Village of Rhinebeck

Route 9 Complete Streets Study

DUTCHESS COUNTY
TRANSPORTATION COUNCIL
Better ways from here to there

November
2022

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DUTCHESS COUNTY
TRANSPORTATION COUNCIL
Better ways from here to there

85 Civic Center Plaza, Suite 107
Poughkeepsie, NY 12601
(845) 486-3600
dctc@dutchessny.gov
dutchessny.gov/dctc

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A. Introduction

In 2021, the Village of Rhinebeck requested the Dutchess County Transportation Council (DCTC) to study Complete Streets improvements for the northern and southern gateways to the village on Route 9. Complete Streets are designed, operated and maintained to support safe travel of all kinds (walking, bicycling, transit, driving, and freight delivery), by people of all ages and abilities. The study's goals include improving comfort and safety for people walking and bicycling, calming traffic, and creating clear gateways into the village.

Complete Streets improvements would support several efforts underway in the village, including its Climate Smart Community designation and goals, an update to the Comprehensive Plan, grant-funded improvements to curb ramps and crosswalks, and a NYSDOT project to replace the bridge over the Landsman Kill. Village residents have also expressed strong support for improved walking and bicycling access and safety.

This study builds on our 2011 Village of Rhinebeck Sidewalk Study, which evaluated sidewalks and crosswalks and recommended a phased series of improvements, several of which the Village has implemented. The study also aligns with our long-range plan, Moving Dutchess Forward, which identifies the northern portion of Route 9 as a high-crash segment for vehicles and pedestrians; Route 9 through the village as a high-crash corridor for pedestrians and bicyclists; and Route 9 through the village as a high-congestion segment.

We agreed to undertake this study as part of our federally funded 2022-2023 Planning Program. This concept plan is intended to help the Village and its Engineer develop more detailed design plans and cost estimates that can be submitted as part of funding applications. See **Map 1** for the study area.

B. Coordination

We held a series of calls and meetings with Village representatives and others throughout the project. These included:

- November 2021: call with Mayor and Village Engineer to outline the key issues and goals of the study
- April 2022: site visit with Mayor, Village Engineer, and Village Trustee to observe the corridor and refine the scope and focus of the study
- June 2022: meeting with Village Mayor, Village Trustee, and Village Highway staff to discuss improvement options and questions for NYSDOT
- July 2022: call with NYSDOT Region 8 staff to understand the feasibility of various options and the process for implementing them
- September 2022: call with Mayor and Village Trustee to discuss feedback from the Comprehensive Plan Transportation Subcommittee

Notes from these calls/meetings are included in **Appendix A**. Key contacts at NYSDOT Region 8 are Mo Islam, Traffic & Safety Group and Regional Pedestrian/Bicycle Coordinator (Mohammed.Islam@dot.ny.gov); Lisa Mondello, Traffic & Safety Group (lisa.mondello@dot.ny.gov); and Lee Zimmer, Regional Traffic Engineer (Lee.Zimmer@dot.ny.gov). To request items from NYSDOT, the Village can email Lee and cc Lisa, or use a general email (dot.sm.r08.trafficsafety@dot.ny.gov) and cc Lee and Lisa. These staff can also help the Village coordinate any work requiring a NYSDOT Highway Work Permit.

C. Existing Conditions

We collected traffic volume, speed, and vehicle class data as well as pedestrian/bicycle count data in Fall 2022 to better understand conditions on Route 9 in the village. A summary of information based on this data, our site walk, and a review of aerial maps is below. Traffic count reports are provided in **Appendix B** and will be available online via our Traffic Data app. **Map 1** (Study Area) also shows the location of sidewalks, marked crosswalks, and signed bus stops within the study area.

- Traffic counts: collected mid-July 2022
    - North of Locust Grove
        - 11,790 vehicles per day
        - Peaks: 4-5 pm northbound; 3-4 pm southbound
        - Heavy vehicles: about 4% of traffic
        - 85% speed: 35 mph northbound, 36 mph southbound
    - North of Rockefeller Ln
        - 7,750 vehicles per day
        - Peaks: 7-8 am northbound; 4-5 pm southbound
        - Heavy vehicles: about 5% of traffic
        - 85% speed: 41 mph northbound, 44 mph southbound
- Pedestrian & Bicycle volumes (see also **Map 2** for pedestrian and bicycle count data):
  Note: these volumes reflect a typical day in the village; they do not reflect community events that draw larger crowds.
    - Video counts: 12 hours, collected October 6th and 8th, 2022. Screenline totals represent people walking or bicycling north/south on Route 9.
        - Route 9 between Locust Grove & Village Green (screenline):
            - Weekday (7am-7pm) 164 peds, 24 bikes
            - Saturday (7am-7pm) 196 peds, 39 bikes

- Route 9 between Platt Ave & Chestnut St (screenline):
  - Weekday (7am-7pm) 299 peds, 26 bikes
  - Saturday (7am-7pm) 470 peds, 32 bikes

- Route 9 at South St (screenline):
  - Weekday (7am-7pm) 127 peds, 17 bikes
  - Saturday (7am-7pm) 192 peds, 37 bikes

  Note: this count also captured people crossing Route 9 at South St (in the north and south legs of the intersection):
  - Weekday (7am-7pm) 81 peds
  - Saturday (7am-7pm) 103 peds

- Route 9 just north of Rockefeller Ln (screenline):
  - Weekday (7am-7pm) 67 peds, 12 bikes
  - Saturday (7am-7pm) 60 peds, 24 bikes

o Volunteer counts: 2 hours, collected in mid-September 2022

- Route 9 at Terrapin Crosswalk (crossings only):
  - Weekday (4-6pm) 78 peds
  - Saturday (12-2 pm) 251 peds, 5 bikes (in crosswalk)

- Route 9 at South St Crosswalk (crossings only):
  - Weekday (4-6pm) 11 peds
  - Saturday (12-2 pm) 14 peds

- Route 9 / Platt Ave intersection (ped crossings and bikes traveling through):
  - Weekday (4-6pm) 1 ped, 9 bikes
  - Saturday (12-2 pm) 5 peds, 10 bikes
    - During the weekday, 24 people walked past the intersection on the western sidewalk; others walked on the eastern sidewalk and turned up Platt Avenue.
    - During the Saturday, 3 of the pedestrians crossed Route 9; the other 2 crossed Platt Ave.

  Note: there is no marked crosswalk across Route 9 at Platt Ave, so existing crossing volumes may not accurately reflect future crosswalk use.

- Per the Village's request, volunteers also collected data at the CVS crosswalk on Market St:
  - Market St at CVS Crosswalk (crossings only):
    - Weekday (4-6pm) 138 peds
    - Saturday (12-2 pm) 303 peds

Route 9 looking northbound towards South St

- Pavement, sidewalk and buffer widths: These vary throughout the corridor. We took measurements in several locations. See also the Existing Street Sections in **Appendix C**.

  - South of Locust Grove Rd: ~34 ft paved width (11 ft lanes; 5 ft shoulder on east, 7 ft parking lane on west)
    - 4 ft sidewalk on west with 7 ft buffer

  - South of Platt Ave: ~34 ft paved width (11 ft lanes and 6 ft shoulders/parking lanes)
    - 5 ft sidewalks with 6-8 ft buffers

  - South of South St: ~37 ft paved width (11.5 ft lanes; 7 ft parking lanes on both sides)
    - 4 ft sidewalk on west with 6 ft buffer; 5 ft sidewalk on east with 9 ft buffer

- South of Rockefeller Ln: ~36 ft paved width (11.5 ft lanes; 5 ft shoulder on east, 8 ft parking lane on west)
    - 4 ft sidewalk on east with 8 ft buffer

- Sidewalks (see dimensions above):
    - On west side only north of Platt Ave
    - On both sides between Platt Ave and just south of South St
    - On east side only south of South Ave

- Utility poles:
    - On the west side near Springbrook Ave/Montgomery St
    - On both sides south of Springbrook Ave/Montgomery St to south of Rockefeller Ln
    - Lights are mostly on the west side poles
    - Poles are typically in the grass sidewalk buffer; in areas with no sidewalk, they are on the far side of the shoulder

- On-street parking: Allowed through most of the study area, with various restrictions (see **Map 3**, On-Street Parking Restrictions).
    - No marked spaces
    - All on-street parking is free

D. Recommendations

See **Map 4** for a conceptual map of the recommendations, and **Appendix D** for a Recommendations Table.

1. Northern Gateway: Platt Ave to Springbrook Ave/Montgomery St

a. Route 9 at Montgomery St: Create a Gateway; Narrow the Intersection

Issue: This intersection serves as the main gateway to the village from the north. However, it is very wide, which leads to high speeds and entices drivers to illegally pass on the shoulder.

Recommendation: Restripe the intersection and reduce pavement to narrow the intersection. In particular, the northwest and southwest corners could be narrowed. The need for the eastbound right turn lane should be re-evaluated, as well as the need for a potential northbound left turn lane.

In addition, the gateway Village sign in the triangular green space could be emphasized with additional landscaping, lighting, or other features. If the green space is owned by NYSDOT, a Use and Occupancy Permit would be required. See NYSDOT's Gateway Signing Policy and Highway Design Manual, Traffic Calming chapter for reference.

Wide intersection at Route 9/Springbrook/Montgomery; drivers using the shoulder to bypass left turning-vehicles (source: Google maps; image capture: 2019

Process: The Village would need to do a traffic study to evaluate turning movements and the need for turning lanes, determine the appropriate turning radii (especially for heavy vehicles), and determine an appropriate design.

Regarding ownership of the green space, the Village should coordinate with NYSDOT's Real Estate group (845-437-3391).

According to NYSDOT, this would be a Village project, under a NYSDOT Highway Work Permit.

Alternative considered: We discussed a roundabout for this intersection, but the Village expressed concerns related to emergency vehicle access. The Village could revisit this option but would need to do a full study. According to NYSDOT, the intersection would need to meet signal warrants, as a roundabout is an alternative to a traffic signal. The study should also evaluate right of way needs, traffic impacts, and access for large vehicles.

Village sign at northern gateway

b. Platt Ave: Add Crosswalks; Consider Beacons; Improve the Sidewalk

Issue: There are no marked crosswalks across Route 9 to the north in the village, and the nearest marked crosswalk to the south is at Livingston St, more than 1,100 ft away. Residents have requested a crosswalk across Route 9 at this location.

Recommendation: Add a high-visibility ladder crosswalk across Route 9 at Platt Ave (likely on the north side). This would include ADA-compliant ramps on both sides.

Consider Rectangular Rapid Flashing Beacons (RRFBs) to encourage yielding, since this would be an uncontrolled location and the first crossing heading southbound. If RRFBs are not used, uncontrolled crosswalks should have Pedestrian Crossing warning signs (see MUTCD Section 2C.50; sign W11-2).

In addition, a high-visibility ladder crosswalk could be marked across Platt Ave. This would need an ADA-compliant ramp on the north side and an improved ramp on the south side.

The sidewalk on the north side of Platt Ave should also be improved, as it is in very poor condition.

Platt Avenue intersection; note person trying to cross (source: Google maps; image capture: 2019)

Process: The Village would need to make the case for the Route 9 crosswalk to NYSDOT, based on a written summary of nearby destinations, pedestrian crossing volumes, distance to signalized intersections, vehicle speeds and volumes, and other factors (see MUTCD Section 3B.18 on crosswalk markings). The placement of the crosswalk and ramps should be evaluated based on utilities, drainage, and tree locations.

The Village would also need to make the case for RRFBs, based on pedestrian volumes, the distance from signalized crossings, the crash history at this location, and other factors (see NYSDOT TSMI-18-02 for guidance). The Village should consider which uncontrolled crosswalks are the highest priority for RRFBs, rather than request all locations. NYSDOT's Traffic Safety group would evaluate and approve or disapprove the request.

According to NYSDOT, the Route 9 crosswalk would be a Village project, done under a NYSDOT Highway Work Permit. (Note: NYSDOT has an ADA project in Northern Dutchess, but it is limited to improving locations with existing crosswalks). Marking the side-street crosswalk could possibly be done by NYSDOT (see 1.c below for details on striping side-street crosswalks).

If the RRFBs were approved, the Village could install them under a NYSDOT Highway Work Permit, in which case the Village pays, owns, and maintains them, and they could be hard wired or solar powered. Alternatively, the Village could request NYSDOT to install the RRFBs, but it is unlikely (2026 at earliest, according to Lisa Mondello). If NYSDOT installs the RRFBs, they would need to be hard wired.

The sidewalk improvement would be a Village project.

c. Locust Grove Rd & Village Green: Mark Side-Street Crosswalks

Issue: These side streets have sidewalks but no marked crosswalks.

Recommendation: Mark high-visibility ladder crosswalks across both streets. At both locations, the ramps appear ADA-compliant, but this should be confirmed in the field.

Process: This striping could be done by NYSDOT if it is part of a NYSDOT project or if the location falls within their maintenance responsibility, which is typically from curb to curb on the State highway. The Village should check with NYSDOT's Resident Engineer (Bill Lane) to confirm if the location is within the State right of way. If so, NYSDOT will mark crosswalks as part of their regular four-year cycle (last done in 2021) or by request to dot.sm.R08.trafficsafety@dot.ny.gov.

If not within the State right of way, the crosswalk would be marked by the Village. Dutchess County Public Works has a striping contract that allows municipalities to use the same vendor, assuming the municipality is part of the Interagency Purchasing Cooperative with the County. If so, the Village can reach out directly to the vendor (listed below) and it will be billed separately. Matthew Davis at County DPW (mdavis@dutchessny.gov) can help with any questions.

SAFETY MARKING, INC.
David Steffens
POB# 38186/255 Hancock Avenue
Bridgeport, CT 06605
203.333-6870
http://www.safetymarking.net

d. Livingston St/Terrapin Crosswalk: Consider Beacons and Curb Extensions

Issue: This crosswalk is ADA compliant but is uncontrolled; driver yielding could be improved. Recommendation: Consider curb extensions and/or RRFBs to encourage yielding.

Process: See 1.b (Platt Ave) above for discussion of RRFBs. If the Village desires curb extensions, they would need NYSDOT approval. The Village would need to evaluate the required turning radii for large vehicles such as fire trucks and school buses, consider underground utilities, and ensure adequate drainage. Curb extensions would be a Village project under a NYSDOT Highway Work Permit.

Alternative considered: We discussed raised crosswalks, which slow traffic and increase yielding to people in uncontrolled crosswalks. However, NYSDOT has strict guidance on where they can be applied (see EI 13-018), which this location would likely not meet. In addition, raised crosswalks are typically not appropriate on bus routes, and there were concerns about their impact on emergency vehicle access.

2. Southern Gateway: South St to Rockefeller Ln

a. Post Office Crosswalk: Consider Beacons & Curb Extensions

Post Office crosswalk (note ponding at both ramps)

Issue: This crosswalk is ADA compliant but is uncontrolled; driver yielding could be improved. Recommendation: Consider curb extensions and/or RRFBs to encourage yielding.

Process: See 1.b (Platt Ave) above for discussion of RRFBs and 1.d (Livingston St/Terrapin Crosswalk) for discussion of curb extensions.

b. South St Crosswalk: Relocate the Crosswalk; Consider Beacons & Curb Extensions

Issue: This crosswalk is not ADA compliant. It has no curb ramp on the east side and ends at the gas station driveway on the west side.

Recommendation: Relocate the crosswalk to the north side of the intersection and provide ADA compliant ramps on both sides. Consider curb extensions and/or RRFBs to encourage yielding, as this is an uncontrolled crossing.

Process: NYSDOT could add the relocation of the crosswalk to its 2025 Northern Dutchess ADA project if the Village formally requests that NYSDOT add it. However, the ADA program only brings existing facilities up to ADA standards; it would not incorporate curb extensions or RRFBs. Those items would be done separately, most likely by the Village under a Highway Work Permit.

See 1.b (Platt Ave) above for discussion of RRFBs and 1.d (Livingston St/Terrapin Crosswalk) for discussion of curb extensions.

Non-accessible crosswalk at South St (lack of east side ramp and west end at gas station driveway)

c. Side streets (South St, Legion Park, Rockefeller Ln): Create Accessible Crosswalks

Issue: These side streets have connecting sidewalks but no marked crosswalks to alert drivers to expect people crossing. In addition, all the ramps lack detectable warnings, and the South St ramps do not appear to be accessible.

Recommendation: Mark high-visibility ladder crosswalks across these three side streets. Improve ramps as needed and add detectable warnings for full ADA accessibility.

Process: Coordinate with NYSDOT to ensure consistency with improvements at the South St crosswalk (see 2.b, South St Crosswalk) and the Landsman Kill bridge (see 2.e, Route 9 at Rockefeller Ln). We understand that the replacement Landsman Kill bridge will require the existing pedestrian bridge to be shifted east, which will affect the sidewalk approaches and crosswalk location.

See 1.c (Locust Grove Rd & Village Green) regarding striping side-street crosswalks.

d. Legion Memorial Park: Create a Lighted Path; Install Signage

Issue: This park is an important asset for the village but is not well known and access could be improved.

Recommendation: Consider wayfinding signage at key locations in the village (such as the Chamber of Commerce building, near Rockefeller Ln, and near the Mill St (Route 9)/Market St (Route 308) intersection) to direct people to the park and other destinations. Wayfinding signs should be designed to reinforce the Village identity or brand, and would be separate from existing NYSDOT or Hudson River Valley Greenway signs. Sample images are shown below; see also the Empire State Trail Design Guide Section 2 for examples and guidance.

Consider constructing a pedestrian path to the park and add pedestrian-scale lighting. Install clear parking signage at the park.

Access road up to Legion Park

Process: Any signage in the State Right of Way requires a Highway Work Permit from NYSDOT. See 3.d, Pedestrian-Scale Lighting, for lighting recommendations. This would be a Village project.

Sample wayfinding signage (sources: GreenwichStreetscape.com; Pinterest

e. Route 9 at Rockefeller Ln: Create a Gateway

Issue: This is the southern gateway into the Village, but it is not marked in any way.

Recommendation: Create a visual gateway into the village, including a sign, landscaping, lighting, and other features. Drainage at this intersection could also be improved. See NYSDOT's Gateway Signing Policy and Highway Design Manual, Traffic Calming chapter for reference.

The gateway could reinforce the historic nature of the pedestrian bridge through historic design elements. Interpretative signage about the bridge history could also be included.

Landsman Kill historic pedestrian bridge

Process: The Village would determine the desired features and design, and coordinate with NYSDOT's Landsman Kill bridge project. Since the replacement bridge will shift the pedestrian bridge and sidewalk approaches east, there may be opportunities for a pocket plaza or landscaped space west of the new sidewalk location.

This would be a Village project but should be coordinated with NYSDOT. Any work in the State's right of way would require a Highway Work Permit.

3. Corridor Wide

a. Replace Poor Condition Sidewalks; Consider an Improvement District

Issue: Some sidewalks along Route 9 are in poor condition, including the sidewalk on the east side of Route 9 between South St & Rockefeller Ln.

Recommendation: Evaluate sidewalk conditions along Route 9 and replace or repair sidewalks as needed.

The Village could also take on the responsibility for sidewalk maintenance and plowing, and create a sidewalk improvement district to fund sidewalk work (see examples from Moving Dutchess Forward). This would result in more consistent maintenance and improved pedestrian safety and access.

Process: See the Sidewalk Conditions map from our 2011 Village of Rhinebeck Sidewalk Study in **Appendix E** for reference. This would be a Village project.

Poor condition sidewalks south of South St

b. Create Bike Lanes; Add Shared-Lane Markings and Bicycle Signage; Consider Bicycle Boulevards

Issue: State Bike Route 9 runs along Route 9 through the village, and Route 9 is also part of the Hudson River Greenway Trail (see Bike Dutchess for an interactive map). There is also a locally designated 'Historic District Bike/Hike Trail' that connects Bike Route 9 to scenic roads and to the Empire State Trail north of the Kingston-Rhinecliff Bridge. However, these routes only consist of signs. Village residents have expressed concern for improved bicycling safety both for local trips and for connections to the Empire State Trail and other bicycling routes.

Recommendation: Convert shoulders to bike lanes outside the village core (where on-street parking is not needed, such as north of Platt Ave and south of South St). Paint shared-lane markings (sharrows) on Route 9 through the center of the village, where on-street parking is desired. Bike lanes would be at least 5 ft wide, preferably 6 ft, and consist of a bicycle symbol and arrow (see the MUTCD Section 9C.04 and figure 9C-3). For NYSDOT's policy on sharrows, see NYSDOT TSMI-13-07.

In addition, consider Bike Lane signs as well as wayfinding signage to direct bicyclists to key destinations. See the MUTCD Section 9B for bicycle sign standards (Bicycle Guide Signs are described in Section 9B.20 and Figures 9B-4 and 9B-6).

On local streets, consider developing a network of bicycle boulevards. Based on guidance from the National Association of City Transportation Officials (NACTO), bicycle boulevards should have a maximum speed limit of 25 mph and traffic volumes under 1,500 vehicles per day. Bicycle Boulevards typically include sharrows to highlight bicyclists' right to ride in the travel lane, wayfinding signs, and traffic calming treatments.

Route 9 looking northbound towards Legion Park entrance; note wide shoulder and sidewalk buffer

Process: NYSDOT would need to approve any markings and signage on Route 9. To do so, they require a plan showing the proposed bicycle lanes and sharrow markings. The bike lanes should have logical termini, meaning the start and end points should make sense to a bicyclist (these could be Montgomery St/Springbrook Ave at the north end, with signs directing cyclists to the local bicycle route and Empire State Trail via Montgomery St or Astor Dr, and Mill Rd at the south end, with signs directing cyclists to the local bicycle route on Mill Rd and Mill St; see Bike Dutchess for reference). NYSDOT would update existing signage based on the approved markings.

Depending on timing, NYSDOT may be able to paint the sharrows and bike lane markings, or they may require the Village to paint them under a Highway Work Permit. NYSDOT would then maintain the sharrow and bike lane markings on a four-year cycle. NYSDOT would also plow the bike lanes, as long as no vertical elements are present.

Alternatives considered: We recommended buffered bike lanes given the volume of traffic on Route 9. However, NYSDOT's design standards require a 3 ft buffer and 5 ft bike lane, for a total of 8 ft on each side (16 ft total), which would not fit within the existing curbs based on our

measurements. We also discussed green bike lanes, which are higher visibility. However, NYSDOT would not maintain any green paint/material.

c. Stripe Parking Edge Lines

Issue: There is on-street parking through the village core, but there are no pavement markings to indicate this. Outside the village core, there are shoulder line markings (though a southbound segment south of Locust Grove Rd has no shoulder/parking lane marking). Additionally, shoulder and travel lane widths vary along the corridor. Pavement markings help slow traffic by visually narrowing the road, and parking markings can help drivers park closer to the curb.

Recommendation: Stripe a parking edge line where on-street parking is desired (such as Platt Ave to South St). Stripe a shoulder line in the segment south of Locust Grove where it is missing, or convert to a bike lane, per 3.b (Create Bike Lanes). As much as possible, make travel lanes consistent widths. We recommend 11 ft travel lanes to encourage slower speeds. Also, consider hatched pavement markings to indicate 'no parking' areas more clearly (see Village of Fishkill example).

End of shoulder/parking line striping near Platt Ave (looking southbound)

Process: The Village would request NYSDOT's Traffic & Safety group to stripe the parking edge lines and any desired shoulder lines, and to make travel lane widths consistent. The striping plan should be coordinated with the desired bike lane and sharrow markings (see 3.b, Create Bike

Lanes). NYSDOT would do these markings and maintain them. NYSDOT maintains long line striping such as shoulders and parking edge lines about every 2 years.

NYSDOT does not stripe hatched 'no parking' areas; this would need to be done by the Village under a Highway Work Permit.

Alternatives considered: We suggested parking T's to better delineate parking spaces, but NYSDOT stated they would not maintain those.

d. Add Pedestrian-Scale Lighting

Issue: There are highway-style cobra-head lights along Route 9, but no pedestrian-scale lighting. Recommendation: Install pedestrian-scale lighting along Route 9 where feasible. Ideally the poles would be placed in the buffer area and spaced approximately four times their height (e.g., 10-15 ft tall lights would be spaced every 40-60 ft).

Process: NYSDOT only considers installing pedestrian lighting as part of road reconstruction or rehabilitation projects. Because lighting would likely fall within the NYSDOT right of way, the Village would need a Highway Work Permit from NYSDOT to install it. NYSDOT would review the proposed lighting for any negative impacts. The Village should also coordinate with Central Hudson as needed.

e. Review & Reduce Signage

Issue: Portions of the Route 9 corridor have a lot of signage, which can distract drivers and degrade the appearance of the streetscape.

Recommendation: Review existing signage along the corridor and reduce redundant or unnecessary signs where possible. We identified two highway-style signs that span the sidewalk to be removed: one north of Livingston St and one north of South St. Also, several 'No Parking' signs between Rockefeller Ln and South St could possibly be consolidated.

Process: NYSDOT agreed to remove the two sidewalk-spanning signs during a project phone call. The Village should identify additional signs to be removed and discuss options with the sign owner (NYSDOT or other).

Sidewalk-spanning sign near the Terrapin crosswalk (to be removed by NYSDOT)

f. Replace Street Trees

Issue: The Village desires to increase green infrastructure and improve its tree canopy. It is currently replacing trees on the northern portion of Route 9. The Village's Behind the Right of Way (BROW) policy allows property owners to replace a street tree behind the right of way if necessary.

Recommendation: Continue to replace dead or dying trees along the Route 9 corridor. Incorporate green infrastructure where possible, such as porous pavement, large tree boxes and structural soil, which can improve drainage and help tree roots (see County Planning's eNewsletter on Street Trees for guidance).

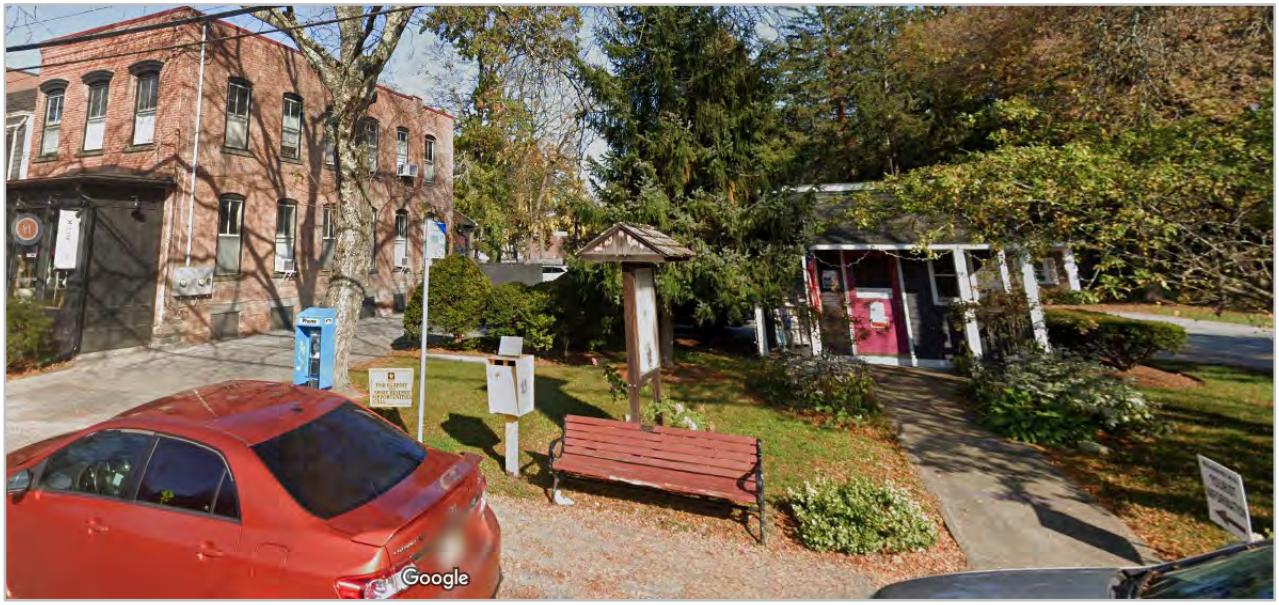
Process: The Village Tree Committee and Village staff lead this effort, working with Central Hudson, other utility companies, property owners, and NYSDOT. A Highway Work Permit from NYSDOT is required for any work within the State's right of way. NYSDOT's landscape group reviews proposed plantings for any negative impacts.

g. Install Bus Stop Shelters

Issue: There are several bus stops along the Route 9 corridor, but only one bus stop shelter (privately owned, at Village Green). Shelters make it more comfortable for bus riders to wait for the bus.

Recommendation: Add bus stop shelters at signed stops, such as southbound by the Post Office, southbound at the Astor driveway, and northbound by the Chamber building.

Process: The Village should discuss potential shelter locations with the County's Division of Public Transit (Amanda Sammon, Assistant Director) which has a system-wide plan for shelter installations and improvements. This would be a County Transit project, in coordination with the Village.



Signed bus stop at the Chamber building (source: Google maps; image capture: 2021)

E. Potential Funding Sources

Many of the recommendations outlined above will rely on the Village to secure funding for implementation. Some potential funding sources are listed below. The Village should also seek input on funding sources from their Engineer and other consultants.

1. Local Funds

It is typically less expensive to use local funds than federal sources. This is because federal funding requires lengthy review and right-of way processes, more rigorous construction inspection, and detailed grant reporting and administration. Although municipal resources are limited, local funds allow for more flexibility and a faster process. Local funding sources could include the following:

- **General Fund/Discretionary Funds**: The Village would need to weigh each project against other local priorities.

- **CHIPS (Consolidated Local Street and Highway Improvement Program)**: The Village receives CHIPS funding annually from NYSDOT based on its 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 Village could issue a local bond to fund a package of capital improvements.

- **Sidewalk or Transportation 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

2. Private Funds

- **Development Conditions of Approval**: Prospective developers could be required to construct or provide funding for any relevant improvements as part of their project.

- **Public-Private Partnerships**: Examples include working with the Chamber of Commerce or other organizations on street improvement projects; working with adjacent property owners to fund a portion of sidewalk or other improvements; 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 small grants for quick actions that can improve walkability, bikeability, wayfinding, and access to transportation options.
    - The League of American Bicyclists' Community Spark Grants fund small projects to improve a community through bicycling.
    - **Foundation Grants**: Local foundations may have funding for walking and bicycling projects. In addition, the Foundation Center website has a national database of grant-makers and grants, as well as other tools for grant-seekers.

- **Foundation Grants**: Local foundations may have funding for walking and bicycling projects. In addition, the Foundation Center website has a national database of grant-makers and grants, as well as other tools for grant-seekers.

3. County & State Funds

- **Community Development Block Grants (CDBG)**: These federal funds from the U.S. Department of Housing and Urban Development 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. See the eligible areas map and reach out to County staff for guidance.

- The **Hudson River Valley Greenway** provides grants to municipalities through its Community Grant Program. The City of Beacon used a Greenway grant to install sharrows, signage, and bicycle parking on its Main Street, and to develop a bicycle education program.

- The **New York State Department of Transportation (NYSDOT)** owns and maintains all State roads, including Route 9 in Rhinebeck. NYSDOT is responsible for the roadway as well as the intersections along it. This includes maintaining pavement, signals, crosswalks, and signs. NYSDOT uses State funds as well as federal funds for its projects. In some cases, improvements can be coordinated with scheduled paving work or other NYSDOT 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 Rhinebeck, potential funding programs could include Climate Smart Communities (DEC), which funds pedestrian and bicycle transportation projects; the Environmental Protection Fund (OPRHP), for development of parks; Clean Energy Communities (NYSERDA); and the Green Innovation Grant Program, for green infrastructure (NYSEFC).

- **New York State's Multi-Modal Program** provides reimbursement funding for capital projects related to 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 State and Municipal Facilities Program**, administered by the State's Dorm Authority, can fund sidewalks and other local infrastructure. Projects are nominated by a State Senator.

- **Legislative Discretionary Funds**: State legislators typically have discretionary funds that can be used for local priority projects.

4. Federal Transportation Funds

To use federal transportation funding, a project must be consistent with an overall transportation plan, such as Moving Dutchess Forward, and be added to our Transportation Improvement Program (TIP). For more information, see our webpage on Federal Transportation Programs 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), which includes Route 9.

- **Surface Transportation Block Grant Program (STBG):** These funds may be used for projects on any federal-aid eligible road, which includes Route 9. Projects can include walking and bicycling facilities, as well as non-construction 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 STBG Set-aside (see below).

- **Transportation Alternatives/Surface Transportation Block Grant (STBG) Program Set-aside**: This competitive grant program, informally known as the "TAP" 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.

- **Highway Safety Improvement Program (HSIP)**: This program funds projects that reduce fatalities and serious injuries at high-crash locations.

- The 2021 **Bipartisan Infrastructure Law (BIL)** created numerous transportation funding programs. In many cases, the regulations are still being defined. See the BIL website for more information.

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, including overruns. The design and construction of pedestrian facilities 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.

F. Next Steps

We suggest the following next steps for the Village:

- Confirm priority improvements; revise Recommendations Table as needed (lead: Village Mayor & Trustees)
- Hold a public meeting to present the study and seek feedback on the proposed improvements; revise proposed improvements as needed (lead: Village Mayor & Trustees)
- Adopt the study through a Village Resolution; append to the updated Comprehensive Plan when adopted (lead: Village Mayor & Trustees).
- Prepare engineering-level designs and renderings as needed (lead: Village Engineer)
- Estimate costs (lead: Village Engineer)
- Coordinate with NYSDOT & other partners; refine designs and cost estimates as needed (lead: Village Engineer)
- Apply for funding (lead: Village Engineer or grant writer)

Village of Rhinebeck Complete Streets Study
Study Area

Pond Dr
Astor Dr
Locust Grove Rd
Locust Grove Rd
Bird Ct
Johns Way
Village Green
Village Green
Montgomery St
Mulberry St
Platt Av
Prospect St
Garden St
Chestnut St
Chestnut St
9
Montgomery St
Mulberry St
Livingston St
Oak St
Garden St
Market St
308
Market St
Traver Ln
Center St
South St
Mill St
Legion Memorial Park

Existing Conditions

- Focus Areas
- Sidewalks
- Signed Bus Stops
- Route 9 Marked Crosswalks
- Local Bike Route
- State Bike Route
- Waterbodies
- Parks

0 250 500 Feet

N

DUTCHESS COUNTY TRANSPORTATION COUNCIL
Better ways from here to there

This map is intended for planning purposes only.
The DCTC shall not be held liable for any misuse or misrepresentation of this information.
Map contents and data are subject to change.

Village of Rhinebeck Complete Streets Study
Pedestrian/Bicycle Video Counts

Weekday:
164 peds
24 bikes

Saturday:
196 peds
39 bikes

Weekday:
299 peds
26 bikes

Saturday:
470 peds
32 bikes

Weekday:
127 peds
17 bikes

Saturday:
192 peds
37 bikes

Weekday:
67 peds
12 bikes

Saturday:
60 peds
24 bikes

Count Locations

- Route 9 north of Village Green
- Route 9 north of Chestnut St
- Route 9 at South St
- Route 9 north of Rockefeller Ln
- Parks
- Waterbodies

0 250 500 Feet

N

DUTCHESS COUNTY TRANSPORTATION COUNCIL
Better ways from here to there

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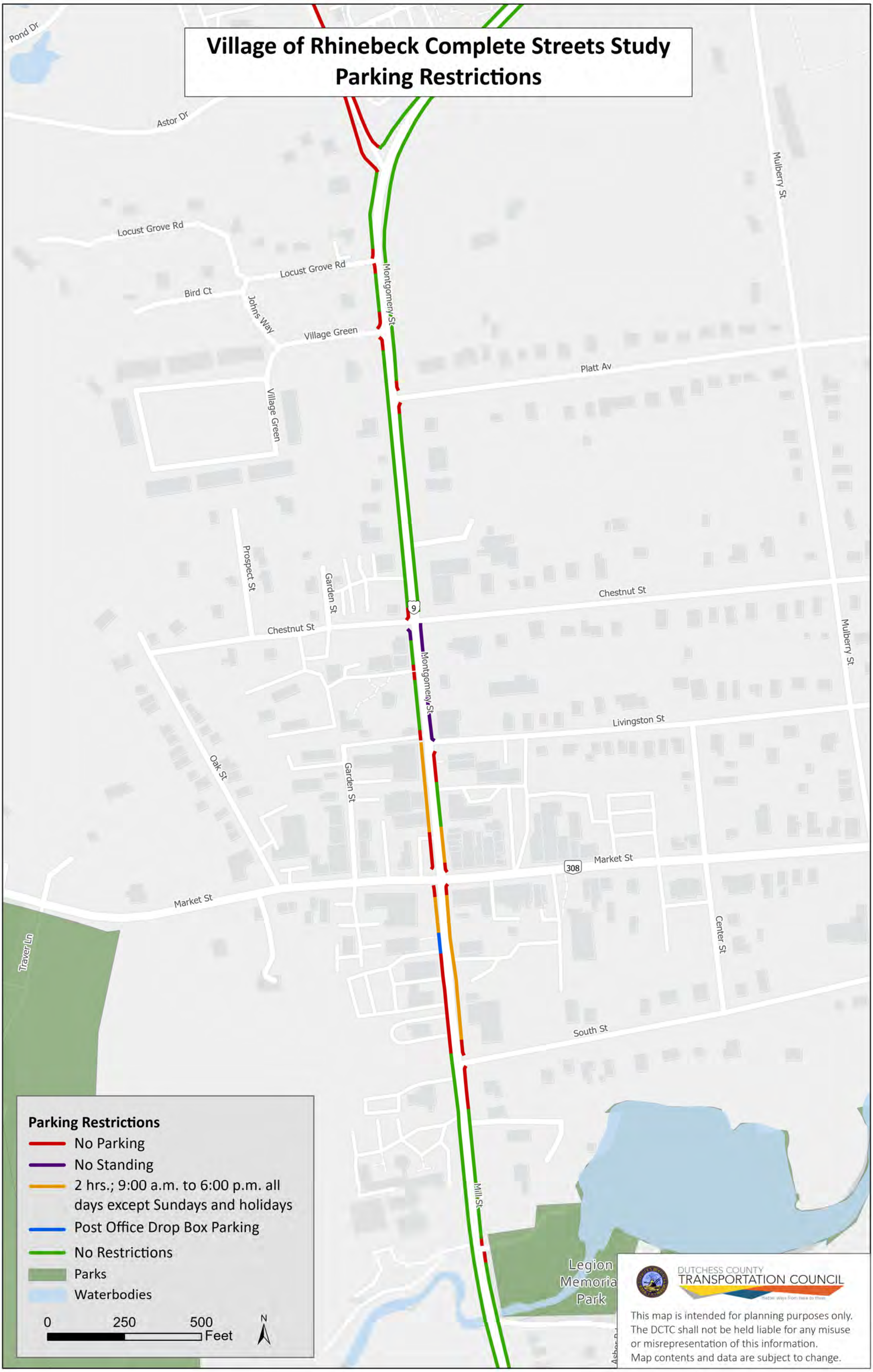
Village of Rhinebeck Complete Streets Study
Parking Restrictions



Village of Rhinebeck Complete Streets Study Recommendations

Restripe and reduce pavement to narrow the intersection. Consider landscaping, lighting, or other gateway features.

General Recommendations

Sidewalks
Evaluate sidewalk conditions along Route 9 and other streets and replace or repair as needed. Refer to the Village's Sidewalk Study for specific locations.

Signage
Review existing signage along the corridor and reduce redundant or unnecessary signs where possible. Consider adding wayfinding signage to direct people to local destinations.

Street Trees
Replace dead or dying trees along the Route 9 corridor. Incorporate green infrastructure and improve drainage where possible.

Consider signage, landscaping, lighting, or other gateway features.

Recommendations

- Mark Crosswalk
- Relocate Crosswalk
- Consider RRFBs* + Curb Extensions
- Consider RRFBs*
- Gateway Treatment
- Remove Highway-Style Sign
- Add Bus Stop Shelter
- Add Pedestrian Scale Lighting
- Add Pedestrian Path
- Mark Bike Lanes
- Mark Sharrows + Parking Edge Lines

- Existing Marked Crosswalks
- Local Bike Route
- State Bike Route
- Waterbodies
- Parks

0 250 500 Feet

N

* Rectangular Rapid Flashing Beacon - see report for details.

DUTCHESS COUNTY TRANSPORTATION COUNCIL
Better ways from here to there

Appendices

A: Meeting Notes

V/Rhinebeck Study Request – 11.15.21 call

Attendees: Brandee Nelson, Dan Murphy- Tighe & Bond; Gary Bassett, Mayor; DCTC staff

- Corridor study – walkability/bikeability: Route 9 from Rockefeller Ln to Montgomery St (south of Hospital)
    - Focus on north/south entrances: gateways, traffic calming
    - Bikeability – Eliminate parking from Montgomery to Platt & Rockefeller to South St; use shoulder space; shared lanes thru heart of village

- Culvert replacement- improve ped access (narrow sidewalk) & drainage – to be replaced in 2023
    - Tivoli bridge example—wider sidewalk, etc

- Climate Smart Community – green infrastructure, and walk/bike options
    - DCTC can't do drainage; T&B could do
    - Green infrastructure- T&B can assist

- Street trees? Separate issue for now (Community Foundation offer to replace trees)
- Outdoor dining? Not on Route 9.

- NYSDOT role? Joe Taylor, permit engineer, encourages a big picture vision

- Village is submitting CDBG grant for curb ramps (including on Routes 9 and 308)

- Final product: CAD drawing? T&B could do; would use DOT ROW map for concept-level design

- UPWP Applications due 11/30; decisions by January (for April UPWP). Village budgeting- Feb/March
- Village Resolution- workshop mtg 11/23

- Team: T&B; DCTC, NYSDOT rep (who is best?)
- Implementation - funding possibilities: Climate Smart Communities, CDBG (only NW quadrant is eligible); TAP- 2023?

Rhinebeck – Route 9 Complete Streets Assessment
April 12 Field Walk

Attendees:
Mark Debald, DCTC – mdebaled@dutchessny.gov
Emily Dozier, DCTC – edozier@dutchessny.gov
Tara Grogan, DCTC – tgrogan@dutchessny.gov
Gary Bassett, Mayor - MayorBassett@villageofrhinebeckny.gov
Ric Lewit, Deputy Mayor - TrusteeLewit@villageofrhinebeckny.gov
Brandee Nelson, Tighe and Bond – bnelson@tighebond.com

Purpose: Refine scope for assessment; determine what we should focus on, and what might be feasible.

Study area limits – 2 focus areas:

1. North of Market St: Platt Ave to Montgomery St
    a. Mark a crosswalk across Route 9 at Platt Ave to connect to apartments (existing Village Green + 80 proposed units)
        i. Or – add sidewalks on east side of Route 9 between Village Green and Platt Ave and have a crosswalk across Route 9 at Village Green.
    b. Create a gateway at Route 9/Montgomery St (Village-owned planting area with new Village sign)

2. South of Market St: Rockefeller Ln to South St
    a. Improve walking comfort and access to Legion Memorial Park
        i. Improve sidewalks & crosswalks on east side of Route 9
            1. Some poor sidewalk sections, including slate
            2. No existing sidewalks on west side of Route 9 in front of Astor – Village does not see a need
        ii. Install pedestrian-scale lighting in buffer area and up to park
    b. Create a gateway near Rockefeller Ln
        i. Coordinate with NYSDOT Landsman Kill Bridge project

Other considerations:

- Crosswalks
    - All are unsignalized except for Mill/Market (all-pedestrian phase)
    - Desire for RRFBs or other enhanced warning:
        - Route 9 just north of Livingston St (at Terrapin)
        - Proposed crosswalk on Route 9 at Platt (or Village Green)
        - Route 9 at South St
            - RRFBs have been installed at other state road crossings, including Route 52 in the Village of Fishkill, 9D in the Village of Wappingers Falls, and Route 9 in Red Hook

- Sidewalks, ramps
    - Village submitted a CDBG grant application for curb ramps – waiting to hear
        - Livingston St/Route 9
        - Center St/E Market St
        - Market St/public parking lot
    - Sidewalk maintenance and plowing: property owner is responsible
        - Encourage Village to take on sidewalk maintenance and plowing
        - Village could create a sidewalk improvement district to fund sidewalk work (see Ithaca example)

- Bus stops on Route 9
    - Northbound: north of South St (Chamber building); just south of Mulberry St (County fairgrounds)
    - Southbound: by Northern Dutchess hospital; north of South St (Post office)
    - Private shelter southbound at Village Green
    - Transit funding might be leveraged to improve access to bus stops

- Shoulder widths
    - Between Legion Park and Rockefeller Ln, measured 11' travel lane, 8' shoulder, 11'8'' grass buffer, and 4' sidewalk

- On-street parking
    - Mayor proposed to eliminate parking from Platt to Montgomery and South St to Rockefeller and use shoulder space for bike lanes; use shared lanes through heart of village.
        - Consider other options, including marked parking spaces (T's) or curb extensions.

- Utility poles
    - Poles are mostly in the grass sidewalk buffer w/ trees.

- Street trees – issues? Replacements needed?
    - Village BROW tree policy
        - Property owners can replace a street tree behind the ROW if necessary
    - Project on E Market St to replace trees
        - May replicate on Route 9 between Chestnut and Platt Ave

- Opportunities for traffic calming
    - Narrower travel lanes (11' may be needed to accommodate buses/trucks)
    - Curb extensions at crossings and gateways
    - Bike lanes or sharrows?
        - Lane would only be for a short distance (through north and south gateways) then transition to sharrows with on-street parking.
        - Route 9 is part of State Bike Route 9

- Culvert at Rockefeller- desired design treatments
    - Per NYSDOT (2/2022): We will be keeping the existing 12' lanes and 8' shoulders, and we will be putting back a 5' wide sidewalk on the east side (existing width is just over 4'). We haven't determined our limits of work yet.
        - NYSDOT will share plans once developed (George CrimiVaroli, Project Mgr)
    - **Construction timeline and detour/traffic management – Village to follow up with NYSDOT**

- Drainage issues/improvements needed (Tighe & Bond)
    - Bottom of Rockefeller Ln
    - Green infrastructure opportunities
        - Suggested porous pavement with large tree box and structural soil – helps with drainage and tree roots

Questions:
- Who is the best NYSDOT rep to discuss options with?
    - **DCTC to ask Lisa Mondello for a contact person**
- Comp Plan update (2022)- just starting. What are the Route 9 vision/goals?

Steering Committee
- Village of Rhinebeck DPW
    - **Village to provide contact**
- MPO staff
    - Emily to be DCTC project manager

Big picture:
- Develop a complete streets and gateway concept plan with memo for the northern and southern portions of Route 9.
- DCTC will do planning level concepts and analysis, Tighe & Bond to do more detailed design/engineering and cost estimates.

Follow up items:
- Village:
    - Contact George CrimiVaroli (NYSDOT) on Landsman Kill bridge project updates, including construction timeline and detour/traffic management.
    - Send DCTC contact information for new DPW staff.
- DCTC:
    - Ask Lisa Mondello for a NYSDOT contact person for this study – done
        - Moe Islam, Traffic & Safety Group and Regional Ped/Bike Coordinator: Mohammed.Islam@dot.ny.gov
        - From Lisa: If the Village plans to do any local project work under Highway Work Permit, we can put you in touch with the appropriate staff when that time comes.

        - Below is the link to the Gateway Signing Policy and the Traffic Calming Chapter from NYSDOT's Highway Design Manual:
            - Gateways on State Highway Right of Way: https://www.dot.ny.gov/divisions/engineering/design/dqab/hdm/hdm-repository/chapt11B.pdf
            - Traffic Calming: https://www.dot.ny.gov/divisions/engineering/design/dqab/hdm/hdm-repository/chapt_25.pdf
    - Contact Amanda Sammon regarding bus stops and any planned transit changes or improvements – done
        - Confirming bus stops
        - No changes to service currently planned
    - Develop draft map of study area with concepts

Rhinebeck Complete Streets – June 3 meeting notes

Attendees: Emily, Mark, Tara – DCTC; Mayor Gary Bassett, Trustee Ric Lewit, DPW Kyle Eighmy

Discussion notes:

- Gary prefers painted curb extensions with bollards over curbed extensions, and over a single roundabout.
    - Wants a consistent look along the Route 9 corridor
    - Gary said that concrete curb extensions are not desired, as they would force bicyclists to share the travel lane, including with trucks
        - note: in any case, bicyclists would have to share the lanes through the center of the Village where on-street parking is used
    - Group not too interested in a physical roundabout; felt there might be resistance even though it would be designed for large vehicles.
- For painted curb extensions, could bollards be placed only on the far edge of the extension, so bikes could still use the shoulder space?
    - Yes, but in some cases the extension width is not that wide, so bollards could possibly restrict bike travel or be challenging for bicyclists to navigate
- Ric- Bollards don't look good; also a maintenance challenge. Paint is also a maintenance issue.
    - But paint by itself might not be enough to slow drivers down
- Stripe bike lanes instead of doing curb extensions, and color them to visually narrow the street more?
- Ric asked about raised crosswalks; Emily and Gary agreed that NYSDOT would probably not allow them on Route 9 and they wouldn't be appropriate in this context.
    - (see NYSDOT Engineering Instruction – lists limited locations for raised crosswalks)
- 2 main options seem to be:
    - **Painted & buffered bike lanes – perhaps a good place to start**
    - Painted curb extensions with bollards (but think about maintenance and image)
        - Concrete curb extensions could be considered as a longer-term investment

- Ped-scale lighting: how would the installation of underground power work, esp with tree roots?
    - Village would need to coordinate with Central Hudson or other
    - Solar powered lights could be considered

Questions for NYSDOT (Moe Islam, Region 8 Ped/Bike Coordinator, Traffic & Safety Group)

a. When is NYSDOT paving/striping these sections of Route 9?
    i. Per Gary, NYSDOT recently paved the SB lane near Montgomery, and is supposed to pave the NB lane.
    ii. Could they **channelize** the Route 9/Montgomery St intersection to narrow it? (eg, remove some pavement and re-stripe? (would need to accommodate trucks/ambulances)
    iii. Could DOT stripe & mark a **bike lane**; do buffer hatching? Paint bike lane green?
    iv. Would NYSDOT plow the bike lane?
    v. Would the Village be required to maintain the paint, or could NYSDOT?
    vi. Could some **re-striping** be incorporated? (eg to adjust centerline and shoulder lines)?

- Near Locust Grove- shift widths from 7/11/11/5 to 6/11/11/6
- Near Rockefeller – if do bike lanes, change from 8/11.5/11.5/5 to 11' lanes with 5.5' bike lanes and 1.5' hatched buffer

vii. Would NYSDOT mark **sharrows** thru center of Village (eg between South St & Chestnut or Platt)?

viii. If the Village would like to mark **parking T's**, what coordination with NYSDOT is needed?

b. Would a **roundabout** at the Route 9/Montgomery St intersection be feasible? (a mini-roundabout, ~80' inscribed diameter)
   i. Would NYSDOT allow a painted roundabout to test it out?
   ii. We don't have turning movement counts at the intersection, but the Village says there is a fair amount of traffic that uses Montgomery St- does NYSDOT have turning counts?

c. Would NYSDOT allow **painted curb extensions** to test them out?

d. Would NYSDOT install **RRFB's** at some crosswalks across Route 9?
   i. Across Route 9 north of Livingston St (at Terrapin)
      1. Consider curb extensions to increase pedestrian visibility
   ii. Across Route 9 near post office
   iii. Across Route 9 at South St
      1. Consider relocating crosswalk to north side of intersection (for better landing on west side)
      2. Install ramps on both ends
      3. Consider curb extensions and RRFBs to encourage yielding

e. Platt Ave – could NYSDOT install a **new crosswalk** across Route 9 here?
   i. Consider curb extensions (with ramps/domes) on both sides of Route 9
   ii. Consider RRFBs to encourage yielding

f. Could some **signs** be removed (or redesigned)?
   i. highway-style sign across the sidewalk north of Livingston St (says 'Rhinecliff 2 -->')
   ii. highway-style sign across the sidewalk north of South St (says 'Rhinecliff 2 <--')

Note: reviewed NYSDOT Highway Design Manual re Traffic Calming:
https://www.dot.ny.gov/divisions/engineering/design/dqab/hdm/hdm-repository/chapt_25.pdf

iii. tables on p 16-19 list various treatments for dif speed limits. Route 9 here is posted 30 mph, non-local road. So Category II, non local. Options include (among others):

1. **Curb extensions**
2. Ped refuge islands
3. Gateways, landscaping
4. Street furniture, **lighting**
5. **Color contrast,** surface textures
6. **Roundabout** (would NYSDOT go for this? Not sure of turning volumes)
7. Median treatments
8. **High-vis crosswalks**

7/8/22 call with NYSDOT

Attendees:

- Mark Debald, Emily Dozier – DCTC
- Lisa Mondello (Traffic & Safety), Mo Islam (Ped/Bike Coordinator), Vincent Grella, Lin-Li Chang, Bill LaRose – NYSDOT

Notes:

Paving:

- When is NYSDOT next paving and/or striping Route 9 in the Village of Rhinebeck?
    - No paving planned in the next 5 years at least
    - Striping – long lines each ~2 years (done 2020); specials each ~4 years (done 2021; next 2025) – these refresh what is already there.
        - For anything new, would need a separate project/permit
- Could NYSDOT narrow the Route 9/Montgomery St intersection to calm traffic here (eg, remove some pavement and/or re-stripe), understanding that truck/emergency vehicles must be accommodated?
    - NYSDOT has no plans to do anything at this intersection and has no turning movement counts.
    - **Village could discuss with NYSDOT, but would need to study the intersection** – turning movement counts, turning radii, etc. LT lane on Route 9? Change EB approach (currently 2 lanes)? NYSDOT wants a consistent shoulder width, esp b/c of State Bike Route.
        - Village would need a Hwy Work Permit to do anything here.

Bike lanes & pavement markings:

- If the Village is interesting a striped/marked bike lane on Route 9, would it be the Village's responsibility to do the markings and maintain them?
        - Depends on cost; **NYSDOT may ask Village to maintain markings (Lisa to confirm)**
        - NYSDOT suggests just maintaining the wide shoulder (vs marking as a bike lane)
    - We have suggested a buffered bike lane, with a 1.5' hatched buffer and a 4.5'-5.5' bike lane, for a total bike lane width of 6-7 feet.
        - NYSDOT uses AASHTO standards, which require a 3' buffer and 5' bike lane—so would need 8' width on each side. **Buffered bike lane likely not feasible**.
        - There aren't any buffered bike lanes in Region 8
    - Some re-striping of the centerline and shoulder lines would be needed to provide consistent widths (the shoulder widths are inconsistent in some locations).
- Would there be any issue with a green bike lane (as allowed under MUTCD interim approval)?
        - NYSDOT wouldn't maintain- Village would need to.
    - Based on our discussion, NYSDOT would plow the bike lane, but the Village would have to maintain the markings/paint unless it was coordinated with a NYSDOT paving/striping project.
        - See above- NYSDOT may ask Village to maintain**. (Lisa will clarify)**

    - We also discussed sharrows and parking T's in the center of the village, where on-street parking is heavily used; the Village would be responsible for these markings as well.
        - Check SLM guidance – make sure it meets guidance *[note: Emily checked the guidance; shared-lane markings would be appropriate here].*
        - **NYSDOT may be able to mark sharrows (did in Red Hook)**
            - Would review a plan from Village
        - NYSDOT doesn't do parking T's but **can do a parking edge line- Village can send a request to Traffic & Safety (Lee Zimmer; cc Lisa)-** can also use general email: dot.sm.r08.trafficsafety@dot.ny.gov
- Who is the NYSDOT contact for coordinating pavement markings?
    - coordinate with Lisa/Moe—they need to approve any improvements; then would coordinate with appropriate staff

Roundabout:

- If the Village were interested in a roundabout at the Route 9/Montgomery St intersection, could a temporary one (eg paint, temporary materials) be installed to test it out? What would be the process for this?
    - We understand that any roundabout would need to consider available ROW, Heavy Vehicles, and traffic impacts.
        - **Pilot not possible; would instead need to do a full study (would need to meet signal warrant); then pursue a permanent roundabout.**
- Does NYSDOT have turning movement counts at this intersection?
    - No

Curb extensions:

- Would NYSDOT allow temporary painted curb extensions to test them out at several intersections (potentially at Montgomery, Locust Grove, Village Green, South St, Rockefeller Ln)?
    - We discussed that the Village would need to submit plans and details to NYSDOT.
        - **Need to look at turning radii for vehicles**, (fire, school bus, trucks)—may not be feasible.
        - NYSDOT doesn't do temporary installations.
        - **NYSDOT could stripe a shoulder line on the SB lane – could help slow vehicles and give bicyclists more room. -> Village can send a request.**

Crosswalks:

- Who is the contact in the signals group for RRFBs?
    - The Village is interested in RRFBs to increase driver yielding and some uncontrolled crosswalks (Route 9 north of Livingston St (at Terrapin), Route 9 near the post office, Route 9 at South St).
        - NYSDOT would require a Hwy Work Permit – in which case Village owns/maintains
        - Or, **could request NYSDOT to install, but unlikely (2026 at earliest).** If NYSDOT installs, it would be hard wired.

    - Our understanding is that the Village would have to pay for these and maintain them, and would need to coordinate with the Traffic & Safety signals group. Solar powered RRFBs are preferred.
        - NYSDOT doesn't maintain solar powered RRFB's; Village would have to maintain & own if it's solar powered.
    - **The Village should consider ped volumes, generators, and crash history in prioritizing the locations**.
        - This would be part of the Hwy Work Permit process—**Traffic Safety needs to approve the locations (based on distance from signals, ped volumes, etc).**
- At South Street, could the crosswalk be relocated to the north side of the intersection, so that the west landing is at a curb instead of a driveway?
    - Ramps would be needed on both ends; curb extensions could be considered as well.
        - Would be a Hwy Work Permit; Village would need to pay for ramps, etc.
        - **Could possibly be part of a future NYSDOT ADA project or a resurfacing of Route 9** – nothing planned until 2025 northern Dutchess ADA project—could request NYSDOT to add this.
            - **NYSDOT will find out more about the 2025 project.**
- The Village is interested in a new crosswalk at Platt Ave. We understand that NYSDOT would require pedestrian crossing data, though there is no standard format – is that correct? Is there any guidance for how much data to provide?
    - As discussed, the Village would need to construct suitable landings and ramps on both sides.
        - Under Hwy Work Permit—if want it done soon.
        - Make the case- apartments, end of sidewalk, crossings.
            - **NYSDOT will ask if ADA project could include it.**
        - Lots of issues- inlet, trees, utility poles; would need to be ADA compliant.
        - Consider a RRFB (1st crosswalk heading south). But ADA contract doesn't include these- would be Village responsibility under a Hwy Work Permit.

Signs:

- Could NYSDOT relocate and/or redesign the two highway-style signs that span the sidewalk?
    - north of Livingston St (says 'Rhinecliff 2 -->') – see far right of image
    - north of South St (says 'Rhinecliff 2 <--')
        - **NYSDOT can remove & replace with a simpler train station destination sign** (could ask Village/Town)

- Can you **confirm if NYSDOT owns the piece of land near the hospital with the new Village sign**? (based on Parcel Access map, looks like it's part of the NYSDOT roadway ROW).
    - Need a use & occupancy permit to do anything here, if it's NYSDOT owned.
        - Can call Real Estate group to find out if there is a permit (which means it's NYSDOT owned): 845-437-3391. They may also be able to tell you who owns it.

9/1/22 call re Transportation Subcommittee feedback

Participants:

- Mark Debald, Emily Dozier, Tara Grogan – DCTC
- Gary Basset, Ric Lewit – Village of Rhinebeck

Notes:

The team discussed Ric's August 25th letter on behalf of the Village's Comprehensive Plan Transportation Subcommittee (attached).

- Geographic scope: the letter suggests expanding the geographic scope of the study area. The group agreed that it was better to keep the study focused on the agreed-upon focus areas. Future efforts could consider areas further north and south on Route 9.

- Clarifications: Emily clarified that bike lanes and roundabouts were not 'off the table.' The Village and DCTC had discussed a roundabout, but the consensus was not to pursue it due to Village concerns about emergency vehicle access. Also, NYSDOT won't consider a roundabout unless the intersection meets the warrants for a traffic signal. For bike lanes, DCTC had recommended buffered bike lanes, but they would not fit based on NYSDOT's design guidelines. However, traditional (non-buffered) bike lanes are still an option.

- Bicycling networks: Gary emphasized a desire to create safe local routes for bicycling in the Village. Those routes should also connect to regional networks, including the Empire State Trail.

- Local support: Ric noted that there is a lot of support by residents and subcommittee members for walking and bicycling improvements, to encourage walking and biking in the Village. He encouraged DCTC to note that in the report.

- Funding sources: Gary requested that the report include suggestions for funding sources.

- Lighting: Ric asked that the report include recommendations related to pedestrian-scale lighting.

Emily stated that the report will include background information, existing conditions, recommendations, funding sources, and next steps, as well as some conceptual maps/images showing the recommendations. She added that DCTC is also collecting vehicle volume and speed data and pedestrian and bicycle counts, which will be incorporated into the report.

She will share a draft with Gary and Ric before finalizing the report.

Richard Lewit
39 Lorraine Dr.
Rhinebeck, NY 12572
917.273.2572
richardlewit@mac.com

August 25, 2022

Dear Mayor Bassett, Emily, Mark and Tara,

I am writing as a representative of the Transportation and Mobility Subcommittee of Rhinebeck's Comprehensive Plan Committee. Our committee took the ideas for improving Rhinebeck's Rt.9 corridor as envisioned by Dutchess County Planning and walked the length of it from Mill St. to the Mulberry St. extension just beyond the hospital.

In general, committee members are extremely enthusiastic about creating better walking and biking conditions. Concurrently, members are keen to reduce traffic speeds and calm traffic transiting the Village. These measures go hand-in-hand and are vital to creating the conditions that residents often speak of and desire.

The committee liked many of the ideas presented by DC Planning, finding them to further the Village's goals of improving walkability, bikeablity and sustainability. They are happy learn that the County is supporting the Village in accordance with its citizens' stated goals.

The committee recommends extending DC Planning's improvements south to Mill St, at least, and to the Grassmere entrance at best. This would expand villagers' walking and cycling loops through the community and support existing bike routes.

At the time of the site visit, items such as bike lanes and roundabouts were on the list of potential improvements. Subsequently, the committee was quite disappointed to hear that NYS DOT took them off the table. Should any of these ideas be revisited, I can state that there is significant citizen support for such improvements.

Given NYS DOT's constraints, the committee endorses improvements to calm traffic, improve pedestrian circulation through the Village, and improve signage to take advantage of ***existing signed and designated*** bike routes (NYS 9 route, Heritage Greenway Routes A&B, and DC Tourism suggested routes).

Based upon its site visit and additional discussions, the committee would like to see the following measures incorporated into plans:

To calm traffic and reduce speeds of vehicles through the Village.

- Begin calming measures at the southern portal to the Village.
- Improve the intersection of Montgomery and Springbrook Ave.
- Install curb extensions to calm traffic and facilitate crosswalks.
- Designate parking spots with lines.

To improve pedestrian safety and access.

- Improvements to the sidewalk surface throughout the Village.
- Install pedestrian scale lighting along the corridor.
- Relocate the crosswalk at South St to the north as indicated by DC Planning.
- Paint crosswalks at Chestnut, Platt and Mulberry extension on Rt.9 and across the side streets to promote practical walkability and to communicate to drivers that Rhinebeck is a walking community.
- Add flashing lights to crosswalks.
- Complete the sidewalk from the hospital grounds to the shopping plaza and then to the fairgrounds entrance along the westside of Rt.9.

To improve bicycle safety and access.

- Aggressively add bike awareness signage and lane markings.
- Improve crossing safety at Mill St and Rt.9 (a Y shaped intersection) and currently a signed Heritage Greenway and DC Tourism bike route.
- Improve safety markings and signage at Rt.9 and Montgomery St to indicate that Heritage Greenway Route B turns from Rt.9 to Montgomery.

The committee firmly advocates that Rhinebeck should be a leader toward a future that is less car dependent and more climate friendly. As we move forward, I hope that the ideas from this educated and involved group of will be considered.

Thank you,

Ric

Village Trustee Ric Lewit
Member Comprehensive Plan Transportation Subcommittee

B: Traffic Count Reports

Dutchess County

Traffic Count Hourly Report

ROUTE #: **US 9** ROAD NAME: **ROUTE 9**
DIRECTION: Northbound FACTOR GROUP: 30
STATE DIR CODE: 6 WK OF YR: 29
DATE OF COUNT: 07/18/2022
NOTES LANE 1: NB TRAVEL LANE

COUNT TAKEN BY: ORG CODE: TST INITIALS: BEK

FROM: **LOCUST GROVE RD**
REC. SERIAL #: 6003
PLACEMENT: 52 ft N/O Locust Grove Rd
@ REF MARKER:
ADDL DATA:
COUNT TYPE: VEHICLES

PROCESSED BY: ORG CODE: TST INITIALS: BEK

TO: **MONTGOMERY ST**
FUNC. CLASS: 07
NHS: yes
JURIS: City
CC Stn:
BATCH ID: DUT-CountToProcess

COUNTY: **Dutchess**
VILLAGE:
LION#:
BIN:
RR CROSSING:
HPMS SAMPLE:

DATE	DAY	12 TO 1 AM	1 TO 2 AM	2 TO 3 AM	3 TO 4 AM	4 TO 5 AM	5 TO 6 AM	6 TO 7 AM	7 TO 8 AM	8 TO 9 AM	9 TO 10 AM	10 TO 11 AM	11 TO 12 AM	12 TO 1 PM	1 TO 2 PM	2 TO 3 PM	3 TO 4 PM	4 TO 5 PM	5 TO 6 PM	6 TO 7 PM	7 TO 8 PM	8 TO 9 PM	9 TO 10 PM	10 TO 11 PM	11 TO 12 PM	DAILY TOTAL	DAILY HIGH COUNT	DAILY HIGH HOUR
1	F																											
2	S																											
3	S																											
4	M																											
5	T																											
6	W																											
7	T																											
8	F																											
9	S																											
10	S																											
11	M																											
12	T																											
13	W																											
14	T																											
15	F																											
16	S																											
17	S																											
18	M											**394**	**398**	**432**	**447**	**472**	**472**	**504**	**402**	**245**	**192**	**198**	**80**	**71**	**39**			
19	T	**24**	**10**	**5**	**2**	**13**	**58**	**228**	**300**	**494**	**431**	**399**	**450**	**450**	**489**	**513**	**484**	**532**	**480**	**335**	**265**	**229**	**116**	**102**	**34**	6443	532	16
20	W	**22**	**8**	**7**	**4**	**8**	**57**	**205**	**319**	**467**	**428**	**415**	**455**	**468**	**456**	**475**	**495**	**487**	**503**	**362**	**232**	**238**	**169**	**101**	**57**	6438	503	17
21	T	**20**	**9**	**4**	**6**	**15**	**54**	**200**	**313**	**456**	**412**	**429**	**445**	**505**	**474**	**506**	**521**	**545**	**525**	**415**	**355**	**258**	**184**	**109**	**71**	6831	545	16
22	F	**23**	**11**	**3**	**9**	**15**	**46**																					
23	S																											
24	S																											
25	M																											
26	T																											
27	W																											
28	T																											
29	F																											
30	S																											
31	S																											

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)

																									ADT
22	**10**	**5**	**5**	**13**	**54**	**211**	**311**	**472**	**424**	**409**	**437**	**464**	**466**	**492**	**493**	**517**	**478**	**339**	**261**	**231**	**137**	**96**	**50**	**6397**

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY High Hour	AVERAGE WEEKDAY % of day	Axle Adj. Factor	Seasonal/Weekday Adjustment Factor
5	92	5	92	517	8%	1.000	1.083

ESTIMATED

AADT
5907

Dutchess County
Traffic Count Hourly Report

ROUTE #: **US 9** ROAD NAME: **ROUTE 9**
DIRECTION: Southbound FACTOR GROUP: 30
STATE DIR CODE: 7 WK OF YR: 29
DATE OF COUNT: 07/18/2022
NOTES LANE 1: NB TRAVEL LANE

COUNT TAKEN BY: ORG CODE: TST INITIALS: BEK

FROM: **LOCUST GROVE RD**
REC. SERIAL #: 6003
PLACEMENT: 52 ft N/O Locust Grove Rd
@ REF MARKER:
ADDL DATA:
COUNT TYPE: VEHICLES

PROCESSED BY: ORG CODE: TST INITIALS: BEK

TO: **MONTGOMERY ST**
FUNC. CLASS: 07
NHS: yes
JURIS: City
CC Stn:
BATCH ID: DUT-CountToProcess

COUNTY: **Dutchess**
VILLAGE:
LION#:
BIN:
RR CROSSING:
HPMS SAMPLE:

DATE	DAY	12 TO 1 AM	1 TO 2 AM	2 TO 3 AM	3 TO 4 AM	4 TO 5 AM	5 TO 6 AM	6 TO 7 AM	7 TO 8 AM	8 TO 9 AM	9 TO 10 AM	10 TO 11 AM	11 TO 12 AM	12 TO 1 PM	1 TO 2 PM	2 TO 3 PM	3 TO 4 PM	4 TO 5 PM	5 TO 6 PM	6 TO 7 PM	7 TO 8 PM	8 TO 9 PM	9 TO 10 PM	10 TO 11 PM	11 TO 12 PM	DAILY TOTAL	DAILY HIGH COUNT	DAILY HIGH HOUR
1	F																											
2	S																											
3	S																											
4	M																											
5	T																											
6	W																											
7	T																											
8	F																											
9	S																											
10	S																											
11	M																											
12	T																											
13	W																											
14	T																											
15	F																											
16	S																											
17	S																											
18	M											**438**	**402**	**476**	**409**	**447**	**482**	**459**	**422**	**306**	**213**	**136**	**85**	**61**	**33**			
19	T	**18**	**4**	**5**	**5**	**14**	**81**	**203**	**377**	**438**	**445**	**382**	**471**	**456**	**491**	**460**	**496**	**506**	**508**	**359**	**257**	**182**	**120**	**74**	**57**	6409	508	17
20	W	**22**	**9**	**4**	**3**	**13**	**65**	**182**	**371**	**467**	**441**	**414**	**501**	**503**	**401**	**443**	**483**	**481**	**489**	**343**	**302**	**214**	**116**	**60**	**58**	6385	503	12
21	T	**22**	**15**	**3**	**7**	**19**	**68**	**171**	**347**	**409**	**446**	**423**	**429**	**513**	**457**	**477**	**586**	**550**	**489**	**345**	**288**	**204**	**109**	**69**	**61**	6507	586	15
22	F	**16**	**12**	**9**	**3**	**22**	**63**																					
23	S																											
24	S																											
25	M																											
26	T																											
27	W																											
28	T																											
29	F																											
30	S																											
31	S																											

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)

12 TO 1 AM	1 TO 2 AM	2 TO 3 AM	3 TO 4 AM	4 TO 5 AM	5 TO 6 AM	6 TO 7 AM	7 TO 8 AM	8 TO 9 AM	9 TO 10 AM	10 TO 11 AM	11 TO 12 AM	12 TO 1 PM	1 TO 2 PM	2 TO 3 PM	3 TO 4 PM	4 TO 5 PM	5 TO 6 PM	6 TO 7 PM	7 TO 8 PM	8 TO 9 PM	9 TO 10 PM	10 TO 11 PM	11 TO 12 PM	ADT
20	**10**	**5**	**4**	**17**	**69**	**185**	**365**	**438**	**444**	**414**	**451**	**487**	**440**	**457**	**512**	**499**	**477**	**338**	**265**	**184**	**108**	**66**	**52**	**6307**

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY High Hour	AVERAGE WEEKDAY % of day	Axle Adj. Factor	Seasonal/Weekday Adjustment Factor
5	92	5	92	512	8%	1.000	1.083

ESTIMATED

AADT
5824

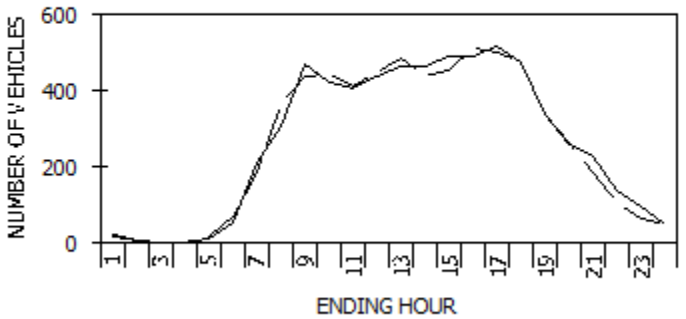
Dutchess County
Classification Count Average Weekday Data Report

ROUTE #: US 9 ROAD NAME: ROUTE 9 YEAR: 2022 STATION: 829000
COUNTY NAME: Dutchess MONTH: July
REGION CODE: 8
FROM: LOCUST GROVE RD
TO: MONTGOMERY ST
REF-MARKER:
END MILEPOINT: NO. OF LANES: 2
FUNC-CLASS: 07 HPMS NO:
STATION NO: 9000 LION#:
COUNT TAKEN BY: ORG CODE: TST INITIALS: BEK
PROCESSED BY: ORG CODE: TST INITIALS: BEK BATCH ID: DUT-CountToProcess

DIRECTION	North	South	TOTAL
NUMBER OF VEHICLES	**6389**	**6299**	**12688**
NUMBER OF AXLES	**12906**	**12697**	**25604**
% HEAVY VEHICLES (F4-F13)	**4.16%**	**4.21%**	**4.19%**
% TRUCKS AND BUSES (F3-F13)	**18.00%**	**19.07%**	**18.53%**
AXLE CORRECTION FACTOR	**0.99**	**0.99**	**0.99**

VEHICLE CLASS		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	TOTAL
NO. OF AXLES		2	2	2	2.5	2	3	4	3.5	5	6	5	6	8.75	
ENDING HOUR	1:00	0	20	2	0	0	0	0	0	0	0	0	0	0	**22**
	2:00	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
	3:00	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
	4:00	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
	5:00	0	8	2	0	1	0	0	0	1	0	0	0	0	**12**
	6:00	0	39	8	2	2	0	1	0	1	0	0	0	0	**53**
	7:00	0	163	36	3	7	2	0	0	1	0	0	0	0	**212**
	8:00	0	236	58	3	8	3	1	0	1	0	0	0	0	**310**
	9:00	2	368	80	4	11	5	0	0	1	0	0	0	0	**471**
	10:00	4	325	75	2	11	3	0	1	3	0	0	0	0	**424**
DIRECTION	11:00	4	315	68	4	13	4	0	0	1	0	0	0	0	**409**
North	12:00	3	349	66	4	12	2	0	0	1	0	0	0	0	**437**
	13:00	6	361	73	2	14	4	0	0	3	0	0	0	0	**463**
	14:00	4	375	62	4	16	3	1	0	2	0	0	0	0	**467**
	15:00	4	401	64	2	16	3	0	0	2	0	0	0	0	**492**
	16:00	3	406	66	2	13	3	0	0	0	0	0	0	0	**493**
	17:00	3	435	60	2	12	4	0	0	1	0	0	0	0	**517**
	18:00	4	408	50	2	9	3	1	0	1	0	0	0	0	**478**
	19:00	2	290	38	1	7	1	0	0	0	0	0	0	0	**339**
	20:00	2	226	28	0	4	1	0	0	0	0	0	0	0	**261**
	21:00	2	204	21	0	3	0	0	0	0	0	0	0	0	**230**
	22:00	1	124	10	0	2	0	0	0	1	0	0	0	0	**138**
	23:00	0	82	11	0	2	0	0	0	0	0	0	0	0	**95**
	24:00	0	44	5	0	0	0	0	0	0	0	0	0	0	**49**
TOTAL VEHICLES		**44**	**5195**	**884**	**37**	**163**	**41**	**4**	**1**	**20**	**0**	**0**	**0**	**0**	**6389**
TOTAL AXLES		88	10390	1768	92	326	123	16	4	100	0	0	0	0	12906
ENDING HOUR	1:00	0	17	2	0	0	0	0	0	0	0	0	0	0	**19**
	2:00	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
	3:00	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
	4:00	0	3	0	0	1	0	0	0	0	0	0	0	0	**4**
	5:00	0	10	3	1	1	0	0	0	1	0	0	0	0	**16**
	6:00	0	49	10	0	7	0	0	0	2	0	0	0	0	**68**
	7:00	2	135	32	2	10	2	1	0	1	0	0	0	0	**185**
	8:00	2	273	63	5	17	1	0	0	3	1	0	0	0	**365**
	9:00	6	327	83	2	17	1	1	0	1	0	0	0	0	**438**
	10:00	5	341	76	3	14	3	0	0	1	0	0	0	0	**443**
	11:00	6	318	67	4	15	2	0	1	2	0	0	0	0	**415**
DIRECTION	12:00	5	344	79	2	15	3	0	0	1	0	0	0	0	**449**
South	13:00	5	386	74	2	17	2	0	0	1	0	0	0	0	**487**
	14:00	7	344	68	2	16	1	0	0	2	0	0	0	0	**440**
	15:00	7	364	71	1	12	2	0	0	0	0	0	0	0	**457**
	16:00	6	420	71	1	10	2	1	0	1	0	0	0	0	**512**
	17:00	7	414	64	2	11	1	0	0	1	0	0	0	0	**500**
	18:00	5	407	54	1	8	2	0	0	0	0	0	0	0	**477**
	19:00	5	287	40	1	6	0	0	0	0	0	0	0	0	**339**
	20:00	4	228	26	0	6	0	0	0	0	0	0	0	0	**264**
	21:00	3	152	25	0	4	0	0	0	0	0	0	0	0	**184**
	22:00	2	90	14	0	1	0	0	0	0	0	0	0	0	**107**
	23:00	0	56	7	0	2	0	0	0	0	0	0	0	0	**65**
	24:00	0	44	6	0	2	0	0	0	0	0	0	0	0	**52**
TOTAL VEHICLES		**77**	**5021**	**936**	**29**	**192**	**22**	**3**	**1**	**17**	**1**	**0**	**0**	**0**	**6299**
TOTAL AXLES		154	10042	1872	72	384	66	12	4	85	6	0	0	0	12697
GRAND TOTAL VEHICLES		**121**	**10216**	**1820**	**66**	**355**	**63**	**7**	**2**	**37**	**1**	**0**	**0**	**0**	**12688**
GRAND TOTAL AXLES		242	20432	3640	165	710	189	28	7	185	6	0	0	0	25603

TRAFFIC FLOW BY DIRECTION



--- North - -South

PEAK HOUR DATA

DIRECTION	HOUR	COUNT	2-WAY	HOUR	COUNT
North	**17**	**517**	**A.M.**	**9**	**909**
South	**16**	**512**	**P.M.**	**17**	**1017**

VEHICLE CLASSIFICATION CODES:

F1. Motorcycles
F2. Autos*
F3. 2 Axle, 4-Tire Pickups, Vans, Motorhomes*
F4. Buses
F5. 2 Axle, 6-Tire Single Unit Trucks
F6. 3 Axle Single Unit Trucks
F7. 4 or More Axle Single Unit Trucks
F8. 4 or Less Axle Vehicles, One Unit is a Truck
F9. 5 Axle Double Unit Vehicles, One Unit is a Truck
F10. 6 or More Double Unit Vehicles, One Unit is a Truck
F11. 5 or Less Axle Multi-Unit Trucks
F12. 6 Axle Multi-Unit Trucks
F13. 7 or More Axle Multi-Unit Trucks

* INCLUDING THOSE HAULING TRAILERS

FUNCTIONAL CLASS CODES:

RURAL	URBAN	SYSTEM
01	11	PRINCIPAL ARTERIAL-INTERSTATE
02	12	PRINCIPAL ARTERIAL-EXPRESSWAY
02	14	PRINCIPAL ARTERIAL-OTHER
06	16	MINOR ARTERIAL
07	17	MAJOR COLLECTOR
08	17	MINOR COLLECTOR
09	19	LOCAL SYSTEM

SOURCE: NYSDOT DATA SERVICES BUREAU

Dutchess County
Speed Count Average Weekday Report

Station:	829000	Start date:	Mon 07/18/2022 10:00	Count duration:	93 hours
Route #: US 9	Road name: ROUTE 9	End date:	Fri 07/22/2022 06:45	Functional class:	7
From:	LOCUST GROVE RD	County:	Dutchess	Factor group:	30
To:	MONTGOMERY ST	Town:		Batch ID:	DUT-CountToProcess
Direction:	North	Speed limit:	30	Count taken by:	Org: TST Init: BEK
		LION#:		Processed by:	Org: TST Init: BEK

Speeds, mph

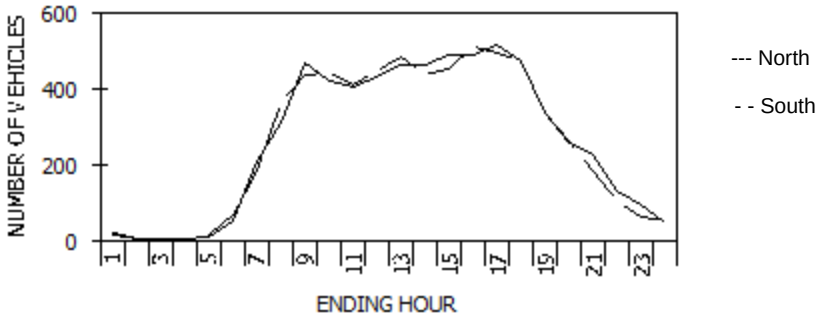
Hour	0.0-20.0	20.1-25.0	25.1-30.0	30.1-35.0	35.1-40.0	40.1-45.0	45.1-50.0	50.1-55.0	55.1-60.0	60.1-65.0	65.1-70.0	70.1-75.0	75.1-95.0	% Exc 45.0	% Exc 50.0	% Exc 55.0	% Exc 60.0	% Exc 65.0	Avg	50th%	85th%	Total
1:00	0	1	4	10	5	1	0	1	0	0	0	0	0	4.5	4.5	0.0	0.0	0.0	32.7	33.0	38.8	22
2:00	0	0	2	3	3	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	33.5	34.2	39.5	9
3:00	0	0	0	3	1	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	35.1	34.2	41.3	5
4:00	0	0	0	2	2	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	36.1	36.3	41.3	5
5:00	0	0	2	7	3	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	32.6	32.9	37.0	12
6:00	2	1	11	23	12	4	1	0	0	0	0	0	0	1.9	0.0	0.0	0.0	0.0	31.1	32.9	38.8	54
7:00	1	4	30	113	54	9	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	32.6	33.2	38.0	211
8:00	9	11	73	151	62	6	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	30.4	32.1	36.8	312
9:00	14	17	149	227	63	3	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	29.6	31.3	34.9	473
10:00	16	23	128	195	55	6	1	0	0	0	0	0	0	0.2	0.0	0.0	0.0	0.0	29.2	31.2	35.0	424
11:00	15	18	132	191	49	4	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	29.2	31.1	34.8	409
12:00	17	22	140	199	54	4	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	29.1	31.0	34.9	436
13:00	21	30	152	207	50	4	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	28.6	30.8	34.7	464
14:00	24	18	142	214	65	4	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	28.9	31.2	35.0	467
15:00	18	20	173	218	56	6	1	0	0	0	0	0	1	0.4	0.2	0.2	0.2	0.2	29.2	30.9	34.8	493
16:00	16	19	144	241	70	4	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	29.7	31.5	35.0	494
17:00	24	35	159	230	61	8	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	28.7	30.9	34.9	517
18:00	16	17	134	240	64	6	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	29.7	31.5	35.0	477
19:00	8	8	76	168	72	7	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	30.9	32.4	37.0	339
20:00	5	8	68	136	39	5	1	0	0	0	0	0	0	0.4	0.0	0.0	0.0	0.0	30.6	31.9	35.8	262
21:00	2	4	66	121	34	3	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	31.0	31.8	35.4	230
22:00	0	4	42	66	22	2	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	31.1	31.7	35.9	136
23:00	0	2	21	50	18	3	1	0	0	0	0	0	0	1.1	0.0	0.0	0.0	0.0	32.1	32.5	37.2	95
24:00	0	0	10	27	10	2	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	32.5	32.7	37.4	49
Avg. Daily Total	208	262	1858	3042	924	94	5	1	0	0	0	0	1	0.1	0.0	0.0	0.0	0.0	29.7	31.5	35.4	6395
Percent	3.3%	4.1%	29.1%	47.6%	14.4%	1.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%									
Cum. Percent	3.3%	7.3%	36.4%	84.0%	98.4%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%									
Average hour	9	11	77	127	38	4	0	0	0	0	0	0	0									266

	Avg. Speed	50th% Speed	85th% Speed
North	29.7	31.5	35.4
South	29.0	31.5	35.9

Peak Hour Data

Direction	Hour	Count	2-way	Hour	Count
North	17	517	A.M.	9	912
South	16	513	P.M.	17	1016

TRAFFIC FLOW BY DIRECTION



Dutchess County
Speed Count Average Weekday Report

Station:	829000	Start date:	Mon 07/18/2022 10:00	Count duration:	93 hours
Route #: US 9	Road name: ROUTE 9	End date:	Fri 07/22/2022 06:45	Functional class:	7
From:	LOCUST GROVE RD	County:	Dutchess	Factor group:	30
To:	MONTGOMERY ST	Town:		Batch ID:	DUT-CountToProcess
Direction:	South	Speed limit:	30	Count taken by:	Org: TST Init: BEK
		LION#:		Processed by:	Org: TST Init: BEK

Speeds, mph

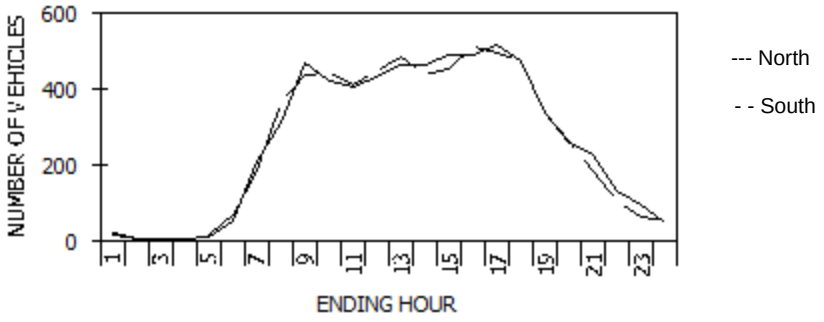
Hour	0.0-20.0	20.1-25.0	25.1-30.0	30.1-35.0	35.1-40.0	40.1-45.0	45.1-50.0	50.1-55.0	55.1-60.0	60.1-65.0	65.1-70.0	70.1-75.0	75.1-95.0	% Exc 45.0	% Exc 50.0	% Exc 55.0	% Exc 60.0	% Exc 65.0	Avg	50th%	85th%	Total
1:00	0	1	5	8	4	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	31.5	32.2	37.7	19
2:00	0	1	2	3	2	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	31.4	32.6	39.2	9
3:00	0	0	1	2	1	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	32.1	32.6	37.0	4
4:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	34.8	35.0	38.6	2
5:00	1	1	1	7	5	2	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	30.8	34.0	39.5	17
6:00	1	0	11	21	24	8	2	2	0	0	0	0	0	5.8	2.9	0.0	0.0	0.0	34.0	35.4	41.1	69
7:00	6	4	27	75	60	14	1	0	0	0	0	0	0	0.5	0.0	0.0	0.0	0.0	31.9	33.8	39.0	187
8:00	12	4	71	193	77	8	1	0	0	0	0	0	0	0.3	0.0	0.0	0.0	0.0	30.9	32.5	37.1	366
9:00	26	12	118	221	55	6	0	0	0	0	0	0	1	0.2	0.2	0.2	0.2	0.2	28.9	31.5	35.0	439
10:00	28	18	115	209	65	8	0	0	0	0	0	0	1	0.2	0.2	0.2	0.2	0.2	28.7	31.5	35.6	444
11:00	22	14	122	197	56	3	1	0	0	0	0	0	0	0.2	0.0	0.0	0.0	0.0	28.9	31.3	35.0	415
12:00	28	23	142	193	56	8	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	28.3	30.9	35.0	450
13:00	30	29	151	212	62	4	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	28.2	30.9	34.9	488
14:00	25	16	117	204	65	11	2	0	0	0	0	0	0	0.5	0.0	0.0	0.0	0.0	29.0	31.6	36.0	440
15:00	31	20	118	204	72	10	1	0	0	0	0	0	0	0.2	0.0	0.0	0.0	0.0	28.6	31.5	36.1	456
16:00	32	26	152	224	67	11	1	0	0	0	0	0	0	0.2	0.0	0.0	0.0	0.0	28.4	31.1	35.2	513
17:00	33	28	152	206	72	8	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	28.2	30.9	35.4	499
18:00	31	25	147	210	58	6	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	28.2	30.9	34.9	477
19:00	14	12	87	158	59	7	1	0	0	0	0	0	0	0.3	0.0	0.0	0.0	0.0	29.7	31.8	36.4	338
20:00	8	11	72	125	42	5	2	0	0	0	0	0	0	0.8	0.0	0.0	0.0	0.0	30.0	31.7	36.2	265
21:00	6	10	66	78	19	5	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	29.1	30.7	34.8	184
22:00	2	6	39	39	18	2	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	29.8	30.8	36.2	106
23:00	0	2	20	29	9	4	1	0	0	0	0	0	0	1.5	0.0	0.0	0.0	0.0	31.5	31.9	37.4	65
24:00	1	3	18	18	9	3	1	0	0	0	0	0	0	1.9	0.0	0.0	0.0	0.0	30.3	31.3	37.9	53
Avg. Daily Total	337	266	1754	2837	958	135	14	2	0	0	0	0	2	0.3	0.1	0.0	0.0	0.0	29.0	31.5	35.9	6305
Percent	5.3%	4.2%	27.8%	45.0%	15.2%	2.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%									
Cum. Percent	5.3%	9.6%	37.4%	82.4%	97.6%	99.7%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%									
Average hour	14	11	73	118	40	6	1	0	0	0	0	0	0									263

	Avg. Speed	50th% Speed	85th% Speed
North	29.7	31.5	35.4
South	29.0	31.5	35.9

Peak Hour Data

Direction	Hour	Count	2-way	Hour	Count
North	17	517	A.M.	9	912
South	16	513	P.M.	17	1016

TRAFFIC FLOW BY DIRECTION



Dutchess County
Traffic Count Hourly Report

ROUTE #: **US 9** ROAD NAME: **ROUTE 9**
DIRECTION: Northbound FACTOR GROUP: 30
STATE DIR CODE: 6 WK OF YR: 29
DATE OF COUNT: 07/18/2022
NOTES LANE 1: NB TRAVEL LANE

COUNT TAKEN BY: ORG CODE: TST INITIALS: BEK

FROM: **ROCKEFELLER LN** TO: **SOUTH**
REC. SERIAL #: 5220 FUNC. CLASS: 07
PLACEMENT: 220 ft N/O Rockefeller Lane NHS: yes
@ REF MARKER: JURIS: City
ADDL DATA: CC Stn:
COUNT TYPE: VEHICLES BATCH ID: DUT-CountToProcess
PROCESSED BY: ORG CODE: TST INITIALS: BEK

COUNTY: **Dutchess**
VILLAGE:
LION#:
BIN:
RR CROSSING:
HPMS SAMPLE:

DATE	DAY	12 TO 1 AM	1 TO 2 AM	2 TO 3 AM	3 TO 4 AM	4 TO 5 AM	5 TO 6 AM	6 TO 7 AM	7 TO 8 AM	8 TO 9 AM	9 TO 10 AM	10 TO 11 AM	11 TO 12 AM	12 TO 1 PM	1 TO 2 PM	2 TO 3 PM	3 TO 4 PM	4 TO 5 PM	5 TO 6 PM	6 TO 7 PM	7 TO 8 PM	8 TO 9 PM	9 TO 10 PM	10 TO 11 PM	11 TO 12 PM	DAILY TOTAL	DAILY HIGH COUNT	DAILY HIGH HOUR
1	F																											
2	S																											
3	S																											
4	M																											
5	T																											
6	W																											
7	T																											
8	F																											
9	S																											
10	S																											
11	M																											
12	T																											
13	W																											
14	T																											
15	F																											
16	S																											
17	S																											
18	M											**265**	**252**	**265**	**253**	**298**	**331**	**290**	**193**	**134**	**91**	**60**	**38**	**36**	**19**			
19	T	**7**	**6**	**3**	**6**	**30**	**135**	**224**	**376**	**321**	**277**	**277**	**290**	**308**	**287**	**310**	**337**	**338**	**257**	**151**	**153**	**73**	**59**	**31**	**15**	4271	376	7
20	W	**5**	**9**	**3**	**7**	**29**	**122**	**240**	**316**	**332**	**258**	**272**	**307**	**271**	**277**	**331**	**328**	**330**	**266**	**146**	**168**	**91**	**55**	**45**	**19**	4227	332	8
21	T	**6**	**3**	**4**	**4**	**29**	**117**	**223**	**383**	**316**	**247**	**302**	**323**	**310**	**298**	**332**	**368**	**373**	**342**	**271**	**187**	**113**	**56**	**45**	**21**	4673	383	7
22	F	**7**	**3**	**7**	**11**	**31**	**34**																					
23	S																											
24	S																											
25	M																											
26	T																											
27	W																											
28	T																											
29	F																											
30	S																											
31	S																											

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)

																								ADT
6	**5**	**4**	**7**	**30**	**102**	**229**	**358**	**323**	**261**	**279**	**293**	**288**	**279**	**318**	**341**	**333**	**264**	**176**	**150**	**84**	**52**	**39**	**18**	**4239**

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY High Hour	AVERAGE WEEKDAY % of day	Axle Adj. Factor	Seasonal/Weekday Adjustment Factor
5	92	5	92	358	8%	1.000	1.083

ESTIMATED

AADT
3914

Dutchess County
Traffic Count Hourly Report

ROUTE #: **US 9** ROAD NAME: **ROUTE 9**
DIRECTION: Southbound FACTOR GROUP: 30
STATE DIR CODE: 7 WK OF YR: 29
DATE OF COUNT: 07/18/2022
NOTES LANE 1: NB TRAVEL LANE

COUNT TAKEN BY: ORG CODE: TST INITIALS: BEK

FROM: **ROCKEFELLER LN** TO: **SOUTH**
REC. SERIAL #: 5220 FUNC. CLASS: 07
PLACEMENT: 220 ft N/O Rockefeller Lane NHS: yes
@ REF MARKER: JURIS: City
ADDL DATA: CC Stn:
COUNT TYPE: VEHICLES BATCH ID: DUT-CountToProcess
PROCESSED BY: ORG CODE: TST INITIALS: BEK

COUNTY: **Dutchess**
VILLAGE:
LION#:
BIN:
RR CROSSING:
HPMS SAMPLE:

DATE	DAY	12 TO 1 AM	1 TO 2 AM	2 TO 3 AM	3 TO 4 AM	4 TO 5 AM	5 TO 6 AM	6 TO 7 AM	7 TO 8 AM	8 TO 9 AM	9 TO 10 AM	10 TO 11 AM	11 TO 12 AM	12 TO 1 PM	1 TO 2 PM	2 TO 3 PM	3 TO 4 PM	4 TO 5 PM	5 TO 6 PM	6 TO 7 PM	7 TO 8 PM	8 TO 9 PM	9 TO 10 PM	10 TO 11 PM	11 TO 12 PM	DAILY TOTAL	DAILY HIGH COUNT	DAILY HIGH HOUR
1	F																											
2	S																											
3	S																											
4	M																											
5	T																											
6	W																											
7	T																											
8	F																											
9	S																											
10	S																											
11	M																											
12	T																											
13	W																											
14	T																											
15	F																											
16	S																											
17	S																											
18	M											**214**	**258**	**248**	**281**	**332**	**325**	**330**	**205**	**153**	**126**	**98**	**47**	**46**	**21**			
19	T	**4**	**8**	**2**	**12**	**33**	**129**	**239**	**287**	**269**	**259**	**263**	**248**	**301**	**303**	**356**	**346**	**380**	**257**	**183**	**143**	**118**	**74**	**53**	**21**	4288	380	16
20	W	**7**	**2**	**1**	**15**	**40**	**117**	**217**	**286**	**257**	**248**	**236**	**270**	**249**	**273**	**330**	**339**	**364**	**285**	**205**	**156**	**149**	**57**	**65**	**19**	4187	364	16
21	T	**13**	**3**	**6**	**12**	**37**	**117**	**237**	**278**	**274**	**260**	**236**	**256**	**309**	**278**	**342**	**344**	**366**	**268**	**212**	**177**	**124**	**70**	**60**	**25**	4304	366	16
22	F	**8**	**4**	**1**	**18**	**27**	**49**																					
23	S																											
24	S																											
25	M																											
26	T																											
27	W																											
28	T																											
29	F																											
30	S																											
31	S																											

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)

																								ADT
8	**4**	**2**	**14**	**34**	**103**	**231**	**284**	**267**	**256**	**237**	**258**	**277**	**284**	**340**	**338**	**360**	**254**	**188**	**150**	**122**	**62**	**56**	**22**	**4151**

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY High Hour	AVERAGE WEEKDAY % of day	Axle Adj. Factor	Seasonal/Weekday Adjustment Factor
5	92	5	92	360	9%	1.000	1.083

ESTIMATED

AADT
3833

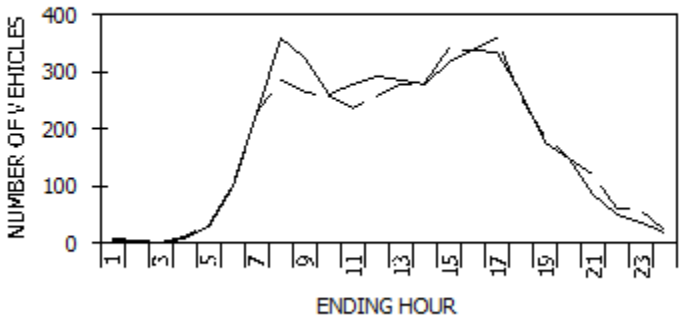
Dutchess County
Classification Count Average Weekday Data Report

ROUTE #: US 9 ROAD NAME: ROUTE 9 YEAR: 2022 STATION: 829001
COUNTY NAME: Dutchess MONTH: July
REGION CODE: 8
FROM: ROCKEFELLER LN
TO: SOUTH
REF-MARKER:
END MILEPOINT: NO. OF LANES: 2
FUNC-CLASS: 07 HPMS NO:
STATION NO: 9001 LION#:
COUNT TAKEN BY: ORG CODE: TST INITIALS: BEK
PROCESSED BY: ORG CODE: TST INITIALS: BEK BATCH ID: DUT-CountToProcess

DIRECTION	North	South	TOTAL
NUMBER OF VEHICLES	**4226**	**4147**	**8373**
NUMBER OF AXLES	**8542**	**8396**	**16937**
% HEAVY VEHICLES (F4-F13)	**4.31%**	**5.11%**	**4.71%**
% TRUCKS AND BUSES (F3-F13)	**18.39%**	**20.23%**	**19.30%**
AXLE CORRECTION FACTOR	**0.99**	**0.99**	**0.99**

VEHICLE CLASS		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	TOTAL
NO. OF AXLES		2	2	2	2.5	2	3	4	3.5	5	6	5	6	8.75	
ENDING HOUR	1:00	0	6	0	0	0	0	0	0	0	0	0	0	0	**6**
	2:00	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
	3:00	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
	4:00	0	4	1	0	2	0	0	0	0	0	0	0	0	**7**
	5:00	0	21	3	1	2	0	1	0	0	0	0	0	0	**28**
	6:00	1	76	16	2	4	2	0	0	0	0	0	0	0	**101**
	7:00	2	177	37	2	8	2	0	0	1	0	0	0	0	**229**
	8:00	3	276	63	3	9	3	1	0	1	0	0	0	0	**359**
	9:00	4	247	55	2	9	3	0	0	3	0	0	0	0	**323**
	10:00	3	196	45	5	8	1	1	1	1	0	0	0	0	**261**
DIRECTION	11:00	2	222	42	2	8	1	0	0	1	0	0	0	0	**278**
North	12:00	4	225	47	2	10	2	0	0	3	0	0	0	0	**293**
	13:00	2	225	45	2	10	1	0	0	2	0	0	0	0	**287**
	14:00	3	222	38	2	9	2	0	0	2	0	0	0	0	**278**
	15:00	3	258	43	2	9	1	0	0	0	0	0	0	0	**316**
	16:00	4	288	38	0	9	0	0	0	1	0	0	0	0	**340**
	17:00	2	287	35	1	6	0	1	0	1	0	0	0	0	**333**
	18:00	3	223	31	0	6	0	0	0	0	0	0	0	0	**263**
	19:00	2	149	21	1	3	0	0	0	0	0	0	0	0	**176**
	20:00	1	130	16	0	1	0	0	0	0	0	0	0	0	**148**
	21:00	0	75	7	0	2	0	0	0	0	0	0	0	0	**84**
	22:00	0	45	6	0	1	0	0	0	0	0	0	0	0	**52**
	23:00	0	35	3	0	0	0	0	0	0	0	0	0	0	**38**
	24:00	0	16	2	0	0	0	0	0	0	0	0	0	0	**18**
TOTAL VEHICLES		**39**	**3410**	**595**	**27**	**116**	**18**	**4**	**1**	**16**	**0**	**0**	**0**	**0**	**4226**
TOTAL AXLES		78	6820	1190	68	232	54	16	4	80	0	0	0	0	8542
	1:00	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
ENDING HOUR	2:00	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
	3:00	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
	4:00	0	8	2	2	1	0	0	0	0	0	0	0	0	**13**
	5:00	0	24	4	0	4	0	0	0	2	0	0	0	0	**34**
	6:00	0	74	18	1	7	2	0	0	1	0	0	0	0	**103**
	7:00	1	177	34	4	11	1	1	0	1	1	0	0	0	**231**
	8:00	2	210	52	3	14	1	0	0	2	0	0	0	0	**284**
	9:00	3	201	46	2	8	3	1	0	2	0	0	0	0	**266**
	10:00	2	190	43	2	13	3	0	1	2	0	0	0	0	**256**
	11:00	1	171	50	2	9	1	0	0	2	0	0	0	0	**236**
DIRECTION	12:00	3	194	45	1	11	2	1	0	1	0	0	0	0	**258**
South	13:00	2	212	46	2	12	2	0	0	1	0	0	0	0	**277**
	14:00	2	223	45	2	8	1	1	0	1	0	0	0	0	**283**
	15:00	2	273	50	2	11	2	0	0	1	0	0	0	0	**341**
	16:00	4	278	44	1	9	2	0	1	0	0	0	0	0	**339**
	17:00	4	304	43	0	6	2	0	0	1	0	0	0	0	**360**
	18:00	2	216	31	2	3	1	0	0	0	0	0	0	0	**255**
	19:00	1	156	26	0	5	0	0	0	0	0	0	0	0	**188**
	20:00	2	128	18	0	2	0	0	0	0	0	0	0	0	**150**
	21:00	1	105	15	0	1	0	0	0	0	0	0	0	0	**122**
	22:00	0	54	5	0	2	0	0	0	0	0	0	0	0	**61**
	23:00	0	48	6	0	2	0	0	0	0	0	0	0	0	**56**
	24:00	0	19	2	0	0	0	0	0	0	0	0	0	0	**21**
TOTAL VEHICLES		**32**	**3276**	**627**	**26**	**139**	**23**	**4**	**2**	**17**	**1**	**0**	**0**	**0**	**4147**
TOTAL AXLES		64	6552	1254	65	278	69	16	7	85	6	0	0	0	8396
GRAND TOTAL VEHICLES		**71**	**6686**	**1222**	**53**	**255**	**41**	**8**	**3**	**33**	**1**	**0**	**0**	**0**	**8373**
GRAND TOTAL AXLES		142	13372	2444	132	510	123	32	10	165	6	0	0	0	16938

TRAFFIC FLOW BY DIRECTION



--- North - -South

PEAK HOUR DATA

DIRECTION	HOUR	COUNT	2-WAY	HOUR	COUNT
North	**8**	**359**	**A.M.**	**8**	**643**
South	**17**	**360**	**P.M.**	**17**	**693**

VEHICLE CLASSIFICATION CODES:

F1. Motorcycles
F2. Autos*
F3. 2 Axle, 4-Tire Pickups, Vans, Motorhomes*
F4. Buses
F5. 2 Axle, 6-Tire Single Unit Trucks
F6. 3 Axle Single Unit Trucks
F7. 4 or More Axle Single Unit Trucks
F8. 4 or Less Axle Vehicles, One Unit is a Truck
F9. 5 Axle Double Unit Vehicles, One Unit is a Truck
F10. 6 or More Double Unit Vehicles, One Unit is a Truck
F11. 5 or Less Axle Multi-Unit Trucks
F12. 6 Axle Multi-Unit Trucks
F13. 7 or More Axle Multi-Unit Trucks

* INCLUDING THOSE HAULING TRAILERS

FUNCTIONAL CLASS CODES:

RURAL	URBAN	SYSTEM
01	11	PRINCIPAL ARTERIAL-INTERSTATE
02	12	PRINCIPAL ARTERIAL-EXPRESSWAY
02	14	PRINCIPAL ARTERIAL-OTHER
06	16	MINOR ARTERIAL
07	17	MAJOR COLLECTOR
08	17	MINOR COLLECTOR
09	19	LOCAL SYSTEM

SOURCE: NYSDOT DATA SERVICES BUREAU

Dutchess County
Speed Count Average Weekday Report

Station:	829001	Start date:	Mon 07/18/2022 10:00	Count duration:	93 hours
Route #: US 9	Road name: ROUTE 9	End date:	Fri 07/22/2022 06:45	Functional class:	7
From:	ROCKEFELLER LN	County:	Dutchess	Factor group:	30
To:	SOUTH ST	Town:		Batch ID:	DUT-CountToProcess
Direction:	North	Speed limit:	30	Count taken by:	Org: TST Init: BEK
		LION#:		Processed by:	Org: TST Init: BEK

Speeds, mph

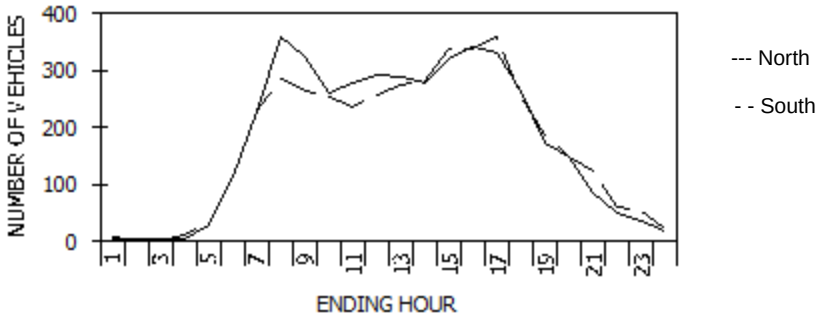
Hour	0.0-20.0	20.1-25.0	25.1-30.0	30.1-35.0	35.1-40.0	40.1-45.0	45.1-50.0	50.1-55.0	55.1-60.0	60.1-65.0	65.1-70.0	70.1-75.0	75.1-95.0	% Exc 45.0	% Exc 50.0	% Exc 55.0	% Exc 60.0	% Exc 65.0	Avg	50th%	85th%	Total
1:00	0	0	0	2	2	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	36.1	36.3	41.3	5
2:00	0	0	0	1	2	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	37.2	37.6	42.0	4
3:00	0	0	0	1	2	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	37.2	37.6	42.0	4
4:00	0	0	0	2	2	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	36.1	36.3	41.3	5
5:00	0	0	4	8	11	3	2	2	0	0	0	0	0	13.3	6.7	0.0	0.0	0.0	35.9	36.4	44.2	30
6:00	4	2	8	32	36	24	7	1	0	0	0	0	0	7.0	0.9	0.0	0.0	0.0	34.0	36.6	43.2	114
7:00	6	1	16	79	72	37	13	5	0	0	0	0	0	7.9	2.2	0.0	0.0	0.0	34.4	35.9	42.8	229
8:00	14	7	38	139	114	38	8	0	1	0	0	0	0	2.5	0.3	0.3	0.0	0.0	32.2	34.4	39.7	359
9:00	16	4	43	120	94	37	8	3	0	0	0	0	0	3.4	0.9	0.0	0.0	0.0	31.7	34.2	40.0	325
10:00	5	2	27	97	90	32	7	1	0	0	0	0	0	3.1	0.4	0.0	0.0	0.0	33.7	35.0	40.2	261
11:00	8	4	34	108	82	36	6	2	0	0	0	0	0	2.9	0.7	0.0	0.0	0.0	32.8	34.4	40.3	280
12:00	8	3	33	106	95	36	11	2	0	0	0	0	0	4.4	0.7	0.0	0.0	0.0	33.2	34.9	40.7	294
13:00	6	3	24	106	104	35	9	1	0	0	0	0	0	3.5	0.3	0.0	0.0	0.0	33.8	35.3	40.3	288
14:00	8	3	28	102	92	37	7	2	0	0	0	0	0	3.2	0.7	0.0	0.0	0.0	33.2	35.0	40.6	279
15:00	10	4	28	115	106	42	12	2	0	0	0	0	0	4.4	0.6	0.0	0.0	0.0	33.3	35.2	41.0	319
16:00	13	2	34	116	116	47	12	2	0	0	0	0	0	4.1	0.6	0.0	0.0	0.0	33.0	35.3	41.1	342
17:00	10	7	35	128	104	38	9	1	0	0	0	0	0	3.0	0.3	0.0	0.0	0.0	32.7	34.5	40.0	332
18:00	7	2	23	87	100	35	8	2	0	0	0	0	0	3.8	0.8	0.0	0.0	0.0	33.7	35.7	40.8	264
19:00	4	2	14	58	58	28	8	2	0	0	0	0	0	5.7	1.1	0.0	0.0	0.0	34.2	35.8	42.2	174
20:00	3	2	17	54	48	16	7	2	0	0	0	0	0	6.0	1.3	0.0	0.0	0.0	33.6	34.9	40.9	149
21:00	1	1	8	34	25	11	4	0	0	0	0	0	0	4.8	0.0	0.0	0.0	0.0	34.1	34.8	41.1	84
22:00	0	0	6	17	13	11	2	1	0	0	0	0	0	6.0	2.0	0.0	0.0	0.0	35.5	35.8	43.0	50
23:00	0	0	3	16	11	5	2	1	0	0	0	0	0	7.9	2.6	0.0	0.0	0.0	35.4	35.0	42.4	38
24:00	0	0	2	5	5	4	1	1	0	0	0	0	0	11.1	5.6	0.0	0.0	0.0	36.4	37.0	44.2	18
Avg. Daily Total	123	49	425	1533	1384	556	143	33	1	0	0	0	0	4.2	0.8	0.0	0.0	0.0	33.3	35.0	40.9	4247
Percent	2.9%	1.2%	10.0%	36.1%	32.6%	13.1%	3.4%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%									
Cum. Percent	2.9%	4.0%	14.1%	50.2%	82.7%	95.8%	99.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%									
Average hour	5	2	18	64	58	23	6	1	0	0	0	0	0									177

	Avg. Speed	50th% Speed	85th% Speed
North	33.3	35.0	40.9
South	37.3	38.6	44.1

Peak Hour Data

Direction	Hour	Count	2-way	Hour	Count
North	8	359	A.M.	8	643
South	17	359	P.M.	17	691

TRAFFIC FLOW BY DIRECTION



Dutchess County
Speed Count Average Weekday Report

Station:	829001	Start date:	Mon 07/18/2022 10:00	Count duration:	93 hours
Route #: US 9	Road name: ROUTE 9	End date:	Fri 07/22/2022 06:45	Functional class:	7
From:	ROCKEFELLER LN	County:	Dutchess	Factor group:	30
To:	SOUTH ST	Town:		Batch ID:	DUT-CountToProcess
Direction:	South	Speed limit:	30	Count taken by:	Org: TST Init: BEK
		LION#:		Processed by:	Org: TST Init: BEK

Speeds, mph

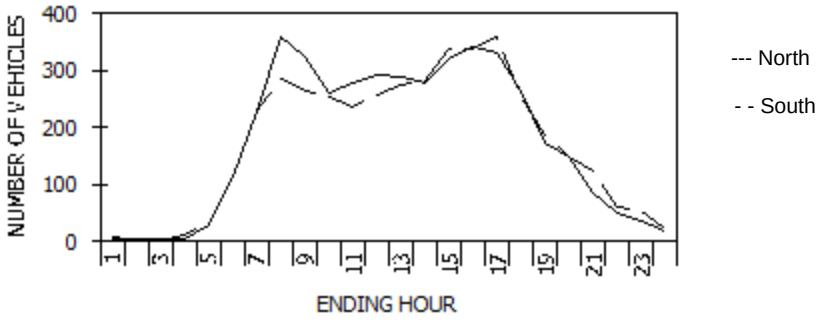
Hour	0.0-20.0	20.1-25.0	25.1-30.0	30.1-35.0	35.1-40.0	40.1-45.0	45.1-50.0	50.1-55.0	55.1-60.0	60.1-65.0	65.1-70.0	70.1-75.0	75.1-95.0	% Exc 45.0	% Exc 50.0	% Exc 55.0	% Exc 60.0	% Exc 65.0	Avg	50th%	85th%	Total
1:00	0	0	0	1	3	2	2	0	0	0	0	0	0	25.0	0.0	0.0	0.0	0.0	40.0	40.0	47.0	8
2:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	37.5	37.6	39.3	3
3:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	37.5	37.6	39.3	1
4:00	0	0	0	2	4	4	3	0	0	0	0	0	0	23.1	0.0	0.0	0.0	0.0	39.9	40.7	46.8	13
5:00	0	0	0	4	10	11	7	2	0	0	0	0	0	26.5	5.9	0.0	0.0	0.0	40.8	41.4	47.8	34
6:00	2	0	2	13	34	42	16	4	0	1	0	0	0	18.4	4.4	0.9	0.9	0.0	38.7	40.8	46.3	114
7:00	1	0	3	26	89	85	25	2	0	0	0	0	0	11.7	0.9	0.0	0.0	0.0	39.0	39.9	44.6	231
8:00	5	1	3	48	112	88	25	2	0	0	0	0	0	9.5	0.7	0.0	0.0	0.0	37.2	38.8	44.2	284
9:00	6	0	7	54	108	71	18	2	0	0	0	0	0	7.5	0.8	0.0	0.0	0.0	36.3	38.1	43.6	266
10:00	4	0	5	45	97	80	22	2	0	0	0	0	0	9.4	0.8	0.0	0.0	0.0	37.3	38.8	44.2	255
11:00	4	0	3	41	102	71	14	1	0	0	0	0	0	6.4	0.4	0.0	0.0	0.0	37.0	38.5	43.6	236
12:00	3	1	8	54	110	66	14	2	0	0	0	0	0	6.2	0.8	0.0	0.0	0.0	36.6	37.9	43.3	258
13:00	3	2	7	59	108	74	19	3	0	0	0	0	0	8.0	1.1	0.0	0.0	0.0	36.9	38.1	43.7	275
14:00	6	0	5	42	117	86	23	4	0	0	0	0	0	9.5	1.4	0.0	0.0	0.0	37.1	38.8	44.2	283
15:00	7	1	10	49	139	102	30	2	0	0	0	0	0	9.4	0.6	0.0	0.0	0.0	36.9	38.8	44.1	340
16:00	6	0	7	59	125	103	33	5	0	0	0	0	0	11.2	1.5	0.0	0.0	0.0	37.3	38.9	44.4	338
17:00	4	0	5	64	152	106	24	4	0	0	0	0	0	7.8	1.1	0.0	0.0	0.0	37.5	38.6	43.8	359
18:00	2	1	4	42	103	74	23	4	0	0	0	0	0	10.7	1.6	0.0	0.0	0.0	37.9	38.8	44.3	253
19:00	0	1	4	42	69	54	15	3	0	0	0	0	0	9.6	1.6	0.0	0.0	0.0	37.9	38.5	44.1	188
20:00	1	1	6	38	62	33	8	1	0	0	0	0	0	6.0	0.7	0.0	0.0	0.0	36.4	37.4	43.0	150
21:00	2	0	6	34	54	20	6	1	0	0	0	0	0	5.7	0.8	0.0	0.0	0.0	35.4	36.9	42.2	123
22:00	0	0	2	16	23	14	6	1	0	0	0	0	0	11.3	1.6	0.0	0.0	0.0	37.5	37.9	44.2	62
23:00	0	0	1	12	17	17	6	2	0	0	0	0	0	14.5	3.6	0.0	0.0	0.0	38.6	39.3	45.0	55
24:00	0	0	0	4	7	7	3	0	0	0	0	0	0	14.3	0.0	0.0	0.0	0.0	39.1	39.7	44.9	21
Avg. Daily Total	56	8	88	749	1649	1210	342	47	0	1	0	0	0	9.4	1.2	0.0	0.0	0.0	37.3	38.6	44.1	4150
Percent	1.3%	0.2%	2.1%	18.0%	39.7%	29.2%	8.2%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%									
Cum. Percent	1.3%	1.5%	3.7%	21.7%	61.4%	90.6%	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%									
Average hour	2	0	4	31	69	50	14	2	0	0	0	0	0									173

	Avg. Speed	50th% Speed	85th% Speed
North	33.3	35.0	40.9
South	37.3	38.6	44.1

Peak Hour Data

Direction	Hour	Count	2-way	Hour	Count
North	8	359	A.M.	8	643
South	17	359	P.M.	17	691

TRAFFIC FLOW BY DIRECTION



Pedestrian/Bicycle Video Count

Year	2022
Month	October
Count Type	Video
Location Type	**Screenline (on-road)**
Municipality	V/Rhinebeck
Location Description	**Route 9 between Locust Grove & Village Green**
Site ID, Address, or Station #	BIKEPEDB02a
X coordinate	41.93203489
Y coordinate	-73.91315607
Week	10/3/2022

Survey Dates		**High Temp**	**Low Temp**
Weekday	6-Oct	72	41
Saturday	8-Oct	55	37

Direction	
Dir 1	NB
Dir 2	SB

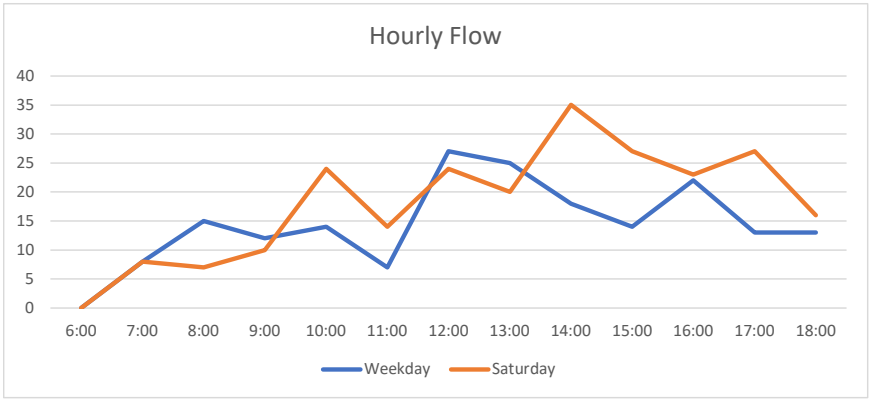
Data Summary

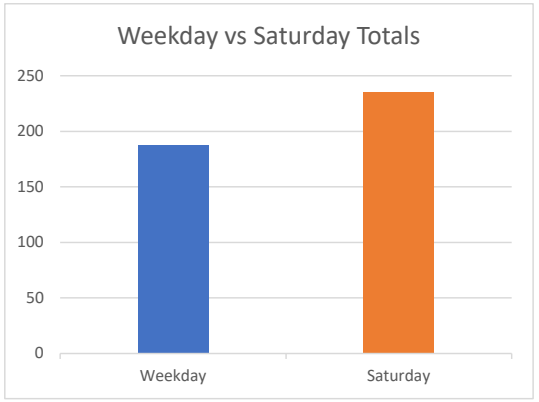
	2 hr (4-6pm weekday; 12-2pm Sat)			**12 hr (7am-7pm)**		
	PED	**BCL**	**Total**	**PED**	**BCL**	**Total**
Weekday	24	11	35	164	24	188
Saturday	37	7	44	196	39	235

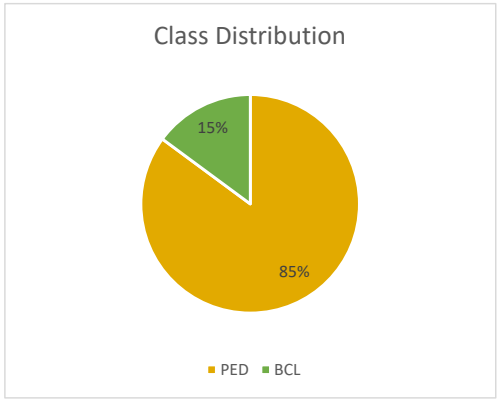
Daily Totals

Date	**NB**	**SB**	**Total**
6-Oct	94	94	188
8-Oct	124	111	235
Total	**218**	**205**	**423**

Class	**Total**
PED	360
BCL	63







Pedestrian/Bicycle Video Count

Year	2022
Month	October
Count Type	Video
Location Type	**Screenline (on-road)**
Municipality	V/Rhinebeck
Location Description	**Route 9 between Platt and Chestnut**
Site ID, Address, or Station #	BIKEPEDB03b
X coordinate	41.93036056
Y coordinate	-73.91308641
Week	10/3/2022

Survey Dates		**High Temp**	**Low Temp**
Weekday	6-Oct	72	41
Saturday	8-Oct	55	37

Direction	
Dir 1	NB
Dir 2	SB

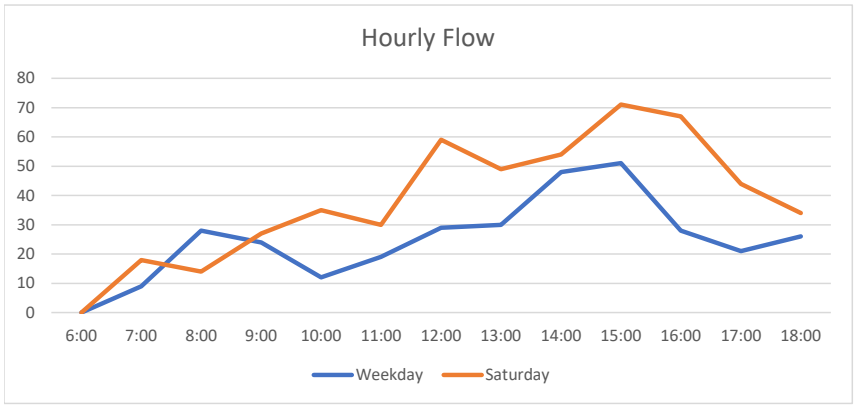
Data Summary

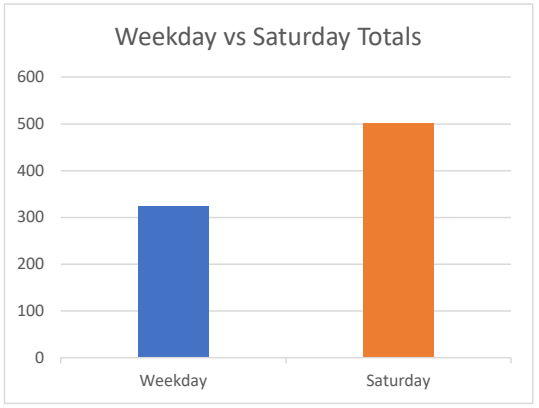
	2 hr (4-6pm weekday; 12-2pm Sat)			**12 hr (7am-7pm)**		
	PED	**BCL**	**Total**	**PED**	**BCL**	**Total**
Weekday	40	9	49	299	26	325
Saturday	102	6	108	470	32	502

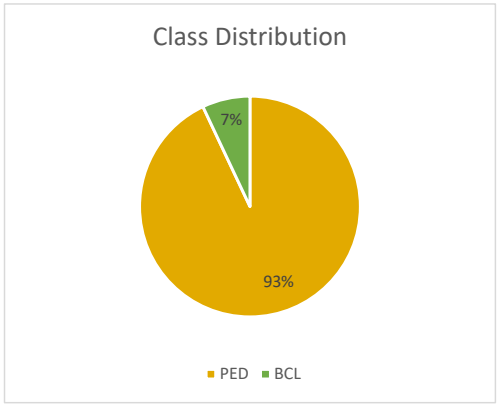
Daily Totals

Date	**NB**	**SB**	**Total**
6-Oct	162	163	325
8-Oct	247	255	502
Total	**409**	**418**	**827**

Class	**Total**
PED	769
BCL	58







Pedestrian/Bicycle Video Count

Year	2022
Month	October
Count Type	Video
Location Type	**Intersection**
Municipality	V/Rhinebeck
Location Description	**Route 9 at South St**
Site ID, Address, or Station #	BIKEPEDB04b
X coordinate	41.92497947
Y coordinate	-73.9124137
Week	10/3/2022

Survey Dates		**High Temp**	**Low Temp**
Weekday	6-Oct	72	41
Saturday	8-Oct	55	37

Intersection leg (for ped counts)
East
West
North
South

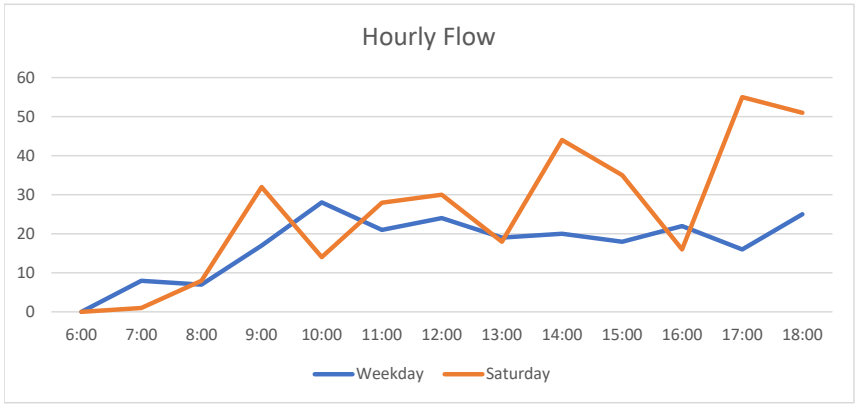
Data Summary

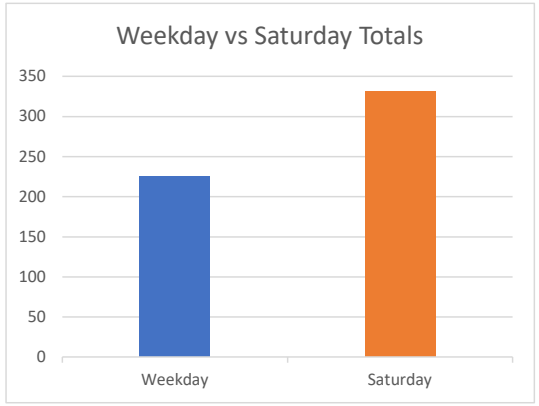
	2 hr (4-6pm weekday; 12-2pm Sat)			**12 hr (7am-7pm)**		
	PED	**BCL**	**Total**	**PED**	**BCL**	**Total**
Weekday	33	5	38	208	17	225
Saturday	43	5	48	295	37	332

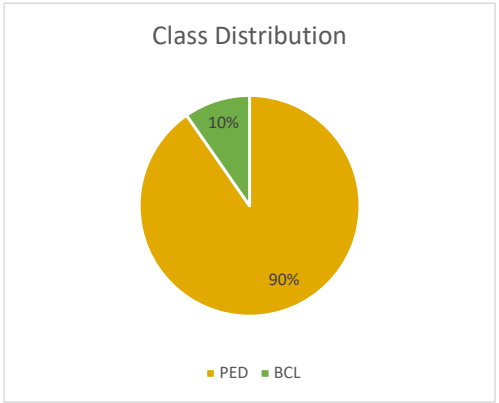
Daily Totals

	Intersection leg (for ped counts only)				
Date	**East**	**West**	**North**	**South**	**Total**
6-Oct	67	60	37	44	208
8-Oct	98	94	44	59	295
Total	**165**	**154**	**81**	**103**	**503**

Class	**Total**
PED	503
BCL	54







Pedestrian/Bicycle Video Count

Year	2022
Month	October
Count Type	Video
Location Type	**Screenline (on-road)**
Municipality	V/Rhinebeck
Location Description	**Route 9 just north of Rockefeller Ln**
Site ID, Address, or Station #	BIKEPEDB01a
X coordinate	41.92291452
Y coordinate	-73.91190421
Week	10/3/2022

Survey Dates		**High Temp**	**Low Temp**
Weekday	6-Oct	72	41
Saturday	8-Oct	55	37

Direction	
Dir 1	NB
Dir 2	SB

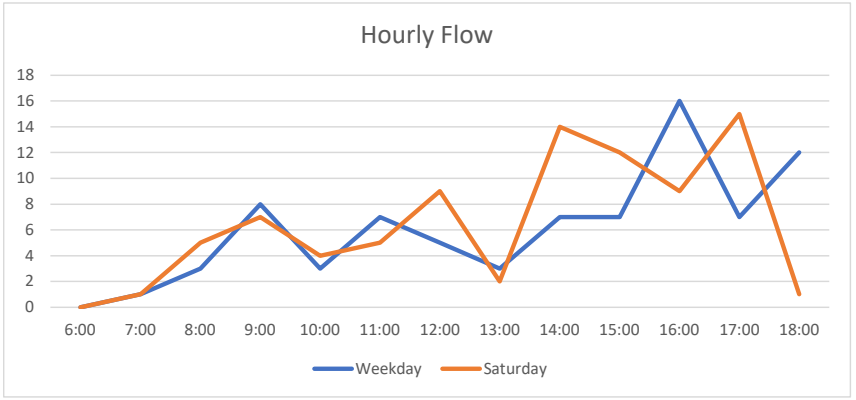
Data Summary

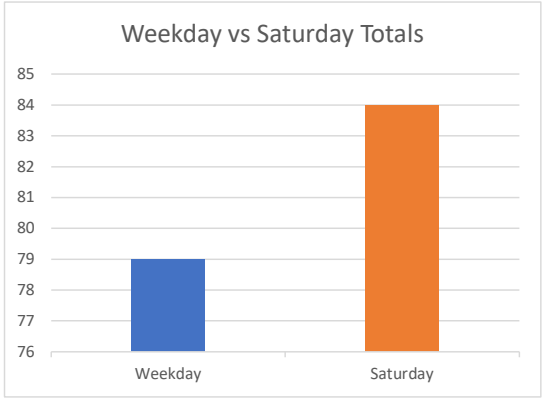
	2 hr (4-6pm weekday; 12-2pm Sat)			**12 hr (7am-7pm)**		
	PED	**BCL**	**Total**	**PED**	**BCL**	**Total**
Weekday	19	4	23	67	12	79
Saturday	6	5	11	60	24	84

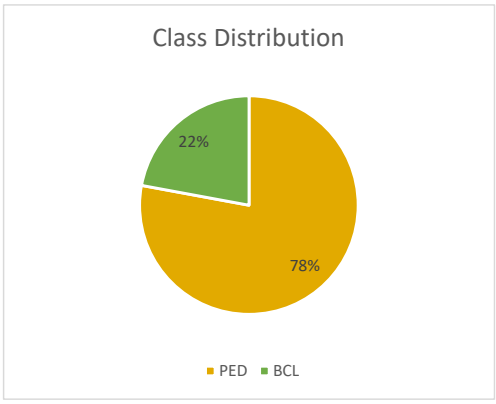
Daily Totals

Date	**NB**	**SB**	**Total**
6-Oct	47	32	79
8-Oct	52	32	84
Total	**99**	**64**	**163**

Class	**Total**
PED	127
BCL	36







Name: Stephanie Gunning **Location:** Platt Ave. + Rte. 9 X,Y: 41.9309393, 73.9126282 (from Google Maps)

Date: 9/17/22 **Start Time:** 12:00 PM **End Time:** 2:00 PM

Weather: partly cloudy / sunny

Notes:

Female: 0
Male: X

First: Fill in street names and adjust the road layout as needed.

Female: 0
Male: X

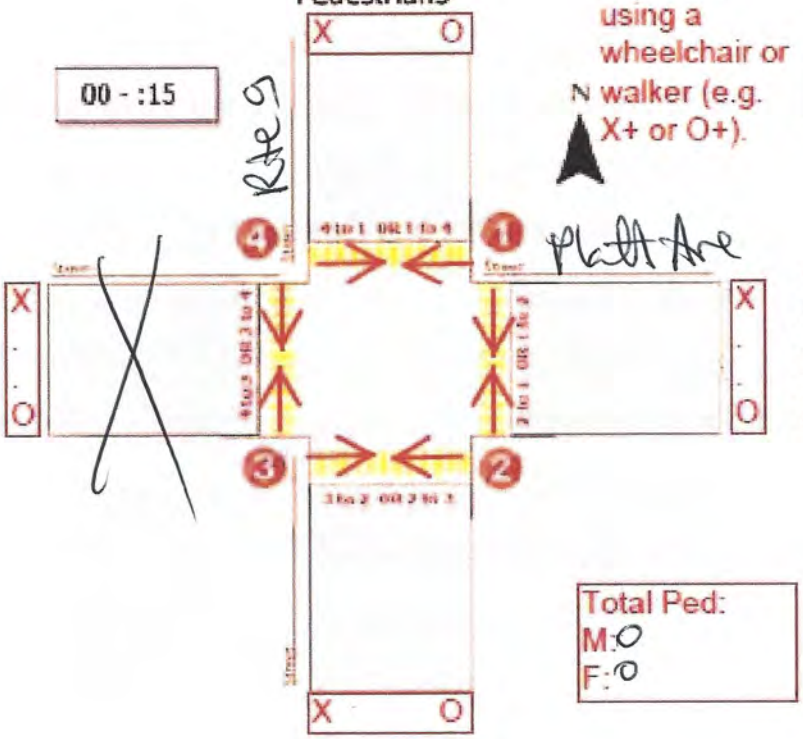
Count pedestrians crossing at the intersection or within 50 ft of the intersection. Don't count if they don't cross.

Bicyclists include those riding on sidewalks. People walking bikes are pedestrians.

Pedestrians

00 - :15

Add a + if using a wheelchair or walker (e.g. X+ or O+).

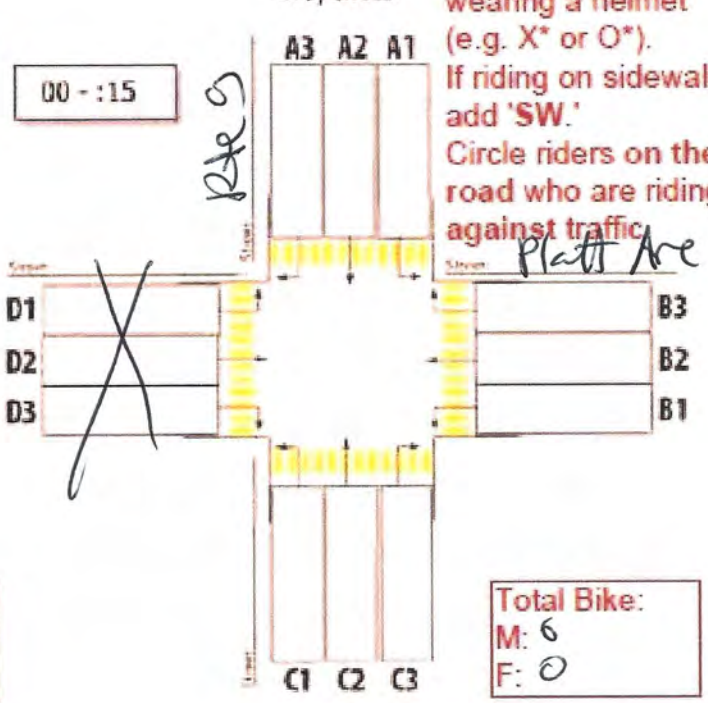


Total Ped:
M: 0
F: 0

Bicyclists

00 - :15

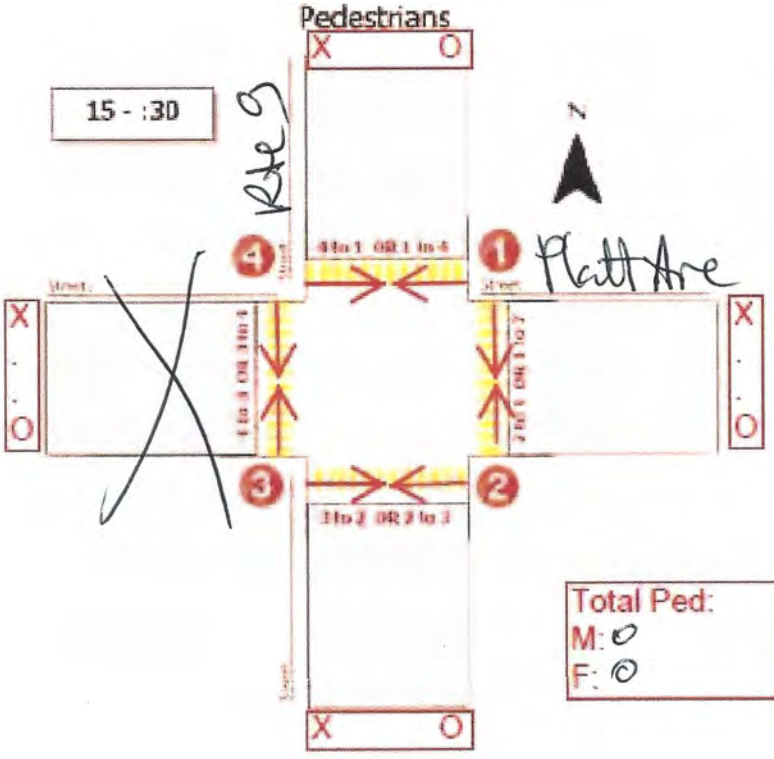
Add a * if **not** wearing a helmet (e.g. X* or O*).
If riding on sidewalks, add '**SW**.'
Circle riders on the road who are riding against traffic.



Total Bike:
M: 6
F: 0

Pedestrians

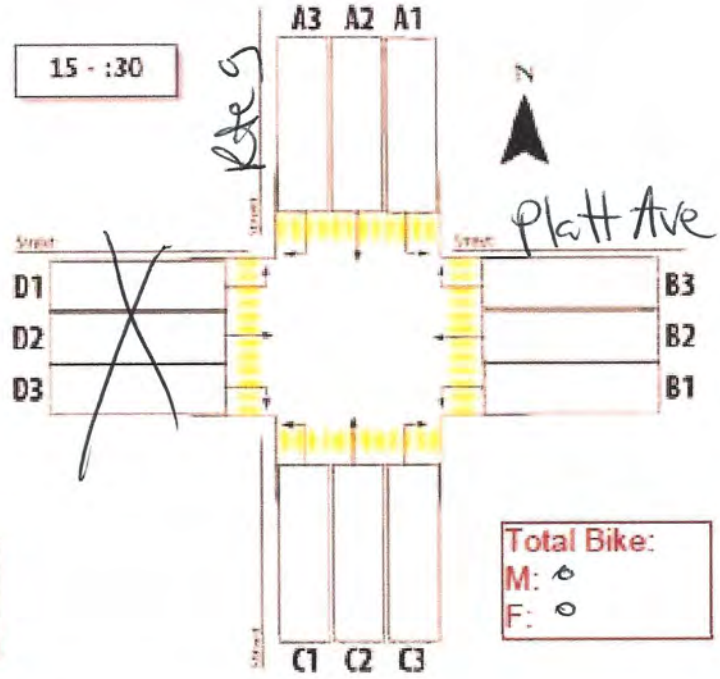
15 - :30



Total Ped:
M: 0
F: 0

Bicyclists

15 - :30



Total Bike:
M: 0
F: 0

Intersection Count Form 2nd half-hour (out of 4) - Page 2 of Form

Notes:

Female: 0
Male: X

Female: 0
Male: X

Count pedestrians crossing at the intersection or within 50 ft of the intersection. Don't count if they don't cross.

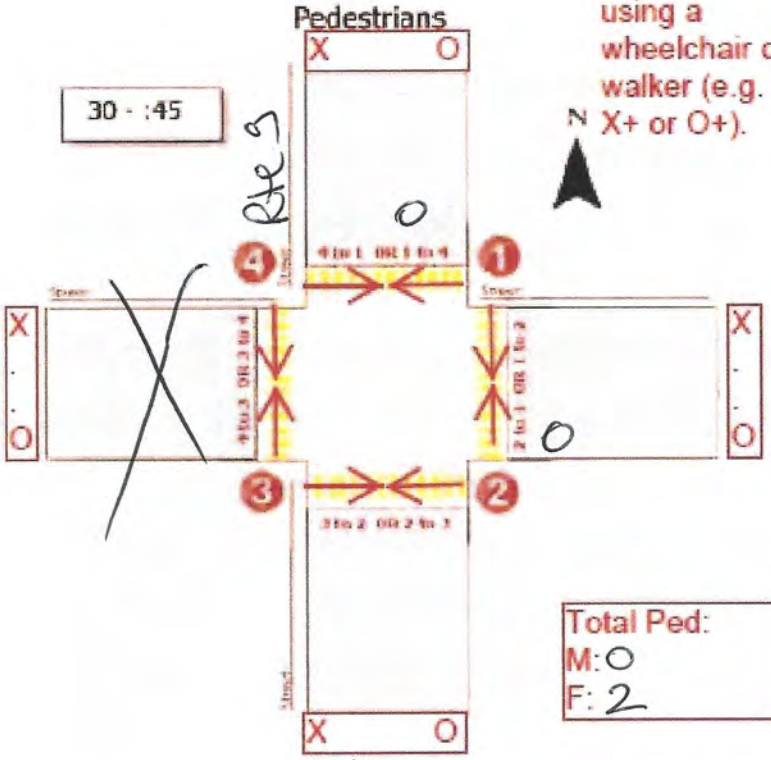
Bicyclists include those riding on sidewalks. People walking bikes are pedestrians.

Add a + if using a wheelchair or walker (e.g. X+ or O+).

Add a * if **not** wearing a helmet; '**SW**' if riding on sidewalk. Circle riders on the road who are riding **against** traffic.

Pedestrians

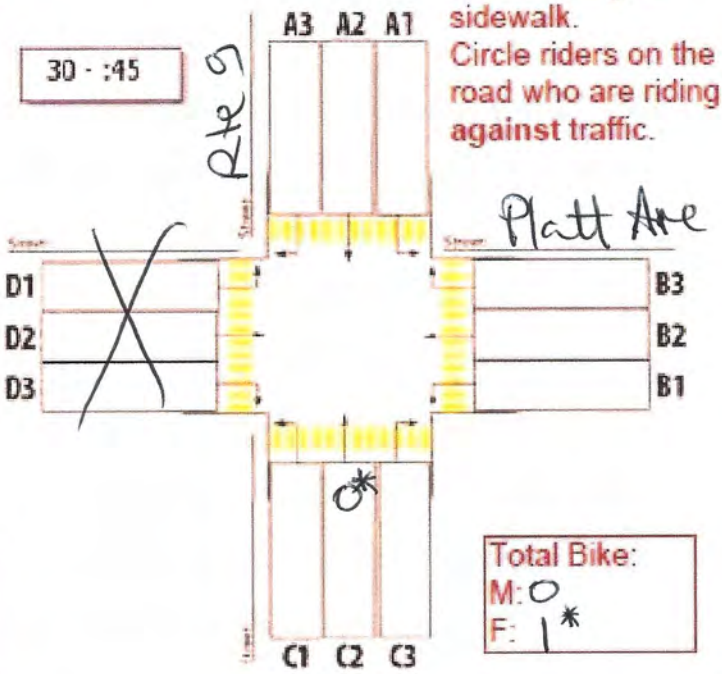
30 - :45



Total Ped:
M: 0
F: 2

Bicyclists

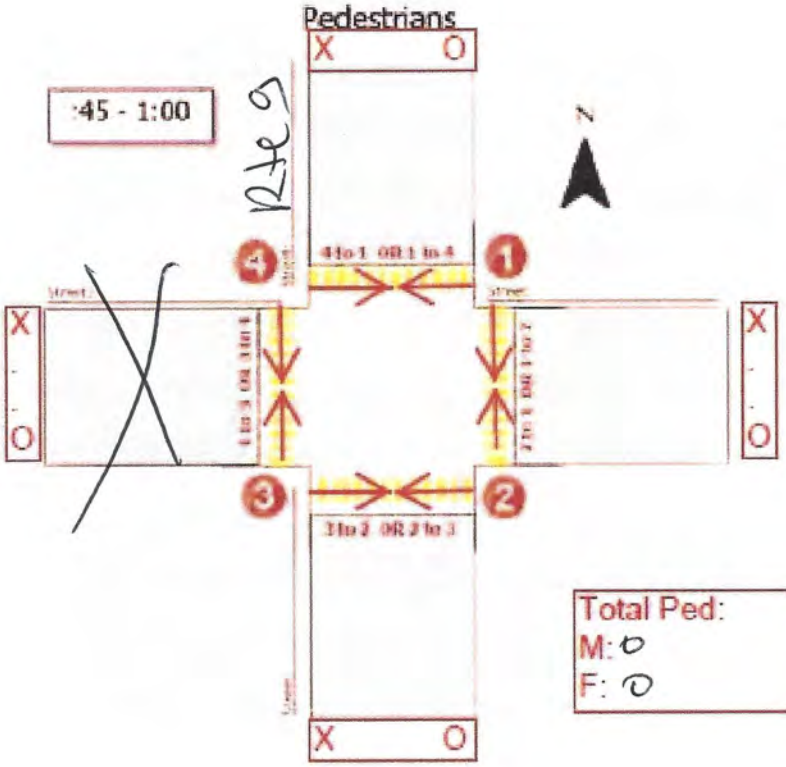
30 - :45



Total Bike:
M: 0
F: 1*

Pedestrians

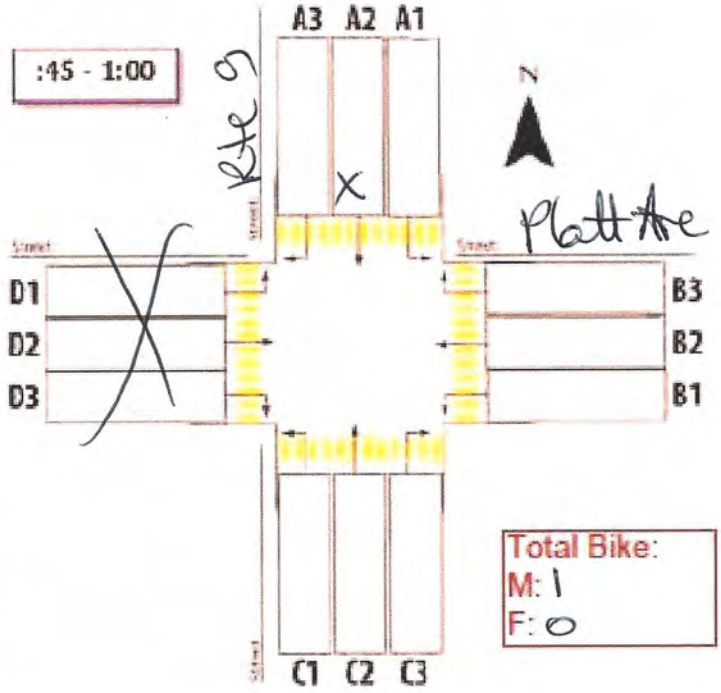
:45 - 1:00



Total Ped:
M: 0
F: 0

Bicyclists

:45 - 1:00



Total Bike:
M: 1
F: 0

Intersection Count Form 3rd half-hour (out of 4) - Page 3 of Form

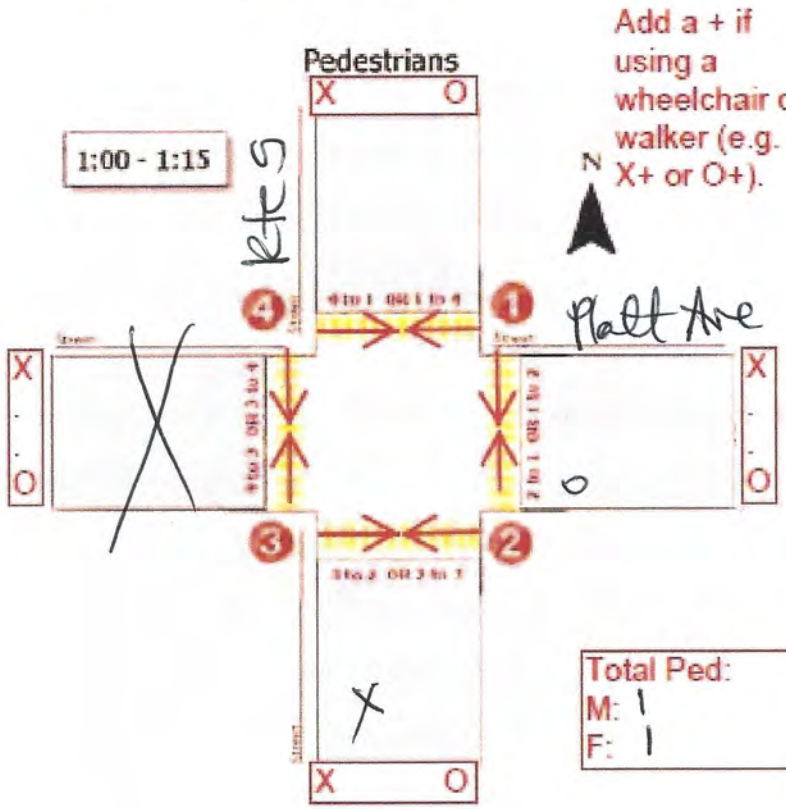
Notes:

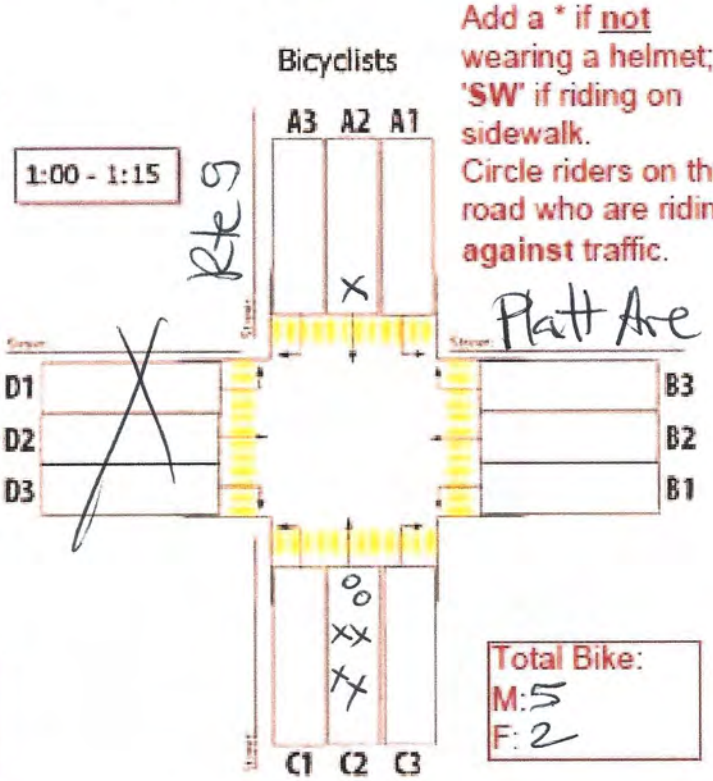
Female: 0
Male: X

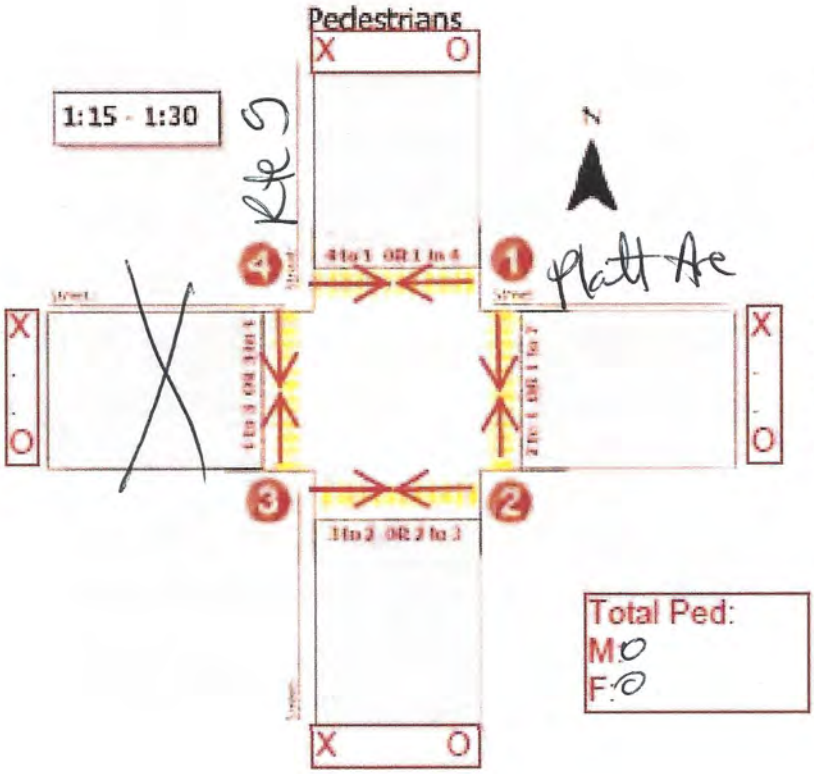
Female: 0
Male: X

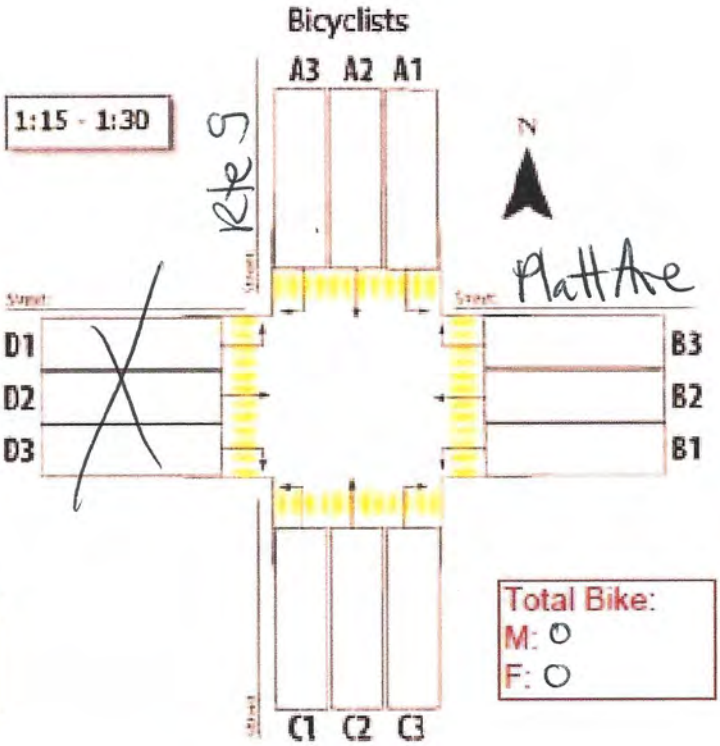
Count pedestrians crossing at the intersection or within 50 ft of the intersection. Don't count if they don't cross.

Bicyclists include those riding on sidewalks. People walking bikes are pedestrians.









Intersection Count Form 4th half-hour (out of 4) - Page 4 of Form

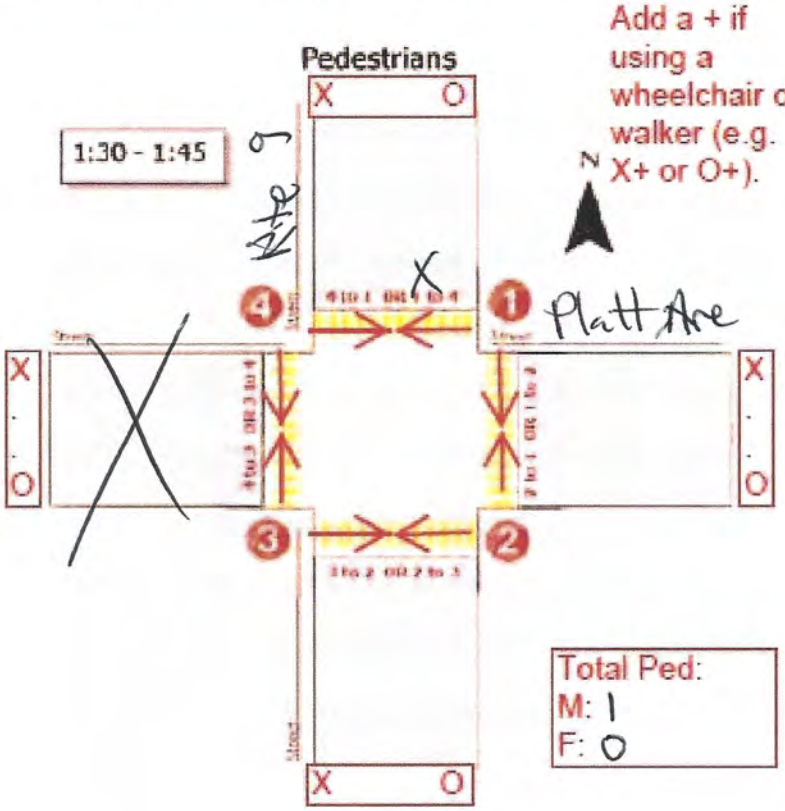
Notes:

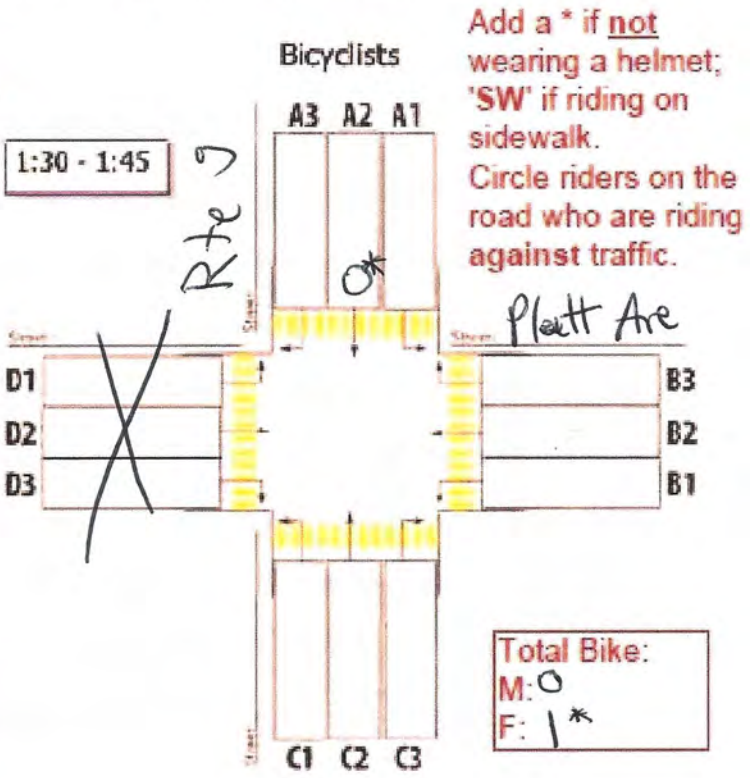
Female: 0
Male: X

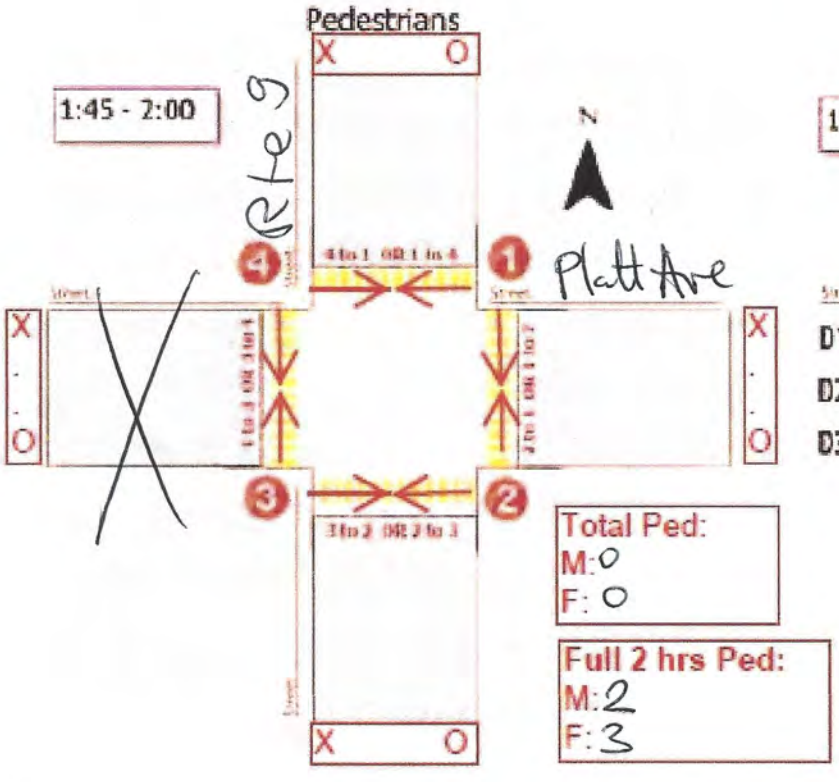
Female: 0
Male: X

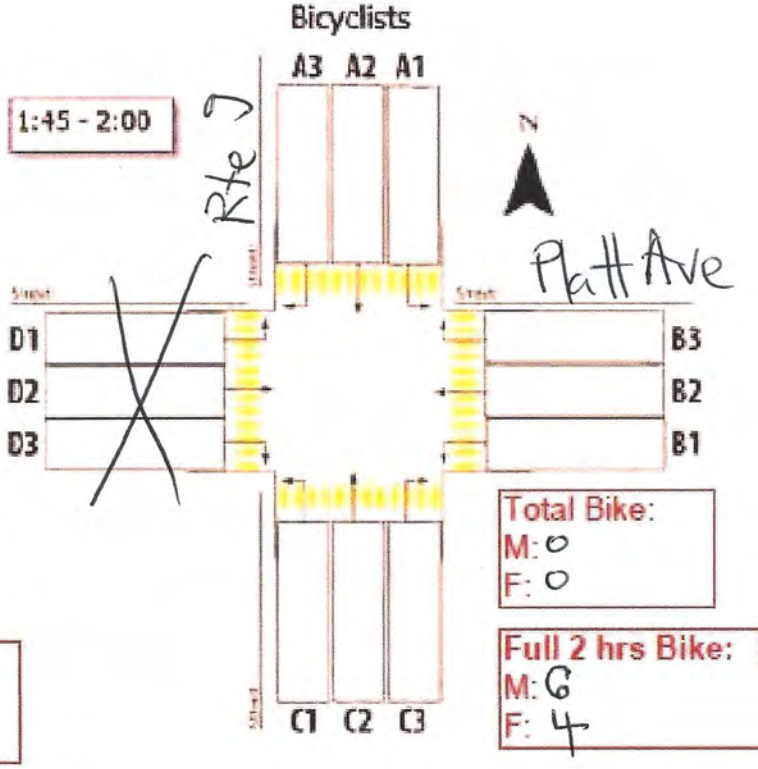
Count pedestrians crossing at the intersection or within 50 ft of the intersection. Don't count if they don't cross.

Bicyclists include those riding on sidewalks. People walking bikes are pedestrians.





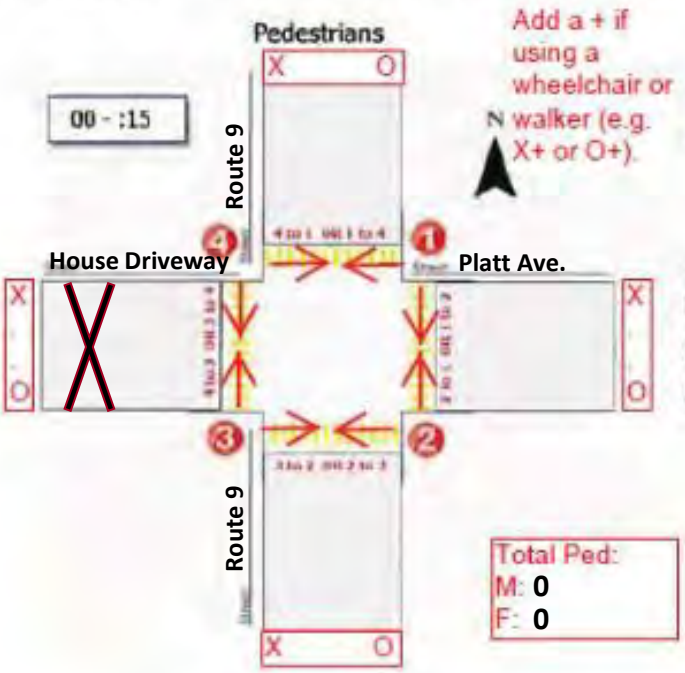


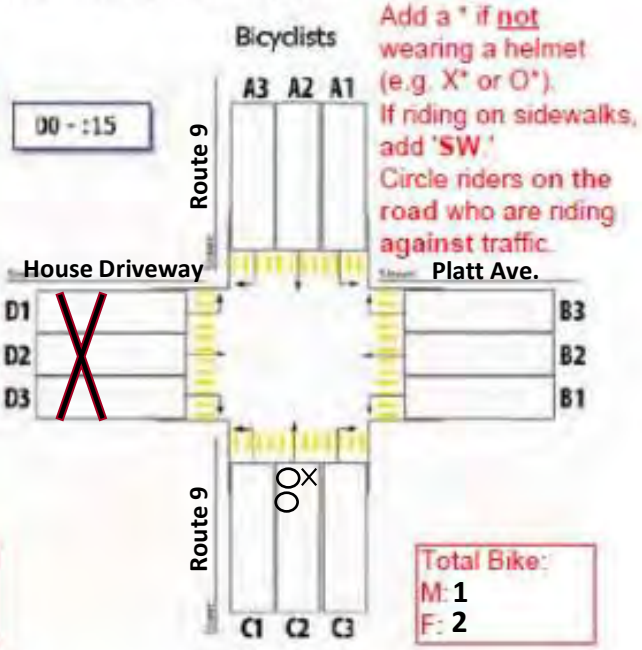


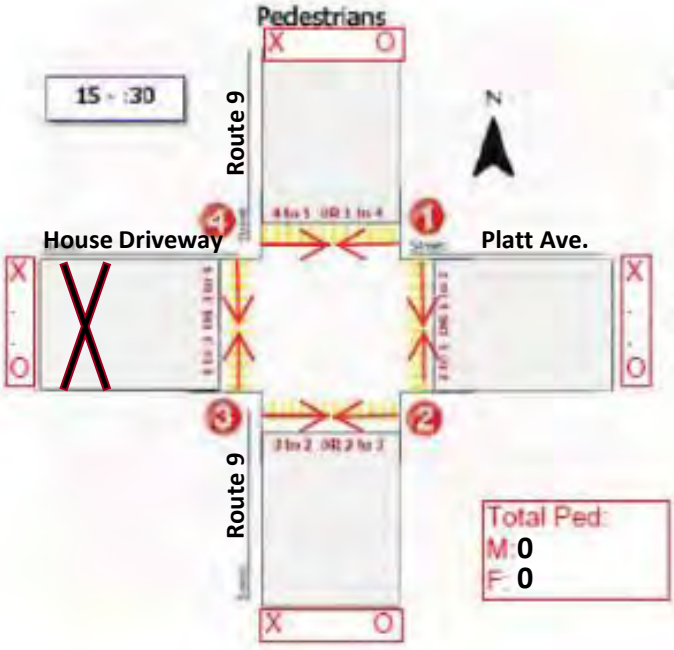
Name: John Clarke **Location:** Route 9/Platt Ave, Rhinebeck X,Y: 41.931262, -73.913010
Date: Sept. 21, 2022 **Start Time:** 4:00 pm **End Time:** 6:00 pm (from Google Maps)
Weather: Partly Sunny
Notes: This is a T intersection with a private driveway on the western leg and no crosswalks. Vehicle traffic between 4 - 6 pm was fairly constant on Route 9. The sidewalk on the west side of Route 9 is continuous, but the eastern sidewalk stops at the south side of Platt Avenue. During the two hours, 8 males and 16 females walked past the intersection on the western sidewalk and every pedestrian on the eastern sidewalk turned to go up Platt. Platt Avenue has so sidewalk on the south side and the sidewalk on the north side at this end is overgrown and not complete.

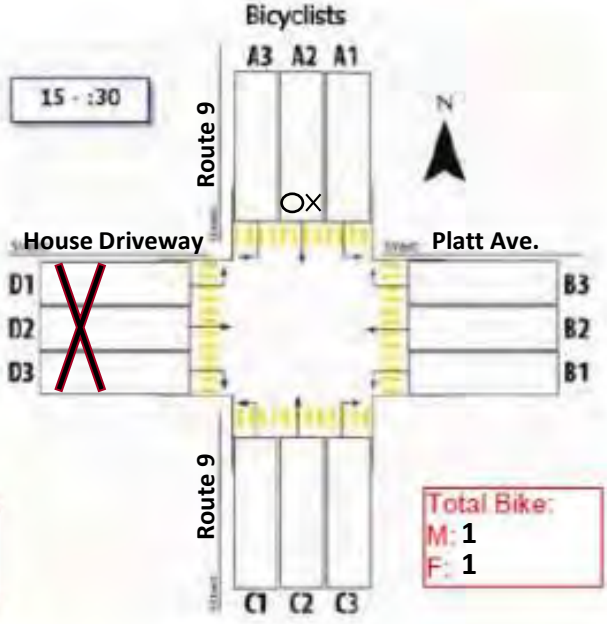
Count pedestrians crossing at the intersection or within 50 ft of the intersection. Don't count if they don't cross.

Bicyclists include those riding on sidewalks. People walking bikes are pedestrians.









Intersection Count Form 2nd half-hour (out of 4) - Page 2 of Form

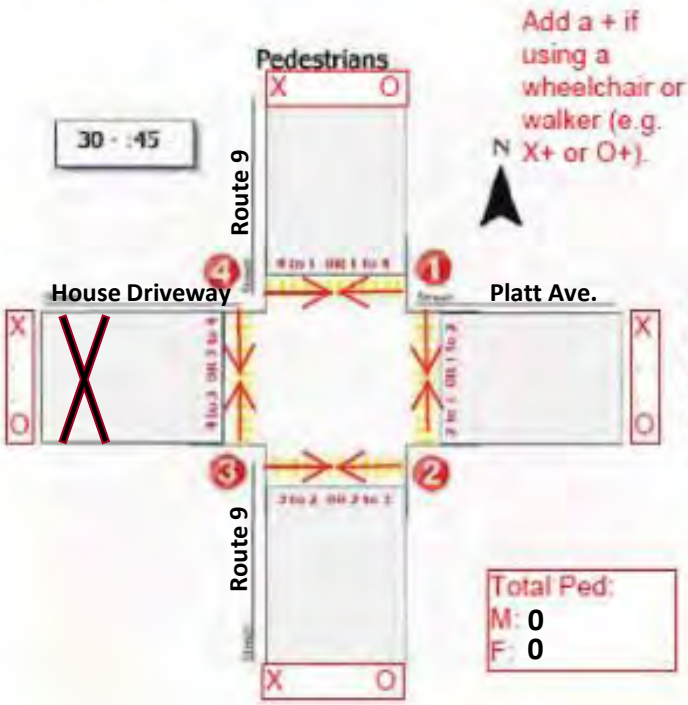
Notes:

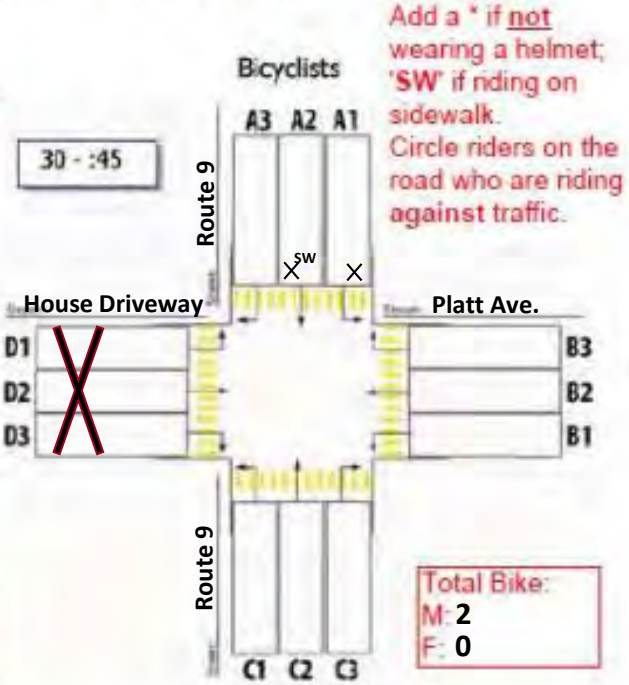
Female: 0
Male: X

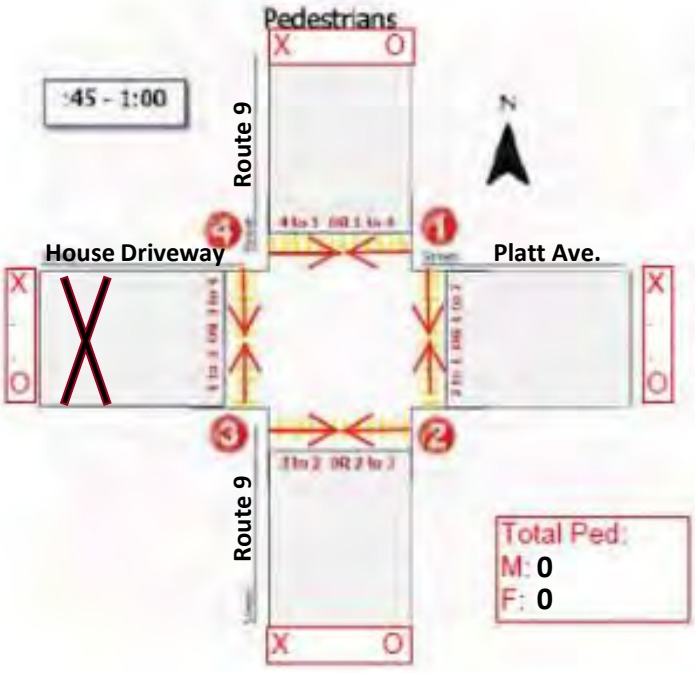
Female: 0
Male: X

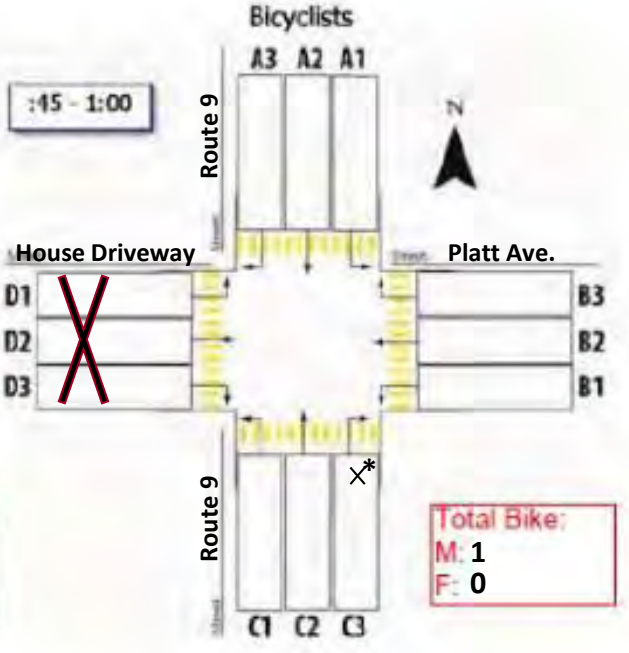
Count pedestrians crossing at the intersection or within 50 ft of the intersection. Don't count if they don't cross.

Bicyclists include those riding on sidewalks. People walking bikes are pedestrians.









Intersection Count Form 3rd half-hour (out of 4) - Page 3 of Form

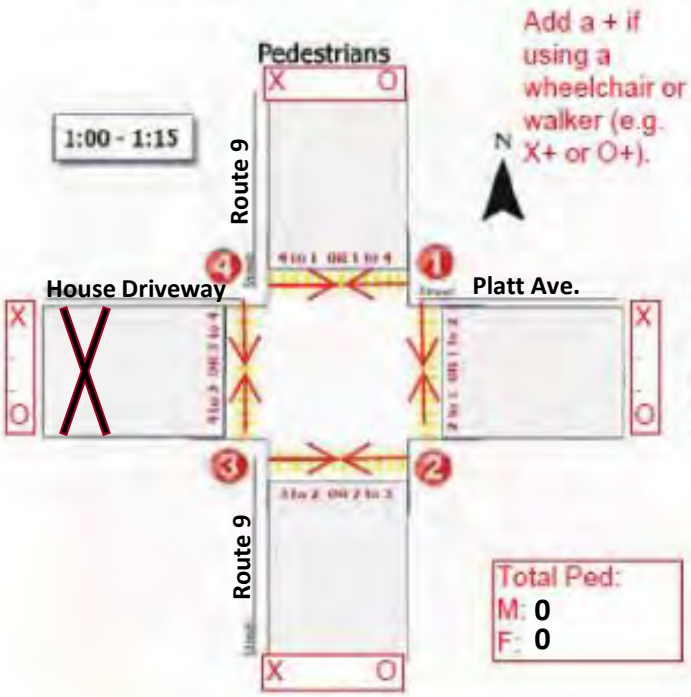
Notes:

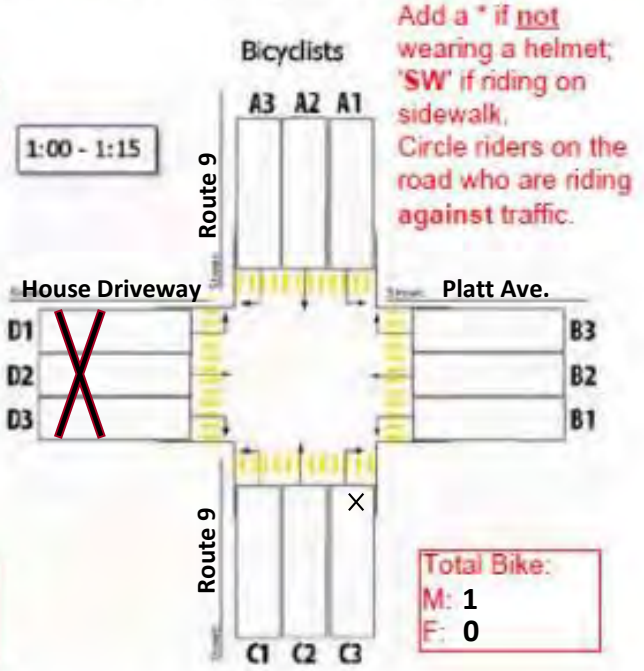
Female: 0
Male: X

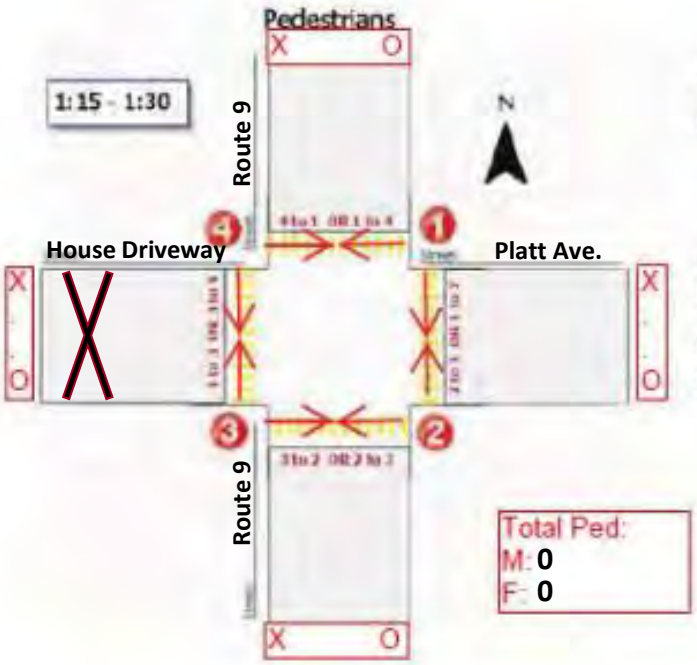
Female: 0
Male: X

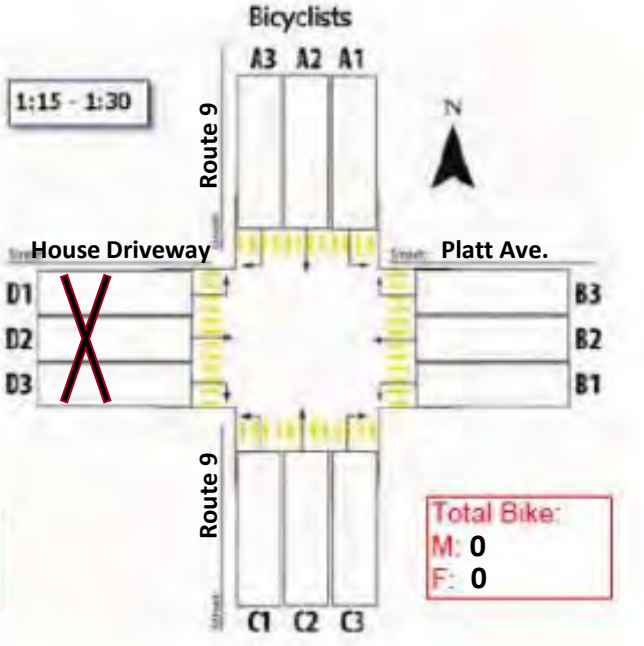
Count pedestrians crossing at the intersection or within 50 ft of the intersection. Don't count if they don't cross.

Bicyclists include those riding on sidewalks. People walking bikes are pedestrians.









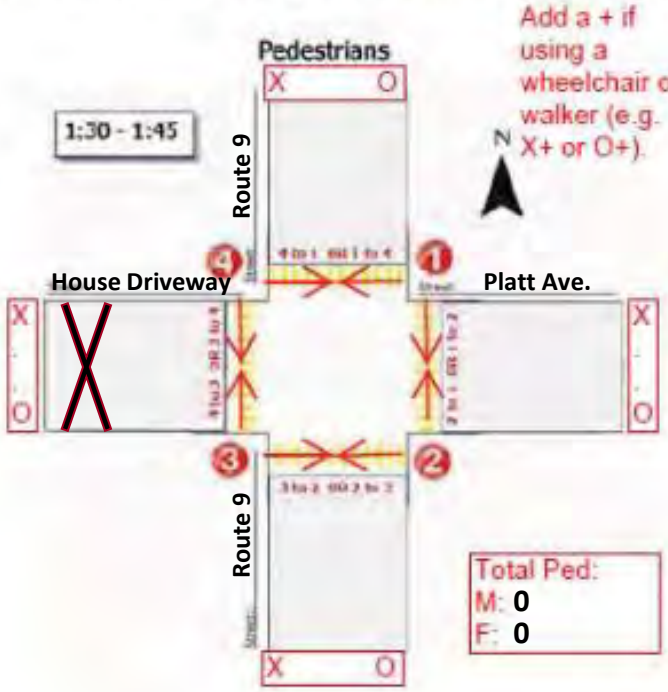
Intersection Count Form 4th half-hour (out of 4) - Page 4 of Form
Notes:

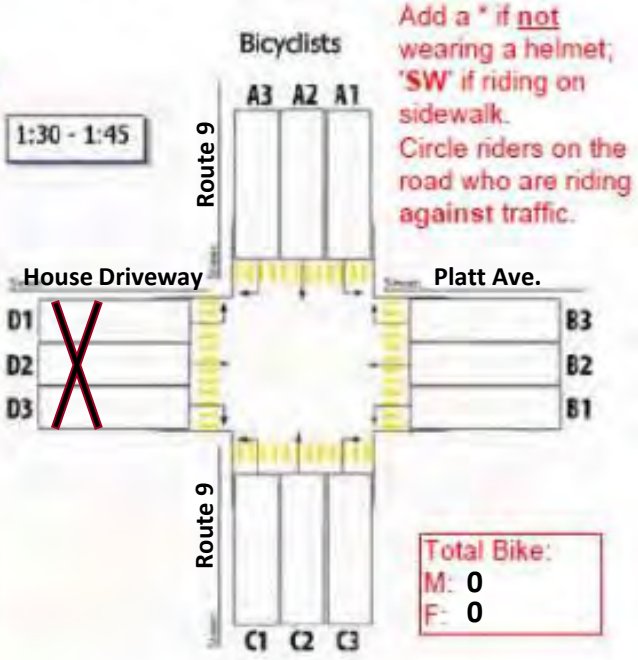
Female: 0
Male: X

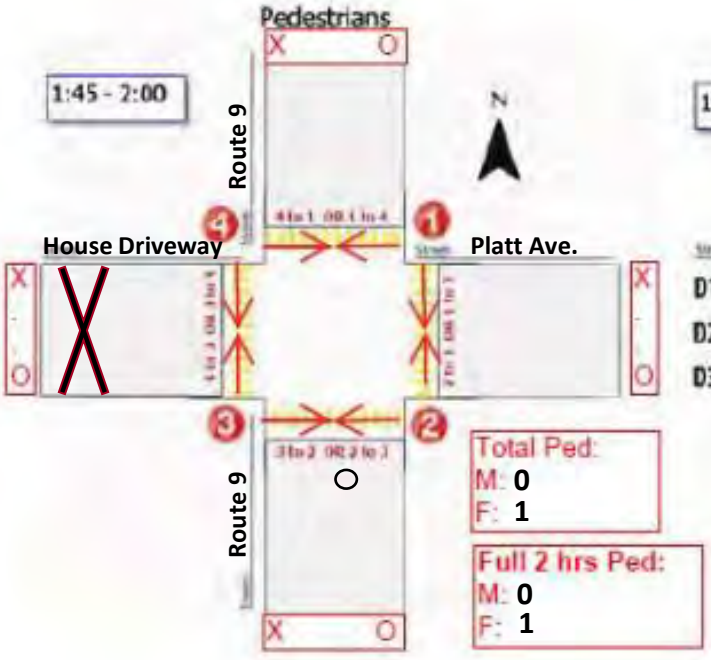
Female: 0
Male: X

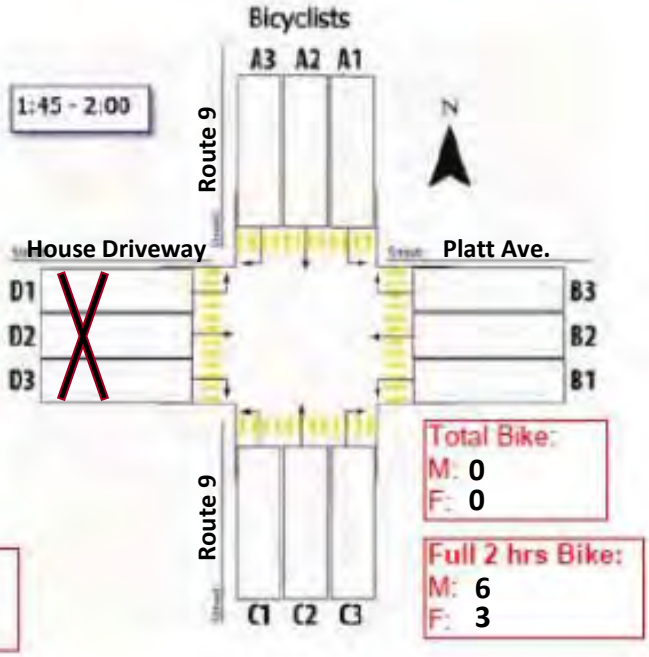
Count pedestrians crossing at the intersection or within 50 ft of the intersection. Don't count if they don't cross.

Bicyclists include those riding on sidewalks. People walking bikes are pedestrians.









SCREENLINE COUNT FORM - ROAD

Name: piper woods

Location (specific): in front of Delamater, just north of crosswalk + in front of 6423 Montgomery St, just south of crosswalk.

Weather: cloudy, but nice + warm

X, Y coordinates (Google Maps): inputted into google docs where i am

Date: 9/17/22 Start Time: 12 End Time: 2

Fill in your name, count location, date, time period, and weather conditions (fair, rainy, cold, hot, etc).
Take a **photo** of the count location.

Count all bicyclists and pedestrians crossing your screenline (on **both sides** of the street).

- Count for two hours in 15 minute increments. Count **all people** who cross your screenline, even if they cross it more than once—count them each time.
- Count bicyclists who *ride on the sidewalk* as **Bicyclists. Tally them under 'SW'.**
- If bicyclists ride on the road, tally them under 'Rd'; circle the tally mark if **riding against traffic on the road.**
- Count the **number of people** on the bicycle, not the number of bicycles.
- **Pedestrians** include people in wheelchairs/using assistive devices, children in strollers/being carried, **skateboarders, rollerbladers, runners, and bicyclists walking their bicycle.**
- **Note e-bikes** and anything unusual in the notes.

Time	Bicyclists (if not wearing a helmet, add a *)		Pedestrians (if using a wheelchair or walker, add a +)	
	Female	Male	Female	Male
00-:15	SW: Rd:	SW: ON BIKES = 11 1* Rd: (3)	卌 卌 卌 || (17)	卌 卌 || (12)
15-:30	SW: Rd:	SW: ON BIKES = 1 Rd: (1)	卌 卌 卌 卌 || (22)	卌 卌 || (11)
30-:45	SW: Rd:	SW: ON BIKE = 1* Rd: (1)	卌 卌 卌 卌 ||| (23)	卌 卌 (10)
45-1:00	SW: Rd:	SW: Rd:	卌 卌 |||| (14)	卌 (5)
1:00-1:15	SW: Rd:	SW: Rd:	卌 |||| (9)	卌 ||| (8)
1:15-1:30	SW: Rd:	SW: Rd:	卌 卌 卌 |||| (19)	卌 卌 卌 卌 ||| (23)
1:30-1:45	SW: Rd:	SW: Rd:	(39) 卌 卌 卌 卌 卌 卌 卌 ||||	卌 卌 卌 卌 卌 (25)
1:45-2:00	SW: Rd:	SW: Rd:	卌 || (7)	卌 || (7)
Total	SW: Rd:	SW: (5) Rd:	150	101

Notes:

# of Dogs ⇒ 卌 |||| (9)

How many cars didn't stop ⇒ (0) all cars stopped. Surprising as not same during weekday

SCREENLINE COUNT FORM - ROAD

Name: Bruce Cuttler Location (specific): Terrapin Restaurant, Rhinebeck NY

Weather: Sunny 80° X, Y coordinates (Google Maps): _____

Date: 9/21/22 Start Time: 4:00 PM End Time: 6:00 PM

Fill in your name, count location, date, time period, and weather conditions (fair, rainy, cold, hot, etc).
Take a **photo** of the count location.

Count all bicyclists and pedestrians crossing your screenline (on **both sides** of the street).

- Count for two hours in 15 minute increments. Count **all people** who cross your screenline, even if they cross it more than once—count them each time.
- Count bicyclists who *ride on the sidewalk* as **Bicyclists. Tally them under 'SW'.**
- If bicyclists ride on the road, tally them under 'Rd'; circle the tally mark if **riding against traffic on the road.**
- Count the **number of people** on the bicycle, not the number of bicycles.
- **Pedestrians** include people in wheelchairs/using assistive devices, children in strollers/being carried, skateboarders, rollerbladers, runners, and bicyclists walking their bicycle.
- **Note e-bikes** and anything unusual in the notes.

Time	**Bicyclists** (if not wearing a helmet, add a *)		**Pedestrians** (if using a wheelchair or walker, add a +)	
	Female	Male	Female	Male
00-:15	SW: Rd:	SW: Rd:	IIII	𝍸 I
15-:30	SW: Rd:	SW: Rd:	II	𝍸
30-:45	SW: Rd:	SW: Rd:	𝍸 II	𝍸 III
45-1:00	SW: Rd:	SW: Rd:	𝍸 I	𝍸 III
1:00-1:15	SW: Rd:	SW: Rd:	II	II
1:15-1:30	SW: Rd:	SW: Rd:	𝍸 I	IIII
1:30-1:45	SW: Rd:	SW: Rd:	𝍸 I	𝍸
1:45-2:00	SW: Rd:	SW: Rd:	IIII	III
Total	SW: Rd:	SW: Rd:	37	4/11

Notes:

SCREENLINE COUNT FORM - ROAD

Name: Richard Leuf Location (specific): Rt 9 e South St.

Weather: Overcast X, Y coordinates (Google Maps): 41.92529480 -73.91233518

Date: 9/17/22 Start Time: noon End Time: 2pm

Fill in your name, count location, date, time period, and weather conditions (fair, rainy, cold, hot, etc).
Take a **photo** of the count location.

Count all bicyclists and pedestrians crossing your screenline (on **both sides** of the street).

- Count for two hours in 15 minute increments. Count **all people** who cross your screenline, even if they cross it more than once—count them each time.
- Count bicyclists who *ride on the sidewalk* as **Bicyclists**. **Tally them under 'SW'**.
- If bicyclists ride on the road, tally them under 'Rd'; circle the tally mark if **riding against traffic on the road**.
- Count the **number of people** on the bicycle, not the number of bicycles.
- **Pedestrians** include people in wheelchairs/using assistive devices, children in strollers/being carried, skateboarders, rollerbladers, runners, and bicyclists walking their bicycle.
- **Note e-bikes** and anything unusual in the notes.

Time	**Bicyclists** (if not wearing a helmet, add a *)		**Pedestrians** (if using a wheelchair or walker, add a +)	
	Female	Male	Female	Male
00-:15	SW: Rd:	SW: Rd:		1
15-:30	SW: Rd:	SW: Rd:		
30-:45	SW: Rd:	SW: Rd:	1	
45-1:00	SW: Rd:	SW: Rd:	1	1
1:00-1:15	SW: Rd:	SW: Rd:	1	1
1:15-1:30	SW: Rd:	SW: Rd:	1	11
1:30-1:45	SW: Rd:	SW: Rd:		1
1:45-2:00	SW: Rd:	SW: Rd:	111	1
Total	SW: Rd:	SW: Rd:	7	7

Notes:

SCREENLINE COUNT FORM - ROAD

Name: Michelle Turck Location (specific): Rte 9 / South St crosswalk

Weather: 78° Sunny X, Y coordinates (Google Maps): 41.925246 7 - 73.9127200

Date: 9/20/22 Start Time: 4pm End Time: 6pm

Fill in your name, count location, date, time period, and weather conditions (fair, rainy, cold, hot, etc).
Take a **photo** of the count location.

Count all bicyclists and pedestrians crossing your screenline (on **both sides** of the street).

- Count for two hours in 15 minute increments. Count **all people** who cross your screenline, even if they cross it more than once—count them each time.
- Count bicyclists who *ride on the sidewalk* as **Bicyclists. Tally them under 'SW'.**
- If bicyclists ride on the road, tally them under 'Rd'; circle the tally mark if **riding against traffic on the road.**
- Count the **number of people** on the bicycle, not the number of bicycles.
- **Pedestrians** include people in wheelchairs/using assistive devices, children in strollers/being carried, skateboarders, rollerbladers, runners, and bicyclists walking their bicycle.
- **Note e-bikes** and anything unusual in the notes.

Time	**Bicyclists** (if not wearing a helmet, add a *)		**Pedestrians** (if using a wheelchair or walker, add a +)	
	Female	Male	Female	Male
00-:15	SW: Rd:	SW: Rd:		
15-:30	SW: Rd:	SW: Rd:		
30-:45	SW: Rd:	SW: Rd:	III 3	II 2
45-1:00	SW: Rd:	SW: Rd:		
1:00-1:15	SW: Rd:	SW: Rd:	I 1	II 2
1:15-1:30	SW: Rd:	SW: Rd:		
1:30-1:45	SW: Rd:	SW: Rd:		
1:45-2:00	SW: Rd:	SW: Rd:	III 3	
Total	SW: Rd:	SW: Rd:	7	4

Notes:

SCREENLINE COUNT FORM - ROAD

Name: Michelle Turck Location (specific): CVS crosswalk Rhinebeck

Weather: 65-70° clear X, Y coordinates (Google Maps): 41.9269796 -73.9110851

Date: 9/17/22 Start Time: 12pm End Time: 2pm

Fill in your name, count location, date, time period, and weather conditions (fair, rainy, cold, hot, etc).
Take a **photo** of the count location.

Count all bicyclists and pedestrians crossing your screenline (on **both sides** of the street).

- Count for two hours in 15 minute increments. Count **all people** who cross your screenline, even if they cross it more than once—count them each time.
- Count bicyclists who *ride on the sidewalk* as **Bicyclists. Tally them under 'SW'.**
- If bicyclists ride on the road, tally them under 'Rd'; circle the tally mark if **riding against traffic on the road.**
- Count the **number of people** on the bicycle, not the number of bicycles.
- **Pedestrians** include people in wheelchairs/using assistive devices, children in strollers/being carried, skateboarders, rollerbladers, runners, and bicyclists walking their bicycle.
- **Note e-bikes** and anything unusual in the notes.

Time 12pm	**Bicyclists** (if not wearing a helmet, add a *)		**Pedestrians** (if using a wheelchair or walker, add a +)	
	Female	Male	Female	Male
00-:15	SW: Rd:	SW: Rd:	24	18
15-:30	SW: Rd:	SW: Rd:	34	19
30-:45	SW: Rd:	SW: Rd:	16	16 → 17
45-1:00	SW: Rd:	SW: Rd:	29	16
1:00-1:15	SW: Rd:	SW: Rd:	17	17
1:15-1:30	SW: Rd:	SW: Rd:	21	19
1:30-1:45	SW: Rd:	SW: Rd:	16	15
1:45-2:00	SW: Rd:	SW: Rd:	18	8
Total	SW: Rd:	SW: Rd:	175	

Notes:

SCREENLINE COUNT FORM - ROAD

Name: Michelle Turck Location (specific): CVS crosswalk Rhinebeck

Weather: 70° clear X, Y coordinates (Google Maps): 41.926862, -73.910888?

Date: 9/22/22 Start Time: 4pm End Time: 6pm

Fill in your name, count location, date, time period, and weather conditions (fair, rainy, cold, hot, etc).
Take a **photo** of the count location.

Count all bicyclists and pedestrians crossing your screenline (on **both sides** of the street).

- Count for two hours in 15 minute increments. Count **all people** who cross your screenline, even if they cross it more than once—count them each time.
- Count bicyclists who *ride on the sidewalk* as **Bicyclists. Tally them under 'SW'.**
- If bicyclists ride on the road, tally them under 'Rd'; circle the tally mark if **riding against traffic on the road.**
- Count the **number of people** on the bicycle, not the number of bicycles.
- **Pedestrians** include people in wheelchairs/using assistive devices, children in strollers/being carried, skateboarders, rollerbladers, runners, and bicyclists walking their bicycle.
- **Note e-bikes** and anything unusual in the notes.

Time	**Bicyclists** (if **not** wearing a helmet, add a *)		**Pedestrians** (if using a wheelchair or walker, add a +)	
	Female	Male	Female	Male
00-:15	SW: Rd:	SW: Rd:	7	8
15-:30	SW: Rd:	SW: Rd:	5	7
30-:45	SW: Rd:	SW: Rd:	9	5
45-1:00	SW: Rd:	SW: Rd:	17	6
1:00-1:15	SW: Rd:	SW: Rd:	21	13
1:15-1:30	SW: Rd:	SW: Rd:	6	5
1:30-1:45	SW: Rd:	SW: Rd:	10	3
1:45-2:00	SW: Rd:	SW: Rd:	11	5
Total	SW: Rd:	SW: Rd:	86	52

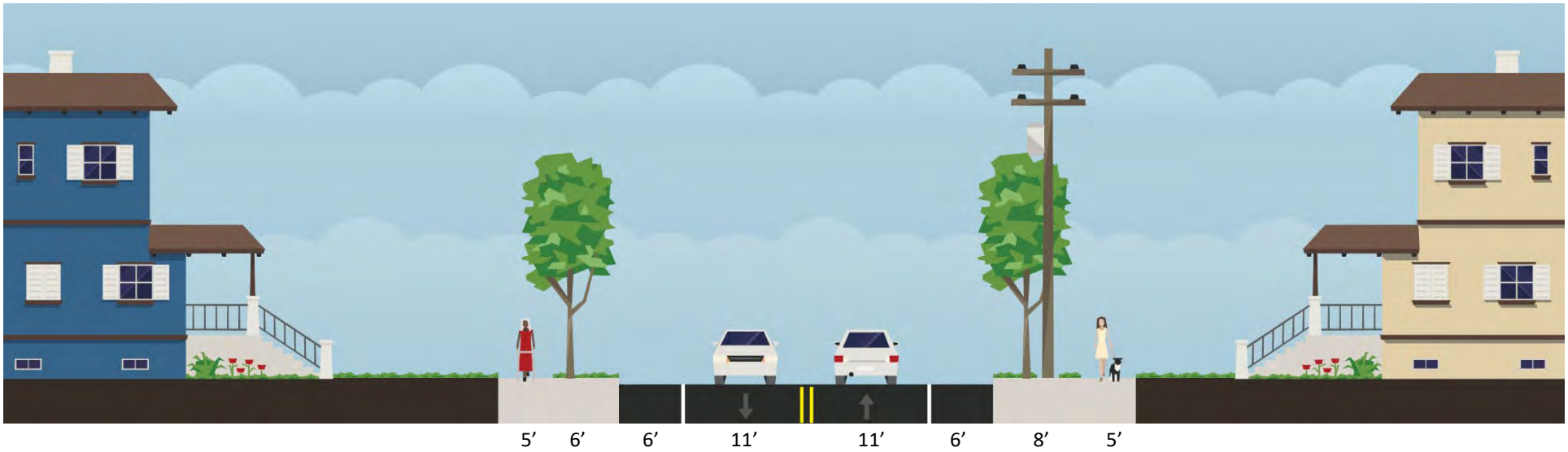
Notes:

C: Existing Street Sections

Northern Gateway: Existing Conditions

Cross Section #1: near Locust Grove Rd (total paved width = 34’)

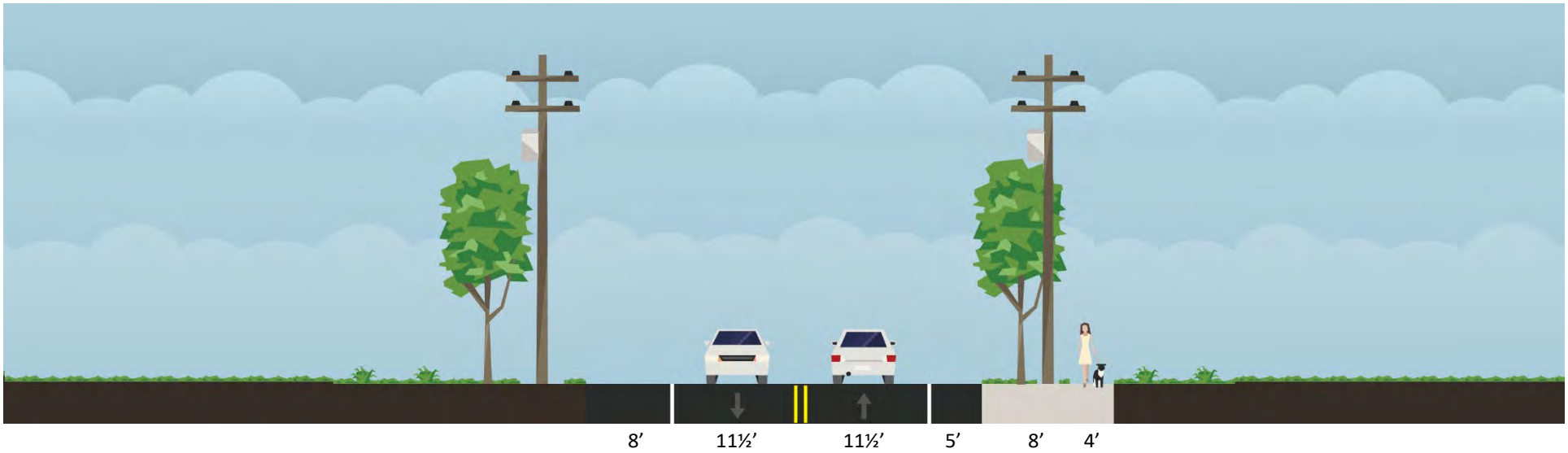
Cross Section #2: near Platt Ave (total paved width = 34’)



Southern Gateway: Existing Conditions

Cross Section #3: near South St (total paved width = 37’)

Cross Section #4: near Rockefeller Ln (total paved width = 36’)



D: Recommendations Table

Village of Rhinebeck Route 9 Complete Streets Study - Recommendations

Location	Recommendation	Priority (1/2/3)*	Lead**
Northern Gateway			
Route 9 / Montgomery St	Create a Gateway; Narrow the Intersection	2	Village
Platt Ave	Add Crosswalks; Consider Beacons; Improve the Sidewalk	2 (crosswalk) 1 (sidewalk improvement)	Village
Locust Grove Rd & Village Green	Mark Side-Street Crosswalks	3	Village
Livingston St / Terrapin crosswalk	Consider Beacons and Curb Extensions	2	Village
Southern Gateway			
Post Office crosswalk	Consider Beacons & Curb Extensions	3	Village
South St crosswalk	Relocate the Crosswalk; Consider Beacons & Curb Extensions	1	Village (crosswalk relocation by NYSDOT per Village request)
South St, Legion Park, Rockefeller Ln	Create Accessible Side-street Crosswalks	3	Village
Legion Memorial Park	Create a Lighted Path; Install Signage	2	Village
Route 9 / Rockefeller Ln	Create a Gateway	1	Village
Corridor Wide			
	Replace Poor Condition Sidewalks; Consider an Improvement District	1	Village
	Create Bike Lanes; add Shared-Lane Markings and Bicycle Signage; Consider Bicycle Boulevards	2	Village
	Stripe Parking Edge Lines	2	NYSDOT (per Village request)
	Add Pedestrian-Scale Lighting	3	Village

	Review & Reduce Signage	1	Village & NYSDOT
	Replace Street Trees	2	Village
	Install Bus Stop Shelters	2	County Transit (per Village request)

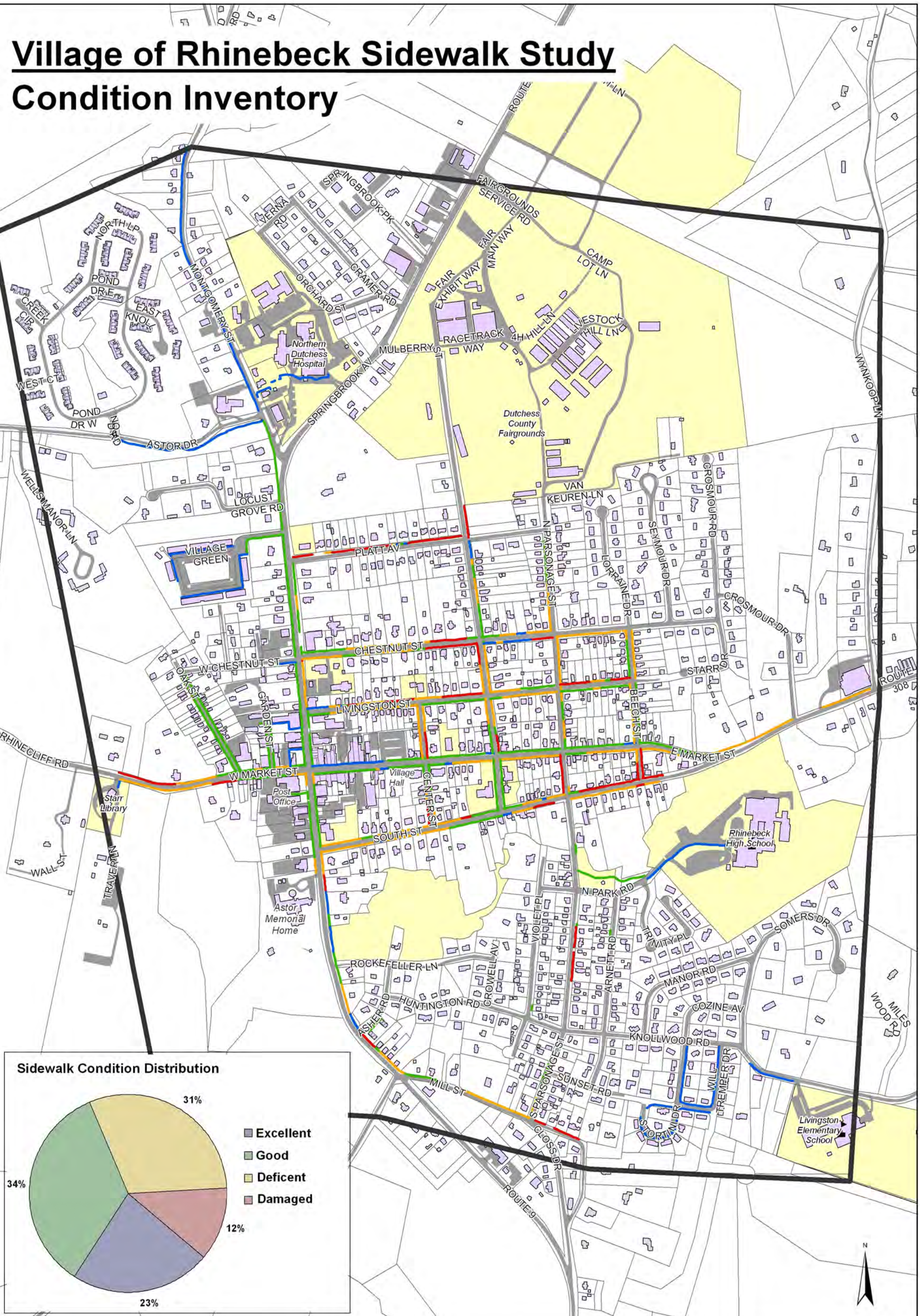
* Accessibility improvements and items identified by the Village as priorities are noted as Priority 1. Items that are more complex, costly, or less critical are listed as Priority 2 or 3. However, some lower-priority items are low-cost and could be done soon. The Village should review and revise the priority levels.

** Village projects that affect the NYSDOT right-of-way require a Highway Work Permit.

E: Sidewalk Conditions (from 2011 study)

Village of Rhinebeck Sidewalk Study

Condition Inventory



Sidewalk Condition Distribution

Condition

- Activity Centers
- Public Schools
- Excellent
- Good
- Deficient
- Damaged

Map produced: February 24, 2011.

0 250 500 1,000 1,500 2,000 Feet

Map 1