make room for the sidewalk. Crosswalks should also be marked across the CVS driveways.

f. Provide a safe crossing to the Village Plaza (Phase 3)

The Task Force discussed the possibility of a crosswalk with flashing beacons (RRFBs) between the Dollar General sidewalk and the Village Plaza. Per NYSDOT, this would require a sidewalk connection on the east side. In addition, given the speeds on Route 22 in this area, an unsignalized crossing may not provide sufficient protection for people crossing. While the northbound speed limit changes from 55 mph to 35 mph partway down the hill approaching the hamlet, drivers routinely exceed this (based on 2022 data, 85th percentile speeds north of Seven Wells Brook Rd were 49-53 mph).

Longer-term, a traffic signal or <u>pedestrian hybrid beacon</u> (HAWK signal) with a crosswalk could be considered in conjunction with increased development in this area. Per NYSDOT, the Village Plaza owner would need to do a signal warrant study and install the signal if warranted.

9. Hamlet-wide Infrastructure

A series of walkability, safety, and accessibility improvements are recommended throughout the hamlet.

a. *Replace poor & fair condition sidewalks (Phases 1-3)

Over time, replace fair and poor-quality sidewalks, as shown on Map 4 – Sidewalk Conditions, with new concrete sidewalks. The

bluestone sidewalk pieces in front of the Second Baptist Church could be reset in a new, more accessible sidewalk with a historical marker, in coordination with the Town's Historical Society.

b. *Address sidewalk issues (Phases 1-3)

Address lifts, cracks, obstructions, and other specific issues on otherwise good condition sidewalks through shaving, replacing short segments, removing obstructions, and trimming vegetation. See Map 8 – Sidewalk Issues.

c. Add detectable warning strips where missing (Phase 1)

Detectable warnings indicate a transition between a sidewalk and the street. They are required at signalized and stop-controlled intersections, at all marked crosswalks, and at commercial driveways that are controlled by signals, stop or yield signs, or that otherwise act like a public street. They should not be installed at residential driveways or minor commercial driveways.

Based on this guidance, detectable warnings should be installed at intersections and select driveways. See Map 10 – Curb Ramps for locations missing warning strips, and the <u>Public Rights of Way Accessibility Guidelines (PROWAG) Section R305</u>
(<u>Detectable Warning Surfaces</u>) for guidance. Cast iron warning strips are higher cost, but most durable. Note that when NYSDOT repaves a street or undertakes a construction project, they will, in most cases, also install any missing ramps within the project limits.

d. Construct curb ramps where missing (Phase 2)



Install ramps where missing, as shown in Map 10 – Curb Ramps. Coordinate with NYSDOT for locations on Route 22. Ramps should direct a person into the crosswalk (whether marked or not), not into the center of the intersection. See the Public Rights of Way Accessibility Guidelines (PROWAG) Section R304 (Curb Ramps) for guidance.

e. Install wayfinding signage (Phases 1-2)

Wayfinding signage would help visitors find destinations such as the train station, Ketcham Park, Stone Church and nearby parking, and hamlet businesses. A series of simple, clear signs with a consistent design would help establish the hamlet's identity and benefit its tourism economy. The Town should coordinate with Metro-North/MTA for signs to and from the train station.



An example of branded wayfinding signage (source: Pinterest).

f. Plant street trees (Phases 1-3)

Trees improve streets in many ways: they beautify the street; add shade, making the street more comfortable to walk along; visually narrow the street, encouraging people to drive more slowly; and when planted between the road and sidewalk, they protect people who are walking (see County Planning's Greenway Guide on Street Trees).

Ideally, street trees should be planted in buffers or tree grates between the road and sidewalk. Due to the lack of buffers and the narrow sidewalks in the hamlet, most trees will need to be placed behind the sidewalk. Priority locations include Mill St, Maple Lane, Powell Rd, and Route 22. The Town should coordinate with property owners as needed. An incentive program could be developed whereby the Town provides and plants trees if the property owner agrees to maintain them. Trees could also be encouraged through the site plan review process.

Species should be selected based on the space available and potential conflicts with sidewalks, utilities, or passing trucks. See Cornell University's searchable database for guidance on species. Shrubs, planters with flowers, or other landscaping could be used where trees are not feasible. See Appendix J for potential locations and funding sources. Note that plantings in or adjacent to MTA/Metro-North or NYSDOT property will need approval by them. Species should have roots that grow down to avoid conflicts with sidewalks and parking areas, and trees should not hang over the active rail line.

g. Install street furniture (Phases 1-3)



Street furniture such as benches, outdoor tables, trash and recycling receptacles, pedestrian-scale lighting, and bicycle parking racks make it more comfortable and convenient to walk around the hamlet. These amenities should be installed along streets where feasible (particularly Mill St and Route 22), as well as in public areas and at key destinations. A consistent design for each furniture type would reinforce the Town's branding/marketing efforts and support its economic development goals.



Benches and landscaping make a main street more comfortable and appealing (as here in the Village of Pawling).

As with street trees, the Town should coordinate with property owners as needed, and could consider an incentive program whereby the Town installs the items if the property owner agrees to maintain them. Street furniture could also be encouraged through the site plan review process. See Appendix J for potential locations and funding sources. For bicycle parking, see DCTC's Bicycle Parking Guidance and our Bicycle Parking

Recommendations.

10. Bicycle Access

Bicycle access was not a focus of this study, but some Task Force members were interested in improving bicycling connections, particularly to the Harlem Valley Rail Trail in Wassaic. The Town could make a few simple changes to improve the safety and comfort of bicyclists.

a. Install bicycle parking (Phase 1)

As discussed in the Inventory section, the only bike racks in the hamlet are at the train station. Bike parking provides a safe place for people to lock their



The only bike parking in the hamlet is at the train station, shown here.

bikes, reduces clutter from bikes parked on poles or against buildings, and encourages people to park their bike and walk around. A consistent series of bike racks (preferably the 'Inverted U' or another simple, easy to use style) should be installed along Mill Street and near local destinations. See



DCTC's <u>Bicycle Parking Guidance</u> and our <u>Bicycle Parking</u> <u>Recommendations</u> for detailed guidance.

b. Install Share the Road signs (Phase 1)

We discussed the possibility of widening shoulders on Poplar Hill Rd (County Rd 4) with County DPW, as this road is the main alternative to Route 22 to access the Harlem Valley Rail Trail (HVRT) in Wassaic. However, additional right of way would be needed, which would require a detailed survey and likely easements or takings of land along the road.

County DPW was hesitant to install <u>bicycle wayfinding/guide</u> <u>signs</u> unless the roads had sufficiently wide shoulders. As an alternative, the Town could work with County DPW, NYSDOT and the Town of Amenia to install <u>Share the Road signs</u> (Bicycle Warning Signs with a 'Share the Road' plaque) on routes to the HVRT, including Poplar Hill Rd/Sinpatch Rd (CR 4), Kent Rd/S Amenia Rd (CR 3), and Old Route 22 (CR 81), and/or Route 22.

11. Policies & Programs

Local codes and policies are critical to providing consistency in development decisions over time. We recommend updating the Town's codes to support a more walkable and accessible community.

a. Update the Town's Streets & Sidewalks code (Phase 1)

We suggest updating the Town's <u>Streets and Sidewalks</u> code (§121) in the following ways:

- Require sidewalks on major/through streets

The code currently requires sidewalks on commercial/industrial streets, but only on major/through streets and rural/suburban streets if required by the Planning Board. We recommend requiring sidewalks on major/through streets.

- Require concrete sidewalks and curbs

The code currently allows 'asphalt concrete' sidewalks in residential areas. However, asphalt is not a recommended sidewalk material, as the edges tend to ravel and the surface often becomes uneven. We recommend requiring concrete for sidewalks and curbs. In rare cases, an alternate material could be used if a written justification is submitted and approved by the Town. (Note that NYSDOT requires concrete for all sidewalks and curbs along a State highway, and accessibility standards limiting gaps and vibration would apply to other sidewalk materials).

- Require 5-foot sidewalks

The code (Chapter 93, <u>Appendix B)</u> shows 4-foot sidewalks on Figure 2 (Commercial/Industrial Highways) and Figure 4 (Curb and Sidewalk Details).

Based on NYSDOT design standards and <u>national accessibility</u> <u>guidelines</u>, sidewalks should be at least five feet wide so two wheelchairs can pass (four-foot sidewalks can be used but must have a five-by-five foot passing area every 200 feet). Facilities must be made accessible to the maximum extent practicable, both for new construction and repairs. If there is a technical reason why a facility cannot be accessible, it should be



documented.⁴ We recommend that the Town update its code to specify a minimum sidewalk width of five feet for new or reconstructed sidewalks, with exceptions allowed in cases of technical infeasibility, if documented and approved.

- Encourage a five-foot sidewalk buffer

Sidewalk buffers make it safer and more comfortable to walk, and provide space for landscaping, street trees, and snow storage. The Town code (Chapter 93, Appendix B) shows 5-foot buffers for Commercial/Industrial Highways (see Figure 2), 8-foot buffers for Rural/Suburban Streets, and 4-foot 3-inch buffers for Major/Through Streets (see Figure 4).

The County Planning Department recommends a minimum buffer width of five feet (see <u>Greenway Guide B2, Walkable Communities</u>). For new or reconstructed sidewalks, we suggest that the Town require a buffer of five feet, unless infeasible.

- Continue sidewalks across driveways

We recommend that sidewalks continue across driveways as a visual prioritization of pedestrian access and to alert drivers that people may be walking across the driveway. However, cracks can form in sidewalks that cross driveways, due to the weight of vehicles traveling over them. The Town code could be updated to clarify that sidewalks should continue across driveways, and sidewalk and driveway specifications be updated to incorporate stronger construction standards to

prevent damage to sidewalk segments that cross driveways. For example, see the Village of Rhinebeck Road Specifications code, <u>Section A125-29.D: Sidewalks</u>.

- Require high visibility crosswalk markings

The new crosswalks on Town roads in the hamlet are high visibility 'continental' markings (parallel horizontal stripes), but there does not appear to be design guidelines specifying this. We recommend requiring continental or ladder crosswalk markings (NYSDOT uses ladder crosswalks on State roads). High-durability markings such as tape or epoxy should be encouraged when feasible. Also, the New York State Vehicle & Traffic law (Section 1202(a)2b) prohibits parking within twenty feet of a



The newly marked crosswalk across Market St at Mill St would benefit from curb extensions to make people crossing more visible, given the adjacent parking.

⁴ Note: the US Access Board has developed Public Rights of Way Accessibility Guidelines (PROWAG) which have been adopted by NYSDOT and others, but have not yet been adopted by the federal government.



crosswalk at an intersection, unless otherwise indicated by official signs, markings, or meters. Curbs should be painted and/or signage installed to enforce this (see MUTCD Section3B.23, Curb Markings).

- Assume Town responsibility for sidewalk maintenance

The Town's code does not assign sidewalk maintenance responsibilities, aside from property owners' responsibility to clear ice and snow. As discussed in Moving Dutchess Forward (see sidebar on Sidewalk Best Practices), best practice is for a municipality to treat sidewalks like other public infrastructure, and plow, repair, and otherwise maintain them. See the recommendation for a capital plan and the funding option of a Sidewalk Improvement District below for related suggestions.

b. Promote walkable development (Phases 1-3)

We encourage the Town to review its Planning, Zoning, and Highway Department procedures to ensure that walkable development is encouraged, and that sidewalks and other pedestrian-related improvements are considered as part of development and redevelopment projects in the hamlet.

The **site plan review process** is a key opportunity to improve pedestrian access, safety, and comfort. This includes working with landowners and applicants to place buildings near the street, install sidewalks and walkways into the site, locate parking to the side or rear, and consolidate driveways and share parking between uses. Parking lots abutting the street make walking less appealing and less safe, due to driveways interrupting the sidewalk. Placing off-street parking in the rear

(or when that is not feasible, to the side of buildings) reduces conflict points and prioritizes pedestrian comfort.

To communicate walkable design goals to property owners and developers, the Town could create **visual design guidelines**, either integrated into the zoning code or as a stand-alone "pattern book" or design guidelines document. This could illustrate building, sidewalk, parking, and driveway placement, as well as details such as entrances, lighting, signage, and setbacks with photos and illustrations. In Dutchess County, the <u>Villages of Tivoli</u> and <u>Red Hook</u> have pattern books that could serve as models, and the County Planning Department's <u>Greenway Guides</u> could be incorporated.

For street design, useful references include NYSDOT's Highway Design Manual, the U.S. Access Board's Public Rights of Way Accessibility Guidelines (PROWAG), the MUTCD, and the National Association of City Transportation Officials (NACTO) design guides.

A complementary approach would be to pass a **Complete Streets Policy**, which could apply to any project affecting streets in the Town or hamlet. <u>Dutchess County's Complete</u>
<u>Streets Policy</u> is one model; the <u>National Complete Streets</u>
<u>Coalition</u> also has best practice language.

c. *Adopt the Pedestrian Plan and designate an implementation entity (Phase 1)

In our experience, plans such as this are most effective when adopted as an official municipal document. Referencing a formally adopted plan can also help in securing grants.



The Town could incorporate the Pedestrian Plan as an appendix to the updated comprehensive plan or adopt it by Resolution as a separate document. We also recommend that a specific entity, such as a Town committee, be tasked with overseeing implementation of the Plan.

d. Develop a capital plan for sidewalk construction and maintenance (Phase 1)

Town Highway staff perform sidewalk repairs as needed, but there is no long-term capital improvement plan or sidewalk maintenance plan, and budgeting is done on an annual basis.

We recommend that the Town use this Plan and the associated maps to establish at least a five-year capital plan with an associated budget and prioritized list of projects, as well as a system to track sidewalk conditions and maintenance work. This will help ensure that the highest-priority areas are addressed first, and that funding is identified to address maintenance needs. The capital plan could include sidewalk construction, repairs, sweeping (as needed to remove gravel), snow plowing, and vegetation trimming, as well as constructing curb extensions and ramps, installing detectable warnings, and marking crosswalks.

As part of this process, the Town should evaluate the personnel and capital/equipment needed to undertake sidewalk snow plowing and maintenance in the hamlet. This would provide consistent, professional attention to a critical element of local infrastructure.

e. Implement a pedestrian safety education campaign (Phase 1-2)

We encourage the Town to promote pedestrian safety by working with civic groups, the School District, and the County's Traffic Safety Board to develop and implement programs to encourage safe walking. The County's Watch Out For Me campaign has resources including brochures, posters, videos, and curricula.



Part IV: Implementation

a. Responsible Entities

New sidewalk construction may be done by the road owner (State, County, or Town), municipality (including, in many cases, for sidewalks on State and County roads), or property owner. Sidewalk repair is typically the Town or adjacent property owner's responsibility. Intersection-related work (signals, crosswalks, and sometimes curb ramps) is based on which entity owns the intersecting streets – the higher-level owner (State, County, or Town) is responsible for the intersection. In Dover Plains, the State owns Route 22 and the County owns Lime Kiln Rd. All other streets are Town-owned. Work on or along a State road requires a highway work permit from NYSDOT and proof of insurance, while work on or along a County road requires a permit from Dutchess County DPW and proof of insurance.

Landscaping and street furniture maintenance would be the responsibility of the Town or property owner, or potentially a civic organization. Installation of landscaping on the NYSDOT right-of-way requires a highway work permit and must meet NYSDOT's requirements for landscaping and planting.

For any work on Metro-North property, plans and engineering drawings must be reviewed and approved by Metro-North and all insurance, permit, and approval process requirements must be followed. In some cases, Metro-North forces would do the work (see meeting notes in Appendix G for details).

Appendix H (Recommendations Summary) lists the lead entity and partners for each recommendation, based on our understanding of the various projects.

b. Unit Cost Estimates

Cost estimates require a detailed understanding of each project's context and components. However, cost estimating tools can provide planning-level estimates. The estimates in Appendix K are based on information from DCTC's on-call consultant.

Typically, federal and state-funded projects cost more than locally- or CDBG-funded projects, and costs can vary based on what entity constructs the project. However, regardless of the funding source, projects on a State road need to follow State design guidelines, which generally involves higher costs.

The unit cost estimates will change over time. Also, costs related to right-of-way, drainage, and utility work can vary substantially and may affect the feasibility of recommended projects. Additional cost estimates could be provided by NYSDOT-Region 8, the Dutchess County Department of Public Works, the Town Highway Department, and local consultants and vendors. For improvements on Metro-North property, Metro-North could provide cost estimates if the project has a scope and design. Online tools include NYSDOT's <u>statewide pay item catalog</u> and <u>Quick Estimator Reference Tool</u> (use the Downstate tab) and the Pedestrian and Bicycle Information Center's (PBIC) <u>national database of pedestrian and bicycle infrastructure costs</u>.



c. Funding Options

There are a variety of potential funding sources for the projects recommended in this plan. Key sources are listed below.

Local Funds

Municipalities often find that it is less expensive to use local funds than federal sources. This is because federal funding typically requires higher-cost materials, lengthy review and right-of way processes, thorough construction inspection, and detailed grant reporting and administration. Although municipal resources are limited, local funds allow for more flexibility and a much faster process. Local funding sources include the following:

- General Fund/Discretionary Funds: The Town will need to weigh each project against other local priorities.
- CHIPS (Consolidated Local Street and Highway Improvement Program): Municipalities receive annual CHIPS funding from NYSDOT based on their local roadway mileage. CHIPS funds can be used for construction and repair of streets and bridges, as well as sidewalks and traffic calming projects. Capital projects must be paid for by the municipality and then reimbursed by NYSDOT.
- Local Bond: The Town could issue a local bond to fund a package of improvements.
- **Sidewalk Improvement District**: Ithaca, NY funds sidewalk installation and maintenance through sidewalk

improvement districts. The districts assess an annual maintenance fee on properties, based on the type of property, its size, and the amount of sidewalk work needed in the district. See Ithaca's Sidewalk Policy website for more information. Denver, CO and other locations have implemented similar programs.

Private Funds

- Development Conditions of Approval: Prospective developers could be required to construct or provide funding for the relevant improvements outlined in this Plan as part of their project.
- Public-Private Partnerships: This would involve working
 with a private entity, civic organization, or community group
 to implement a street improvement project. Other
 examples include funding benches through the sale of
 advertising space or creating an 'adopt a street' or similar
 maintenance program.

• Non-Profit Organizations:

- America Walks' Community Change Micro Grants fund projects or programs to make walking safer, easier, and more fun. These grants have funded walking maps, public art, signage, crosswalks, events, educational materials, and more.
- AARP Community Challenge Grants provide grants for quick actions that can improve walkability, bikeability, wayfinding, and access to transportation options.



 Foundation Grants: Local foundations may have funding for walking and bicycling projects. Nationally, the <u>Foundation</u> <u>Center</u> (now named Candid) has a database of grant-makers and grants, as well as other tools for grant-seekers.

County & State Funds

- Community Development Block Grants (CDBG): These are federal funds from the U.S. Department of Housing and Urban Development and are administered by the Dutchess County Department of Planning and Development's Community Development and Housing Division. In areas defined as low and moderate income, eligible activities include infrastructure improvements such as sidewalk construction, roadwork, and drainage. In all areas, CDBG can fund projects that remove barriers to access. CDBG funds can also be used as a match for other federal funding.
- The <u>County Department of Public Works (DPW)</u> owns and maintains all County roads, including Poplar Hill Rd (CR 4) in Dover Plains. DPW receives CHIPS and County funds and can use bonds or apply for state or federal funding for larger projects. DPW typically does not build or maintain sidewalks but would be a partner for any project related to a County road.
- The <u>Hudson River Valley Greenway</u> provides grants to municipalities through its Greenway Community Grant Program and Conservancy Trail Grant Program. Community grants support economic development, public access, and natural and cultural resource protection.

- The New York State Department of Transportation
 (NYSDOT) owns and maintains all State roads, including
 Route 22 in Dover Plains. NYSDOT is responsible for the
 roadway as well as intersections along it. This includes
 maintaining signals, marking crosswalks, and installing signs.
 NYSDOT uses State funds as well as federal funds for its
 projects.
- New York State's Consolidated Funding Application (CFA) is an annual application for funding from various State agencies, including the Department of Environmental Conservation (DEC), Department of State (DOS), Empire State Development (ESD), Homes and Community Renewal (HCR), Parks, Recreation and Historic Preservation (OPRHP), and others. The funding programs and amounts vary by year. The CFA is intended to implement the economic development priorities and strategies developed by the Regional Economic Development Councils, which for the Mid-Hudson, include promoting alternative transportation.

For Dover Plains, potential funding programs could include <u>Climate Smart Communities</u> (DEC), which funds pedestrian and bicycle transportation projects; the <u>Environmental Protection Fund</u> (OPRHP), for development of parks; <u>Clean Energy Communities</u> (NYSERDA); and the <u>Green Innovation Grant Program</u>, for green infrastructure (NYSEFC).

 New York State's <u>Multi-Modal Program</u> provides reimbursement funding for capital projects related to five transportation modes: rail, port, ferry, airport, and State and local highways and bridges. Projects are nominated by the Governor or a State Legislator and must be approved by



- a State Committee and determined to be eligible by NYSDOT.
- The <u>State and Municipal Facilities Program</u>, administered by the State's Dorm Authority, can fund sidewalks and other local infrastructure. Projects are nominated by a State Legislator.
- State <u>Section 130 Railway-Highway Crossings funding</u> is intended to improve safety at railway crossings on roads, bicycle trails and pedestrian paths. This could be a funding source for additional railroad crossing improvements if needed.
- Legislative Discretionary Funds: State legislators typically have discretionary funds that can be used for local priority projects.

Federal Transportation Funds

Most federal transportation funding comes from the multimodal federal transportation law in effect at the time. To use federal transportation funding, a project must be consistent with an overall transportation plan, such as Moving Dutchess Forward, and be added to the DCTC's Transportation Improvement Program (TIP). For more information, see the DCTC's webpage on Federal Highway Funding and the Federal Highway Administration's Pedestrian and Bicycle Funding Opportunities table.

Federal transportation funding programs that could be used for pedestrian and bicycle improvements include the following:

- National Highway Performance Program (NHPP): These funds may be used for projects, including walking and bicycling facilities, on roads on the National Highway System (NHS). In Dover Plains, the NHS includes Route 22.
- Surface Transportation Block Grant Program (STBG): These funds may be used for projects on any <u>federal-aid eligible</u> road. In Dover Plains, this includes Route 22. Projects can include walking and bicycling facilities, as well as nonconstruction projects related to safety (such as brochures, public service announcements, and route maps). A portion of each State's STBG funds must be used for the Transportation Alternatives Set-Aside (see below).
- Transportation Alternatives Set-Aside: This program funds walking and bicycling infrastructure, safe routes to school projects, and trails, as well as landscaping and other projects on any public road. Eligible costs include studies, design, construction, and right-of-way incidentals and acquisition. Administrative and maintenance costs are not eligible.

Most federal programs are reimbursement programs, and the federal share of the costs is generally 80 percent. If these funds are used, the project sponsor is responsible for the required local match and any costs that are not covered by federal funds. The design and construction of pedestrian facilities could be funded by any of the sources and could be a stand-alone project or combined with a roadway project. A large project could also be split into several smaller pieces with funding from different programs.



d. Final Thoughts

Dover Plains is a special place, with local historical and cultural sites, parks and trails, and a walkable hamlet center with local businesses and institutions. Most importantly, it has residents, local leaders, and staff who are committed to improving the community.

At the same time, Dover Plains faces challenges including balancing the needs of residents and visitors, overcoming the barriers created by Route 22, and working within the constraints of a Town with limited resources.

The first step is to agree on a vision; then begins the hard work of securing funding and implementing priority projects. This work takes time and focused leadership. This plan is intended to help Dover start this effort: first, by identifying the scope of the challenge through an assessment of existing conditions, and second, by presenting a series of recommendations to improve safety, access, and the walking environment throughout the hamlet.

With concerted effort by the Town, working with local organizations as well as NYSDOT, Metro-North, County, and other partners, Dover Plains can become a more walkable and accessible destination for both residents and visitors.



The Ketcham's Corner Plaza on Route 22 at Mill St.

