



Mobility 2050

Improving the Way Your Community Moves

SEPTEMBER 2025 **(DRAFT)**

Table of Contents

Executive Summary	vi
1. Introduction	1
2. Vision, Goals and Objective	9
3. Public Involvement.....	15
4. Profile of the Region	23
5. The Transportation System	42
6. Transportation and the Environment	96
7. Monitoring Our Performance	106
8. The Financial Plan	112
9. Recommended Plan of Projects.....	123

Appendices

- Appendix A:** Federal Requirements Checklist
- Appendix B:** Ulster County Transit Fleet Inventory
- Appendix C:** Consultation with Resource Agencies
- Appendix D:** System Performance Report
- Appendix E:** Calculation Methodology for Projected Sources of Revenue
- Appendix F:** Summary of Stakeholder and Pop-Up Meetings
- Appendix G:** Online Public Engagement Results
- Appendix H:** Public Comments

List of Maps & Figures

Figure 1.1: UCTC Metropolitan Planning Area and Mid-Hudson TMA	7
Figure 4.1: Ulster Co. Population Change, 2018-2023 and Population Density by Municipality	25
Figure 4.2: Ulster County Population Change, 1950-2023	26
Figure 4.3: Ulster County Population Changes in Age Groups, 2013, 2018, 2023	27
Figure 4.4: Summary of Recent Population Estimates Completed for Ulster County	28
Figure 4.5: Groups Traditionally Under-Represented in the Transportation Planning Process, 2018 & 2023 (% of Total Ulster County Population)	30
Figure 4.6: Demographic Make-up by Year: 2013, 2018, 2023 (% of Total Ulster Co Population)	30
Figure 4.7: Groups Traditionally Under-Represented in the Transportation Planning Process by Location	31
Figure 4.8: Ulster County Labor Force and Unemployment, 2005-2024	34
Figure 4.9: Ulster County Jobs by Industry Sector, 2018 & 2023	36
Figure 4.10: Employment within Ulster County	37
Figure 4.11: Annual Existing Single-Family Homes Sold in Ulster County, 2005-2024	38
Figure 4.12: Anticipated Major Developments and Priority Growth Areas	40
Figure 5.1: Functional Classification of Roadways	42
Figure 5.2: Ulster County Roadway Functional Classifications	43
Figure 5.3: IRI Summaries, 2023	46
Figure 5.4: 2023 IRI Conditions by Location	47
Figure 5.5: Ulster County Bridge Conditions (2023)	50
Figure 5.6: Structurally Deficient Bridges by Owner	51
Figure 5.7: I-587, Broadway, and Albany Avenue – Before and After	54
Figure 5.8: Critical Transportation Corridors	55
Figure 5.9: Average Annual Daily Traffic on Ulster County’s Critical Corridors, 2009-2023	56
Figure 5.10: Commutation To and From Ulster County	57
Figure 5.11: UCAT System Map	60
Figure 5.12: UCAT Monthly Ridership (2014-2024)	61
Figure 5.13: Ulster County Pedestrian Crash History (2014-2023)	64
Figure 5.14: Ulster County Bicycle Crash History (2014-2023)	66
Figure 5.15: Ulster County Trail Network	69
Figure 5.16: Journey to Work Modal Distribution, 2023	73
Figure 5.17: Work From Home vs. Non-Work From Home Distribution by Time of Day	74
Figure 5.18: Fatalities and Serious Injuries by Year (2014-2023)	76
Figure 5.19: Fatalities and Serious Injuries by Crash Type (2014-2023)	77
Figure 5.20: Fatalities and Serious Injuries by Emphasis Area (2014-2023)	77
Figure 5.21: Location and Density of Fatal and Serious Injury Crashes in Ulster Co. (2014-2023) ..	79
Figure 5.22: Fatalities and Serious Injuries by Roadway Ownership and Centerline Mileage	80
Figure 5.23: Annual Freight Movements By Tonnage and Value for the Mid-Hudson TMA Region ...	83
Figure 5.24: CSX West Shore Line	84
Figure 5.25: Rail Safety Incidents	85
Figure 5.26: 2022 Peak Hours of Excessive Delay, Normalized Per Centerline Miles of Roadway ...	87
Figure 5.27: Yearly VMT in Ulster County	89
Figure 5.28: Mid-Hudson TMA CMP Segment Threshold Analysis	93
Figure 5.29: Mid-Hudson TMA Priority Congestion Locations	94
Figure 6.1: Journey to Work Modal Distribution, Ulster County, 2023	99
Figure 6.2: Share of Vehicles on the Road, Ulster County, 2024	100

Figure 6.3: EV Registrations for Selected Counties, 2024	100
Figure 6.4: EV Registrations in Ulster County Over Time	101
Figure 6.5: EV Charging Stations, Ulster County	102
Figure 6.6: Possible Measures to Reduce Impacts of the Transportation Sector and Improve the Transportation System for All Users	104
Figure 8.1: UCTC Year 2026-2050 Revenue Sources and Investment Targets (millions of \$)	116
Figure 9.1: Breakdown of Programmed TIP 2026-2030 Funding	123
Figure 9.2: 2026-2030 Transportation Improvement Program, State and Local Highway, Bridge, and Trail Projects.....	125

List of Tables

Table 4.1: Labor and Employment Snapshot of Ulster County	33
Table 4.2: Ulster County Housing and Occupancy, All Units, 2018-2023	39
Table 4.3: Anticipated Major Developments Pending or Underway in Ulster County	39
Table 5.1: Centerline Mileage by Functional Classification.....	44
Table 5.2: Centerline Mileage by Maintenance Jurisdiction.....	44
Table 5.3: 2023 International Roughness Index by Functional Classification	46
Table 5.4: Ulster County Bridges by Owner	49
Table 5.5: Ulster County Bridges by Owner, Conditions, and Sufficiency Rating	49
Table 5.6: Work From Home vs. Non-Work From Home Trip Characteristics	74
Table 5.7: Auto Ownership by Households in Ulster County, 2023	75
Table 5.8: Crash Severity by Jurisdiction	78
Table 5.9: 2023 Truck Counts on Significant Freight Facilities.....	82
Table 5.10: TMA – Overall Congestion & Reliability	92
Table 7.1: Status of Roadway Conditions Performance	106
Table 7.2: Status of Bridge Condition Performance	107
Table 7.3: Status of Available Sidewalk Facilities	107
Table 7.4: Status of Transit Fleet Condition Performance	107
Table 7.5: Status of Crash History	108
Table 7.6: Status of Transit Vehicle Crash History	109
Table 7.7: Status of Journey to Work Mode Share	109
Table 7.8: Status of Electric Vehicle Adoption.....	110
Table 7.9: Status of Vehicle Miles Travelled	111
Table 7.10: Status of Pedestrian and Bicycle Facilities	111
Table 8.1: Ulster County Federal, State, and Local Revenue Forecasts	114
Table 9.1: List of 2026-2030 Transportation Improvement Program, State and Local Highway, Bridge and Trail Projects.....	126
Table 9.2: UCAT 5-Year Program; Derived from the UCTC 2026-2030 TIP	127
Table 9.3: Long Range Plans and Project Conformity with LRTP Goals	137

GLOSSARY OF TERMS

ACS	American Community Survey
ADA	Americans with Disabilities Act
AVAIL	Albany Visualization and Informatics Lab
AVL	Automatic Vehicle Location
BEV	Battery Electric Vehicle
BIL	Bipartisan Infrastructure Law
BUILD	Better Utilizing Investments to Leverage Development
CAD	Computer Aided Dispatch
CHIPS	Consolidated Local Street and Highway Improvement Program
CICAS	Cooperative Intersection Collision Avoidance System
CLEAR	Crash Location and Engineering Analysis Repository
CMP	Congestion Management Process
DCTC	Dutchess County Transportation Council
DMS/VMS	Dynamic or Variable Message Signs
DMV	Department of Motor Vehicles
DOL	Department of Labor
ETC	Electronic Toll Collection
EV	Electric Vehicle
FAST Act	Fixing America's Surface Transportation Act
FCC	Federal Communications Commission
FHWA	Federal Highway Administration
FRA	Federal Rail Administration
FTA	Federal Transit Administration
GI	Green Infrastructure
GIS	Geographic Information System
HAR	Highway Advisory Radio
HOT Lanes	High Occupancy Toll Lanes
HSIP	Highway Safety Improvement Program
HTF	Highway Trust Fund
IJA	Infrastructure Investment and Jobs Act
IRI	International Roughness Index
ITS	Intelligent Transportation Systems
LEP	Limited English Proficiency
LOTTR	Level of Travel Time Reliability
LRTP	Long Range Transportation Plan
MAAS	Mobility as a Service
MPH	Miles Per Hour
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NBI	National Bridge Inventory
NEPA	National Environmental Protection Act
NEVI	National Electric Vehicle Infrastructure
NHFN	National Highway Freight Network

NHPP	National Highway Performance Program
NHS	National Highway System
NPMRDS	National Performance Management Research Dataset
NYMTC	New York Metropolitan Transportation Council
NYSDOT	New York State Department of Transportation
NYSERDA	New York State Energy Research and Development Authority
NYSTA	New York State Thruway Authority
OCTC	Orange County Transportation Council
PAD	Program on Applied Demographics
PEL	Planning Environmental Linkages
PHED	Person Hours of Excessive Delay
PLAFAP	Procedures for Locally Administered Federal Aid Projects
PPP	Private Public Partnership
QECW	Quarterly Census of Employment and Wages
RIP	Resilience Improvement Plan
RRIF	Railroad Rehabilitation and Improvement Financing
SEQR	Statewide Environmental Quality Review
SHRP2	Strategic Highway Research Program
SHSP	Strategic Highway Safety Plan
SPR	System Performance Report
STOA	State Transit Operating Assistance
STPBG	Surface Transportation Program Block Grant
TAM	Transit Asset Management
TBL	Triple Bottom Line
TED/mile	Total Excessive Delay per Mile
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TMC	Traffic Message Channel
TSMO	Transportation System Management and Operations
TTI	Travel Time Index
TTTR	Truck Travel Time Reliability
UCAT	Ulster County Area Transit
UCTC	Ulster County Transportation Council
ULB	Useful Life Benchmark
UPWP	Unified Planning Work Program
USDOT	United States Department of Transportation
V2I	Vehicle-to-Infrastructure
V2V	Vehicle-to-Vehicle
V2X	Vehicle-to-Everything
VMT	Vehicle Miles Travelled
WFH	Work From Home

EXECUTIVE SUMMARY

Though it owns no buses, nor roadways, trails, or any other physical infrastructure assets, the Ulster County Transportation Council (UCTC) is the entity responsible for allocating federal funding to address the transportation needs of its planning area which consists of all of Ulster County. Among many other needs, funding through UCTC keeps Ulster County's buses running, roads paved, infrastructure safe, trails in good condition, and helps chart the county's course going forward – understanding its history, where it stands, and how it can continue to improve for those who live, work, and visit Ulster County.

This is no small task, as the needs are great, and a total of \$1.9 billion in investment is anticipated over the next 25 years. UCTC supports both the maintenance of today's transportation infrastructure and the improvements needed to address tomorrow's challenges and seize on emerging opportunities.

Mobility 2050 long-range transportation plan is the very core of UCTC's transportation planning. It is a federally mandated, multimodal transportation plan that guides the development of a region's transportation system, considering all modes of travel (e.g., automobile, transit, bicycle, pedestrian, and freight). The Plan is crucial for ensuring a safe, efficient, and sustainable transportation network for the future. All studies and initiatives of UCTC are guided by *Mobility 2050*, which sets the overall framework for investment. The recommended investments outlined in this plan provide the foundation on which the County can achieve its quality of life, economic development, environmental protection, safety, and public health goals.

Mobility 2050 is not merely UCTC's plan – it has been cooperatively developed through input from many other public agencies as well as contributions from members of the public.

Much has changed since the prior edition -- known as *Plan 2045* -- was adopted in September 2020. The Covid-19 pandemic has receded, however its impacts on Ulster County's society and economy continue to reverberate, with housing affordability a growing issue. In 2021, we saw a major federal law (the *Bipartisan Infrastructure Law*) establish new competitive funding programs that have changed how the nation's infrastructure is planned and managed. However, at the same time construction cost inflation has increased at a pace not seen for many decades. In the background of all of this are the UCTC's changing demographics (a growing and aging population), broader technological developments (electric vehicles, cars with increasingly sophisticated technology, and emerging options such as micromobility, e-bikes, and bikesharing). The county's infrastructure is also aging, leading to increased needs for maintenance and preservation, coupled with strategic planning to ensure new or upgraded facilities meet the needs of generations to come.

In the pages that follow, *Mobility 2050* addresses Ulster County's current and forecasted transportation needs, and establishes the vision, goals, and objectives to guide the region's transportation planning efforts and investment decisions. In coordination with federal and state partners, *Mobility 2050* evaluates the condition of the region's transportation system, what it will take to reach a state-of-good-repair, as well as performance in other areas including road safety, traffic congestion, and active transportation mobility.

Mobility 2050 lays out an ambitious program of both maintenance and enhancement projects. Planned investments range from new sidewalks and trails to intersection improvements designed to address safety and congestion concerns. It includes enhanced resilience in the face of extreme weather and extensive capital investments in the county’s transit system – including electrification of buses. Finally, it brings forward a concern about the long-term fiscal capacity of local governments in Ulster County to address the needs of the transportation infrastructure under their jurisdiction.

The Ulster County Transportation Council thanks everyone whose contributions have led to *Mobility 2050* and encourage all who are interested in the future of the county’s transportation system to join our mailing list to stay abreast of the full set of upcoming opportunities to get involved with UCTC.

The Plan success relies on its ability to present compelling reasons for its recommendations that are translated into actions by those charged with implementation. The UCTC, in its role as the Metropolitan Planning Organization for Ulster County, and working with our federal, state, and regional partners, will continue its efforts to implement the Plan through its planning studies, data, gathering, and investment decisions to ensure that the County’s transportation system contributes to continued economic development and improved quality of life in our area.

1. INTRODUCTION

The purposes of this subpart are to implement the provisions of 23 U.S.C. 134, 23 U.S.C. 150, and 49 U.S.C. 5303, as amended, which...Set forth the national policy that the MPO designated for each urbanized area is to carry out a continuing, cooperative, and comprehensive performance-based multimodal transportation planning process, including the development of a metropolitan transportation plan and a TIP, that encourages and promotes the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight (including accessible pedestrian walkways, bicycle transportation facilities, and intermodal facilities that support intercity transportation, including intercity buses and intercity bus facilities and commuter vanpool providers) fosters economic growth and development, and takes into consideration resiliency needs, while minimizing transportation-related fuel consumption and air pollution.

23CFR§450.300

The Ulster County Transportation Council (UCTC) is the designated metropolitan planning organization (MPO) serving the Kingston, NY, urbanized area and the entirety of Ulster County. Federal law requires that all urbanized areas with a population greater than 50,000 people have an MPO, which is assigned certain planning responsibilities, notably the preparation and adoption of a Long Range Metropolitan Transportation Plan (LRTP). In addition, UCTC is part of a larger Transportation Management Area (TMA) that includes both Orange and Dutchess Counties. A TMA represents urbanized areas with a population greater than 200,000. The three MPO's for Ulster, Dutchess, and Orange counties coordinate their planning activities for this larger area.

The LRTP must look at least twenty years into the future and be updated at no less than five-year intervals. This long look forward is particularly valuable as transportation facilities can take a long time to move from idea to plan to design and construction, and then once introduced they are long-lasting.

This LRTP, called Mobility 2050, is a strategic vision of Ulster County's transportation future, the policies necessary to support that vision, and an investment plan for its implementation.

In this era of limited financial resources, the LRTP provides guidance on how limited available funds can be best used to meet regional priorities. The total of LRTP recommended investments must, by Federal law, be constrained by an estimate of reasonably available revenue. This "fiscal constraint" ensures that the LRTP's list of investment projects is realistic. Therefore, the preparation of the LRTP forces decision-makers to be explicit about their choices of strategies, programs, and projects, and the trade-offs among them.

A DYNAMIC PLANNING ENVIRONMENT

There are several critical issues that have impacted the development of this LRTP. These include funding, transportation choices, environmental issues, and economic concerns as discussed below:

- **Federal transportation authorization.** The current federal surface transportation law, the Bipartisan Infrastructure Law (BIL), which authorizes funding for Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) programs, expires in 2026. It is expected that new federal legislation, or an extension of the current law, will be passed by 2026. However, the priorities of this prospective future legislation are not yet known.
- **Federal transportation funding.** Programs of the FHWA and the FTA provide a significant proportion of capital funds in New York State's transportation program. All FHWA program funds, and a portion of FTA funds, come from the Highway Trust Fund (HTF). The primary source of revenue for the HTF is tax on gasoline and diesel fuel. These taxes have not been increased since 1993, leaving their purchasing power diminished by nearly three decades of construction cost inflation. At the same time, receipts have been diminished by use of more fuel-efficient cars, and alternative fuels that are not taxed. Since 2016, Congress has transferred billions of dollars from the U.S. General Fund to the HTF so it can meet expenditure obligations despite the decreasing purchasing power of the federal gas/diesel taxes. There is general agreement among policy makers that a sustainable approach to funding FHWA and FTA must be enacted, however how this will happen is unclear.
- **State and local transportation funding.** The New York State Dedicated Highway and Bridge Fund also has fiscal challenges, related to substantial debt service payments resulting from past borrowing, and use for non-capital purposes. Local governments receive state funds through the Consolidated Local Street and Highway Improvement Program (CHIPS) but must rely primarily on property tax and sales tax receipts to pay for transportation projects that are not on the federal-aid road system. Other states permit local option sales taxes, but this is not the case in New York. Public transit is supported separately by the state, with operators such as Ulster County Area Transit (UCAT) receiving State Transit Operating Assistance (STOA), and a portion of the non-Federal share of capital costs. State and federal funds are formula-driven with federal aid shrinking slightly. Public demand for more frequent transit service and wider coverage is being addressed by county leaders, which must ultimately be paid using local dollars.
- **Aging infrastructure.** The New York State Department of Transportation (NYSDOT) points out in its 2022 Transportation Asset Management Plan that, like much of the rest of the country, our state's roads and bridges, transit systems, and railroads are characterized by aging infrastructure. Depending on the type of construction and materials used, each of these elements has a predictable life span. That life may be extended by preventive maintenance and rehabilitation or decreased by neglect. Current conditions are a consequence of investment, but also of timing. From the late 1950s to the early 1970s, the nation built much of the Interstate Highway System and other facilities. Fifty years later, much of this infrastructure is worn out, creating a spike in need for investment in preservation in order to keep the assets operational.

- **Focus on freight and economic development.** The trend in federal transportation policy over recent years is to pay more attention to freight movement and how it supports regional, statewide, and the national economy. NYSDOT completed its first comprehensive statewide Freight Transportation Plan in 2019 and published an update in 2024. Federal legislation requires that the United States Department of Transportation (USDOT) develop a National Freight Strategic Plan and Primary Freight Network. The UCTC will take advantage of these activities to continually evaluate the role of freight movement in the county's economy.
- **Changing attitudes about land use.** People of all ages make decisions about where they choose to live, and how to pursue a positive quality of life. Whether urban or suburban, people increasingly seek a human scaled neighborhood that is walkable and bikeable, has access to schools and shopping, and has convenient public transit. Others prefer a rural location, but one with access to needed services. New York State passed both a Smart Growth Public Infrastructure Policy Act and a Complete Streets Act. These acts were intended to guide state and local government decisions about transportation projects away from a singular auto-centric view to one that looks at the accessibility and mobility needs of all users.
- **Transportation and Harmful Air Pollution.** Air pollution from operating motor vehicles is a major challenge for metropolitan regions across the country. Ulster County is in attainment of federal air quality standards. However, UCTC continues to monitor the policy landscape relating to air pollution and seeks opportunities to further reduce the transportation system's contribution to air pollution.
- **Public health and active transportation.** Transportation planners are bringing new partners into their conversations. The public health community has begun to turn its understanding of the value of physical activity into participation through calls for active transportation initiatives and opportunities. They have become valued stakeholders in supporting the construction of sidewalks and trails, wider shoulders of roads to support safe biking and walking and promoting Safe Routes to School and similar non-motorized programs. This is closely connected to discussions of land use planning as noted above.
- **Transportation and technology.** A twenty-five-year planning cycle is a very long time in today's environment of fast changing technology, disruptor business models, environmental challenges, and economic cycles. We have seen that even a five-year capital program cycle has difficulty responding to these changes. During the 25-year horizon of this LRTP, we may see fully automated cars being in general use, electrical vehicles representing a majority of new vehicles, reoriented investment in transportation infrastructure to reflect environmental concerns, remote work capabilities altering commuter patterns, and the use of online resources changing shopping behavior along with the need for freight and delivery services. These changes have already begun. Already, personal vehicles have more on-board safety features like lane departure warning and automatic brake assist, and pervasive wireless communications has enabled new approaches such as USDOT's Vehicle-to-Everything (V2X) plan to support cars communicating seamlessly with each other and roadside infrastructure, enhancing safety and smoothing traffic flow. Commercial GPS guidance systems are found in cars and trucks, and on smartphones and similar devices. Drivers receive real-time traffic and road information, enabling them to make smart choices on route, mode, and time of travel. EV charging stations are now deployed on major

routes, bridge replacements now require 100yr flood analysis, and Uber and Lyft are present in the region. The resulting changes in travel behavior and infrastructure design will change the need for investments and are likely to change some of the conclusions of this LRTP. The next update of this LRTP, due by 2030, will take stock of expected and any unanticipated technological developments, and evaluate their consequences for UCTC's strategic vision.

FEDERAL PLANNING REQUIREMENTS

The framework of the LRTP is codified in Titles 23 (FHWA) and 49 (FTA) of the Code of Federal Regulations. The LRTP must address the following ten planning factors:

- (1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;*
- (2) Increase the safety of the transportation system for motorized and non-motorized users;*
- (3) Increase the security of the transportation system for motorized and non-motorized users;*
- (4) Increase accessibility and mobility of people and freight;*
- (5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;*
- (6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;*
- (7) Promote efficient system management and operation;*
- (8) Emphasize the preservation of the existing transportation system;*
- (9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and*
- (10) Enhance travel and tourism.*

23 CFR 450.306

The recognition by the Federal government that every metropolitan area is different gives the UCTC flexibility to establish its own priorities among these planning factors in ways that make the most sense for the region it serves. In doing so, UCTC relies on the shared perspectives of all stakeholders providing a collaborative forum to arrive at decision.

RELATED PLANS

UCTC is also required to integrate into the LRTP the goals, objectives, measures, and targets contained in related transportation plans developed and adopted by state departments of transportation and public transportation providers. These "Related" transportation plans are specifically referenced in the federal regulations and include the following:

- New York State Transportation Master Plan (latest edition is in draft form at the time of writing)

- New York State Highway Safety Improvement Program (HSIP) Annual Report and the New York State Strategic Highway Safety Plan (SHSP);
- New York State Transportation Asset Management Plan for the National Highway System (NHS);
- Transit Asset Management (TAM) and Transit Safety Plans adopted by Ulster County Area Transit;
- New York State Freight Plan;
- NYS Pedestrian Safety Action Plan
- NYS Roadway Departure Safety Action Plan
- Mid-Hudson Valley Transportation Management Association (TMA) Congestion Management Process Technical Reports (CMP).



Image courtesy of Orange County Transportation Council

UCTC has considered and integrated the policies and strategies contained in these plans into this LRTP and is committed to supporting progress toward performance targets adopted by New York State Department of Transportation. A detailed System Performance Report is provided in Appendix D.

TITLE VI OF THE CIVIL RIGHTS ACT

“No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”

Title VI of the Civil Rights Act of 1964

UCTC support for and compliance with Title VI of the Civil Rights Act can be found in the following:

- (1) evaluation measures built into the Unified Planning Work Program (UPWP) and Transportation Improvement Program (TIP) project selection process;
- (2) the use of Geographic Information System (GIS) resources to illustrate the relationship between transportation investments programmed and areas with concentrated low-income, minority, age 65 and older, and mobility disability populations;
- (3) outreach for UPWP projects that recognize the needs of the Limited English Proficiency (LEP) population including Spanish translation of project outreach materials, inclusion of Spanish translators at public outreach events and meetings and holding meetings in locations that serve the LEP population; and
- (4) focusing UCTC transit planning efforts on the needs of underserved areas and populations.

ABOUT UCTC

The Kingston urbanized area has more than 50,000 people as determined by the U.S. Census Bureau. Federal regulations require that every urban area in the United States of more than 50,000 persons have a designated MPO in order to qualify for Federal highway and transit funding. UCTC in its role as MPO provides the forum for cooperative transportation decision-making for the metropolitan planning area.

The UCTC was designated as the MPO for the Kingston Urbanized Area by the Governor of New York on April 30, 2003, following the results of the 2000 Census. The UCTC planning area also includes portions of the Poughkeepsie-Newburgh Urbanized area where these urbanized areas extend into the southern towns in the County (see **Error! Reference source not found.**).

The UCTC's decision-making authority rests with its Policy Committee voting members. The Policy Committee is composed of chief elected officials from urbanized and non-urbanized areas throughout Ulster County along with NYSDOT and the New York State Thruway Authority. UCTC's adopted Operating Procedures describes how the Policy Committee is organized and how it operates.

The UCTC Policy Committee is supported by an advisory Technical Committee comprising appointed municipal and transportation agency staff representing Ulster County municipalities and transportation agency interests. The Technical Committee monitors the operational aspects of the UCTC planning program for consistency with Federal, State, and local planning requirements, reviews technical and policy-oriented projects and programs, makes recommendations to the Policy Committee for consideration, and monitors the activities of UCTC staff. ⁱ

UCTC POLICY COMMITTEE MEMBERSHIP

PERMANENT VOTING MEMBERS

Ulster County Executive, Chair
 City of Kingston Mayor
 Town of Saugerties Supervisor
 Town of Ulster Supervisor
 NYS Thruway Authority Executive Director
 NYSDOT Commissioner, Secretary

TWO-YEAR VOTING MEMBERS

(Alternate biennially; 7 at a time)
 Village of Saugerties Mayor
 Town of Hurley Supervisor
 Town of Rosendale Supervisor
 Town of Esopus Supervisor
 Town of Lloyd Supervisor
 Town of Marlborough Supervisor
 Town of Plattekill Supervisor
 Town of Shawangunk Supervisor
 Village of Ellenville Mayor
 Village of New Paltz Mayor
 Town of New Paltz Supervisor
 Town of Wawarsing Supervisor
 Town of Woodstock Supervisor
 Town of Kingston Supervisor

7 AS 1 RURAL VOTING MEMBERSHIP

(Appointed by Ulster County Association of Town Supervisors)
 Town of Denning Supervisor
 Town of Gardiner Supervisor
 Town of Hardenburgh Supervisor
 Town of Marbletown Supervisor
 Town of Olive Supervisor
 Town of Rochester Supervisor
 Town of Shandaken Supervisor

NON-VOTING ADVISORY MEMBERS

Federal Highway Administration
 Federal Transit Administration
 Federal Railroad Administration
 NYS Bridge Authority

MID-HUDSON VALLEY TRANSPORTATION MANAGEMENT AREA

As an urbanized area with a population of over 200,000, the Poughkeepsie-Newburgh urbanized area (including portions of south-eastern Ulster County; see Figure 1.1) is classified as a Transportation Management Area (TMA), which means it is subject to additional Federal requirements and scrutiny. The fusion of the three counties of the Poughkeepsie-Newburgh urbanized area (Dutchess, Orange, and Ulster counties) into a single planning area is known as the Mid-Hudson Valley TMA. The TMA is governed collaboratively by three separate MPOs – the Dutchess County Transportation Council (DCTC), the Orange County Transportation Council (OCTC), and UCTC.

The Mid-Hudson Valley TMA is a forum for a high level of cooperation among the three MPOs and their state partners. Collaboration includes shared work products such as the Congestion Management Process; the allocation of FTA 5307 funds; data and information sharing, such as traffic counts, travel time surveys, geographic information systems products and federal highway classifications; decision making; staffing; professional services; and financial support.

The three MPOs meet regularly concerning TMA requirements, and coordinate on work activities such as planning studies, TIP development, long range transportation plans and other work products that impact the region. The MPOs individually meet their federal requirements, and in the preparation of each MPO's primary work products they take into account the TMA's function and highlight relevant information regarding areas of collaboration.

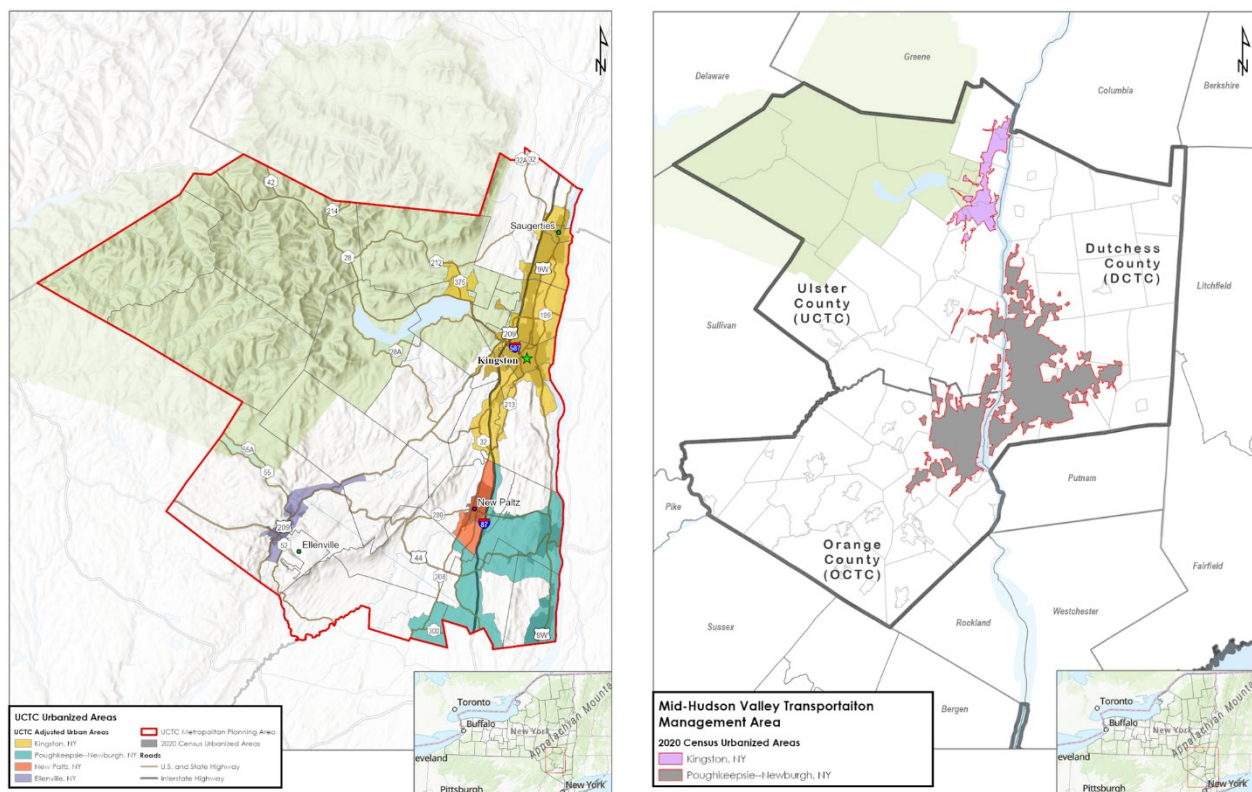


Figure 1.1: UCTC Metropolitan Planning Area and Mid-Hudson Transportation Management Area

2050 LRTP DEVELOPMENT PROCESS

Mobility 2050 builds on the adopted 2045 LRTP, the “related plans” from other agencies and the initiatives at the state level regarding the environment, resilience, and emerging active transportation trends.

Public Input on the LRTP played important role in its development. The UCTC scheduled four (4) stakeholder focus group meetings, a community survey and attended several public events and provided information about the update. These combined efforts provided meaningful input into the Plan’s policies and priorities and are detailed in Section 3 of this report.

UCTC reviewed the **required related plans** at both the federal and state level as part of the LRTP development as well as noting the impact of changes to state law and the implementation of state initiatives that impact the transportation future and land use patterns associated with the Plan. UCTC’s existing topic-specific plans were also reviewed, and their influence is found throughout the LRTP. This includes the Congestion Management Plan for the Region, various transit studies, and countywide safety study, to name a few.

¹ See Ulster County Transportation Council Operating Procedures as approved May 26, 2015. Online at http://www.co.ulster.ny.us/planning/uctc/documents/mpo_op.pdf

2. VISION, GOALS AND OBJECTIVE

THE REGIONAL VISION

The transportation system supports a region's economy and society, thus a shared vision of the future of Ulster County is a necessary starting point for the LRTP. Input from the public and the Technical Advisory Committee helped to answer the question: "What will Ulster County look like in 2050?" This vision will create a foundation for setting goals and objectives for this Plan, which in turn was used to select and enumerate the priority projects, actions, and strategies to carry out the plan.

2050 LRTP Vision Statement

In the year 2050, Ulster County's transportation system is capable of affordably supporting its vibrant communities, which are attractive to business and to people of all ages and stages of life. The transportation system provides appropriate links to the region and beyond, and is viewed by all as an economic and environmental asset and a major contributor to quality of life. Communities are supported by a transportation system that provides safe access by all modes of travel. There is a robust economy, with diverse businesses whose need for efficient freight and personal transportation service is routinely met.

GUIDING PRINCIPLES

The transportation needs that lead to the investment program in this LRTP were determined using the following overarching principles:

An Efficiently Maintained Transportation System: Affordability is a key determinant that underlies the discussion of need. With limited resources, every jurisdiction that owns and operates part of UCTC's transportation system must consider what they can afford to operate, maintain and improve now and in the future. Elements of the transportation system that are overbuilt may need to be realigned to new forecasts of population growth or economic activity. Pressure to accommodate high traffic volume at free-flow speeds even when it occurs infrequently, such as peak recreation or holiday traffic volumes, may need to be overlooked in favor of more pressing maintenance needs and changing trends may force investment for safety or sustainability reasons such as cycling or climate change. The transportation system plan must be smart enough to adapt to these needs and flexible enough to direct financial resources where they are needed most. One example of this is consideration in the context of infrastructure age and condition, such as when bridge is nearing the end of its predicted useful life. While it may be efficient on a life-cycle cost basis to replace it, resource limitations may mean that only a rehabilitation that will add ten years to the lifespan is affordable.

The needs in this Plan have therefore been constrained by forecasts of what the county's transportation agencies can afford, given forecasts of future funding availability (see Section 8).

Land Use Focus: This LRTP focuses on Primary Corridors and the places they link in order to support an efficient land use pattern of compact development capable of serving the multimodal needs of urban centers. These include Kingston, Ulster, New Paltz, Saugerties, Woodstock, and Ellenville as well as the smaller hamlets along these Primary Corridors, including Rosendale,

Marlboro, Highland Gardiner, Wallkill, Stone Ridge and Phoenicia. The corridors themselves will also receive priority in project selection for system preservation and multimodal mobility actions.

User Expectations: Another balance that must be struck is between the expectations of transportation system users and the feasibility of meeting those expectations. Input from stakeholder and public meetings and other forms of interaction (see Appendix F and G) was utilized to understand these expectations. With the advent of performance-based, outcome-oriented planning, the user perspective must be more explicitly considered in the development of the Plan. As UCTC moves ahead in measuring and reporting performance across a number of metrics, the public and decision makers will be given more explicit information on how planned investments are impacting their travel. An example of this is the regional Congestion Management Process. While the perspective of travelers helps UCTC and partners set priorities, fiscal constraint and engineering feasibility impose limits on the ability to meet the public's expectations.

Technological and Social Change: This LRTP relies on the best-available forecasts of future conditions, some of which are seen in both national and NYS policies such as extreme weather, prevalence of alternative fueled vehicles, disruption in the transit sector, and the needs of an aging population. UCTC also recognized that unanticipated changes will happen with the possibility of profound impacts on community and transport needs. This is one reason behind the federal requirement that the LRTP be updated at least every five years.

This LRTP recognizes a number of potential major shifts from traditionally understood transportation system functions. While these do not explicitly affect the quantification of need, they are worthy of discussion.

- **Transportation technology:** Many types of autonomous-driving features are now available among new motor vehicles today. Example applications include adaptive cruise control, automated emergency braking, and self-parking. It is anticipated that the next generation of self-driving cars will be entering the fleet in greater numbers within the time horizon of this plan, including across delivery, freight and transit sectors. When these vehicles reach wide acceptance, they have the potential to influence everything from car ownership to travel demand. People currently unable to drive, including children, seniors, and those with disabilities, may be able to rely on autonomous cars for transport. Early examples of automated trucks are also in development. These may increase efficiency of long haul trips by obviating the need for driver hours-of-service rules; and assist in the implementation of off-hours urban delivery schemes. Transit operators can also benefit from increased safety of bus operation and reduced insurance claims. In addition to automation, connected-vehicle technology allows continuous communication between vehicles and with roadside infrastructure such as traffic signals. The primary focus is a positive impact on safety resulting from a variety of crash-prevention and crash-avoidance applications.
- **Shared Mobility:** Shared mobility is an umbrella term that encompasses a variety of transportation modes including carsharing, bikesharing, peer-to-peer ridesharing, on-demand ride services, microtransit, and other modes. Shared mobility has the potential to greatly decrease the costs of transportation for users by allowing riders to select the mode that best suits their needs, thereby releasing them from the burden of car ownership and single-occupancy trip generation. Simultaneously, the distribution of the costs and

benefits that shared mobility will have on public transit, local congestion, and transportation equity, are not yet fully known or understood.

- **Communications technology:** There is no question that the Internet and related communication technology will continue to evolve. This will have unknown impacts across many industries, and on individual lifestyle choices, including greater emphasis and popularity of remote work and learning, which changes trip types and VMT generation, potentially affecting investment needs in the transportation system.
- **Sustainable communities:** There is a growing focus on how to become more sustainable in terms of energy generation and consumption, locally sourced food, and urban form and structure. There may be unexpected improvements in any of these areas that can affect travel demand and mode choice. State policies as well as local goals will drive increase use of electric vehicles significantly altering the impact of the transportation industry over the life of the LRTP as well as seeing the introduction at scale of charging technology.
- **On-line Shopping:** Increased use of on-line shopping, particularly during and in the aftermath of the COVID-19 pandemic, will create additional needs related to freight and local delivery while at the same time offer a reduction in congestion at major retail centers.
- **Mode Shift:** Increase focus on walkable communities, trails, and bicycle use will drive the need to invest in pedestrian and bicycle facilities over the life of the Plan. Additionally, higher rates of working from home following the COVID-19 pandemic have shifted how and when residents interact with the region's transportation infrastructure.

Addressing Vulnerable Populations in the Transportation System: It is a key value of this LRTP that strategies seek to mitigate negative effects related to the transportation system that impact or benefit the most vulnerable members of the community, such as low-income residents, Title VI populations, children, persons with disabilities, and older adults. Negative health effects related to the transportation system can fall hardest on these vulnerable members, with households in low-income areas typically owning fewer vehicles, having longer commutes, and having higher transportation costs. Inadequate or substandard infrastructure in vulnerable population communities can also prevent people from using active transportation, or even serve as a barrier to walking/cycling that separates neighborhoods.

GOALS AND OBJECTIVES

Goals form the foundation of this LRTP. They offer explicit guidance on the priorities for the investment of transportation dollars, the outcome of that investment and the importance to the region served by UCTC. Each Goal is supported by a series of objectives. Objectives add specificity, spelling out how implementation will support goal achievement.

The goals and objectives are founded on three core principles: that the transportation system must serve the needs of its community today, respond to change, and be affordable for all users. Implementation of these simple principles relies on understanding the complex interactions of preservation versus expansion, accommodation of new or expanding uses and different modes,

and the use of new products or technology. Goals are the base on which stand the strategies, plans, and priorities for investment.

The goals and objectives in the LRTP were developed in coordination with the following:

- UCTC leadership, through the Policy and Technical Advisory Committees.
- Federal legislation including 2015's Fixing America's Surface Transportation (FAST) Act, which establish National Performance Management Goals that states and MPOs must use as a basis for performance-based planning.
- The New York State Department of Transportation, which has a set of principles called the Forward Four. These principles define NYSDOT's overall approach to its stewardship of the State Highway System:
 - Preservation First
 - System not Projects
 - Maximize Return on Investment
 - Make it Sustainable
- Stakeholder and Public Input

Note: Goals are not in order of priority. Priorities are established as projects, strategies, and actions.

System Preservation: Invest in transportation system infrastructure to bring and maintain all facilities and modes into a state of good repair.

The UCTC is committed to evaluating the condition of our roads and streets, bridges, sidewalks, transit buses and facilities, and traffic signals and other devices. System Preservation will rely on utilizing a risk-based asset management approach. Investment decisions will utilize NYSDOT's "Preservation First" methodology as opposed to a "worst first" approach. This approach applies low to moderate cost treatments to more assets that are in fair condition to extend their service life for several years rather than spending greater dollars fixing those assets that are already in poor condition and whose further deterioration does not greatly increase the cost of repair. Achieving this goal requires striking a balance between projects that address infrastructure that is already in poor condition and those that apply the preservation approach to fair infrastructure. The overall goal is to most efficiently allocate limited resources for maintenance and preservation.

Objectives:

- **Develop** and implement a county-wide bridge system maintenance plan
- **Maintain** or **increase** the share of transportation assets (such as roadways, bridges, and active transportation facilities) in good condition
- **Maintain** the UCAT fleet to meet the FTA guidelines for service life

Safety: Continually improve the safety of all users of the transportation system by responding to identified safety deficiencies and proactively addressing future safety needs.

The public expects to be able to travel safely, whether they are driving, using public transit, walking, or bicycling. Safety is reflected primarily in the number and severity of crashes. Fatal and severe personal injury incidents are always of greater concern than those that cause minor injuries or only property damage. Because of the role of human behavior in crashes, safety is considered in terms of the “4 Es”: engineering, education, enforcement, and emergency response. The LRTP considers safety both reactively, by addressing high crash locations; and proactively, by looking at demographic and societal trends and getting ahead of problems. An aging population that maintains its mobility will require a greater investment in signage and wayfinding along with other proven techniques that address the unique safety needs of elderly drivers and pedestrians.

The LRTP also considers the content and objectives of the NYSDOT Strategic Highway Safety Plan (SHSP). UCTC supports the SHSP, which focuses on intersection, pedestrian, and lane departure crashes, with proposed actions to mitigate both crash frequency and severity.

Objectives:

- **Reduce** the number of fatal and serious injury motor vehicle crashes
- **Reduce** the number of crashes resulting in fatality and serious injury to pedestrian and bicyclists
- **Reduce** the number of crashes involving transit vehicles that result in fatality or serious injury to zero
- **Reduce** the number of crashes involving vulnerable user groups as defined in the NYS SHSP
- **Reduce** the number of safety-related incidents at bus stops and on transit vehicles operated by UCAT, including protecting transit workers from assault

Resiliency: Ensure that transportation system users have a sustainable and secure environment, that the transportation system is capable of providing adequate service during severe weather events, and that the natural and built environment is protected and enhanced.

The sustainability of the transportation system infrastructure and the security of transportation system users is a critical investment factor in this LRTP. Experience with extreme weather events, such as Hurricane Irene and Superstorm Sandy, have made it clear how important it is for the transportation system be able to maintain operations during these events and provide security for residents through the evacuation, rescue, and recovery phases.

When considering future transportation projects in the region, it is important to consider the link between transportation and the environment. Not only should projects include the necessary resilience to overcome extreme weather conditions, but potential negative impacts

of the transportation sector, such as the impacts of construction activities and energy consumption and pollution associated with motor vehicle travel, should be combatted.

Objectives:

- **Complete** a Resilience Improvement Plan (RIP) for the top 50 locations identified in UCTC's Phase 1 Resiliency Plan, which enhances the opportunity for discretionary federal funding.
- **Integrate** ranking criteria from RIP results into the TIP project selection criteria for new federal aid bridge awards evaluated by UCTC.
- **Reduce** all forms of pollution from on-road vehicles through support of travel demand management, alternative fueled vehicles, stormwater management practices, and other appropriate techniques.

Mobility: Provide for efficient and reliable travel by all modes by investing in strategies that mitigate congestion and create and maintain a well-connected transportation system.

A well-designed transportation system provides convenient, efficient, and reliable access to destinations within and beyond UCTC's planning area. Whether people travel by car, bus, bicycle, or on foot, they need to reach destinations that include employment, school, health care, shopping, and other services. In addition to geographic access, the predictability of travel time matters to commuters, transit operators, and freight carriers. Recurring congestion can be addressed through a combination of roadway infrastructure projects that mitigate delay, traveler information systems to allow travelers to make informed decisions, and simultaneously investing in multimodal projects that give residents the option to minimize single occupancy vehicle travel.

Objectives:

- **Reduce** vehicle-hours of delay that occur as a result of recurring congestion on principal arterials and arterial streets
- **Integrate** intelligent transportation systems (ITS) into infrastructure projects
- **Develop** a program of infrastructure projects to address truck bottlenecks
- **Increase** transit access (geographic and temporal) in Kingston, New Paltz and Ellenville, and major intra-county corridors
- **Increase** the number of people within a 10-minute walk/bike ride of trails, parks, and other key destinations
- **Increase** the miles of bicycle and pedestrian facilities

3. PUBLIC INVOLVEMENT

The MPO shall provide individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cashout program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under § 450.316(a).

The MPO shall publish or otherwise make readily available the metropolitan transportation plan for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web.

23CFR§450.300 (Development and Content of the Metropolitan Transportation Plan, Parts J & M)

PUBLIC INVOLVEMENT SUMMARY

The development of Mobility 2050 was guided by a collaborative and comprehensive public engagement strategy led by FHI Studio – IMEG. The outreach effort was designed to reach a broad cross-section of the community through both in-person and digital methods.

From October 2024 through December 2025, engagement activities included pop-ups along trails, at community events, and in other strategically selected locations. Paid social media advertisements were also used to promote the Mobility 2050 survey and inform the public about upcoming meetings and opportunities to participate.

The public involvement approach was organized into four key categories:

- Collaboration with the Technical Advisory Committee
- Virtual Stakeholder Meetings
- Pop-Up Events
- Virtual Workshop and Online Survey

The full results of these outreach efforts are detailed in Appendix F and G.

Collaboration with the TAC

Two (2) virtual policy committee meetings were attended on October 22, 2024 and April 22, 2025. During the first meeting the project team shared the public involvement approach, got feedback on the virtual workshop/survey. At the second meeting the project team shared survey results from the first month of responses and gave a general update on public involvement, schedule, and ideas for future pop-ups.

Virtual Stakeholder meetings

Four (4) virtual stakeholder meetings were scheduled to convene business owners, community organizations, transit providers, trail enthusiasts, bike/ped advocates, engineers, town planners and others. These discussions were designed to better understand the values, perceptions, transportation opportunities, and constraints as well as aligning with future plans, and trends that entities see as a need.

Pop-Up Events

Four (4) total pop-up events were attended to support the development of Mobility 2050. Pop-up events were held across Ulster County on May 30th and May 31st. These pop-ups were designed to engage community members in convenient, informal settings such as festivals, transit hubs, and community gathering spots, to raise awareness about Mobility 2050 and gather input directly from residents. The purpose of these events was to better understand local transportation needs, priorities, and ideas for future improvements. Through brief conversations and interactive materials, the pop-ups provided valuable community feedback to help guide the vision and strategies of the LRTP.



*“A system that runs frequently and efficiently enough that taking a bus instead of driving won't double or triple the amount of time it takes.” –
feedback from pop-up participant*

Virtual Workshop and Online Survey

An interactive online workshop and survey tool, ARNIE, developed by FHI Studio-IMEG, was launched to gather community input. This platform served as both a survey and an online workshop, allowing participants to identify specific locations where transportation infrastructure is working well or causing issues using an interactive pin drop map. In addition, users took part in a budgeting exercise, allocating resources to transportation priorities they'd most like to see improved. The survey was conducted from April 30, 2025, to June 30, 2025. In total, we received 314 responses on the interactive map and 250 completed surveys, providing valuable insights to help shape the Long Range Transportation Plan.

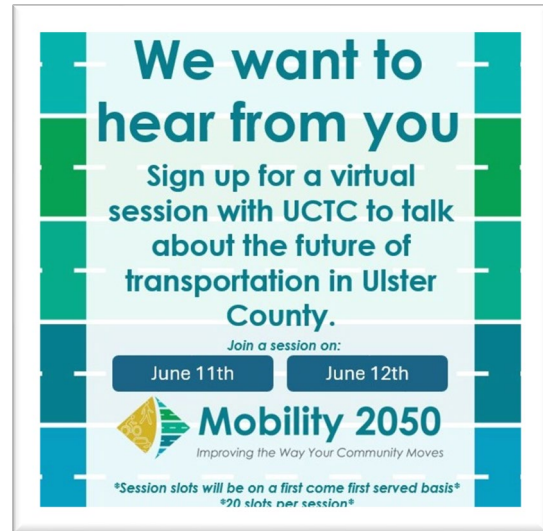
SUMMARY OF PUBLIC INVOLVEMENT RESULTS

Stakeholder Focus Groups Results

The stakeholder focus groups gave feedback on **six** major areas. These categories and their major themes and subjects are summarized below:

General Infrastructure

- Transit and Mobility Enhancements:** There is strong support for expanding electric bus service with a goal of 100% battery electric by 2035, and interest in offering free bus service where feasible. Rail trails were noted as a valuable asset particularly in and around Kingston but there's a need to better connect underserved areas like Wallkill and improve municipal coordination on a broader bike network.
- Complete Streets and Roadway Improvements:** Stakeholders emphasized the importance of expanding Complete Streets strategies across the county, addressing overbuilt roads (such as 9W), and making roads safer for pedestrians. Road diets, improved signage, and Americans with Disabilities Act (ADA)-compliant infrastructure were all highlighted.
- Urban Infrastructure and Land Use:** In urban centers like Kingston, stakeholders noted the need to address legacy impacts from urban renewal projects, plan for increased density, and manage aging infrastructure, including sewers and underground utilities as part of major street projects.
- Sidewalk and Accessibility Issues:** Sidewalks often fall short of ADA standards, with responsibility for maintenance falling to adjacent property owners. Damage from tree roots, snow/ice accumulation, and inadequate sight distances present year-round accessibility challenges.
- Rail and Freight Considerations:** While passenger rail does not currently serve Kingston, freight rail remains a significant factor. Stakeholders suggested rail infrastructure should be more actively considered in future planning.
- Connectivity Gaps:** Notable infrastructure gaps include a lack of pedestrian and bike connections between Kingston and Saugerties to the north, and between New Paltz and Marlborough to the south. Ensuring residents can safely walk to key destinations like community centers was identified as a basic but unmet need.



Flyer advertising public engagement opportunities for Mobility 2050

Non-motorized Transportation

- Foundation and Usage:** Kingston has a strong base for a bike and pedestrian system, including the Greenline, which is actively used for commuting, school, and daily activities. Projects like Midtown Rising further support walkability and non-motorized access.
 - Infrastructure and Design Constraints:** Narrow streets in Kingston make it difficult to safely share space between vehicles, bikes, and pedestrians. Expanding roads or reallocating space was suggested to improve pedestrian safety and accommodate a wider range of users.
 - Connectivity and Access:** There's a desire to improve connections outside the city, such as along Route 28 to the Town of Ulster, and to reestablish ferry service as part of a multimodal network. Access to train stations and UCAT service were also noted as strengths that can support non-motorized trips.
 - Emerging Modes:** E-bikes and motorized scooters present both promise and challenges. E-bikes were seen as transformational, especially for people who can't ride traditional bikes. Stakeholders suggested the need for separate lanes or a secondary network for faster-moving devices (20–25 mph). However, safety concerns and a rise in reported crashes involving E-devices underscore the need for improved operator safety, rules of the road, enforcement, and clearer signage.
-
- Photo of the Ashokan Rail Trail*
- Behavior and Accessibility:** Expanding bike rentals for tourists and casual users was seen as a positive step, especially in areas served by regional buses or cruise ships. However, barriers like carrying belongings, lack of education on road-sharing behavior, and speed limits not suited for mixed-use corridors remain concerns.
 - Mode Shift and Policy Goals:** In Kingston, 90% of trips are made by private vehicle, reducing that number even to 70% would be a major success. Stakeholders emphasized realistic goals that reflect where people are actually commuting from and highlighted the importance of promoting car-free access to nearby destinations.

Public Transportation/Human Service Transportation

- Service Frequency and Coverage:** While making UCAT service free is a positive step, stakeholders stressed the need for more frequent buses and better service to key destinations such as shopping centers, medical facilities, and essential services. Some noted that UCAT would benefit from having four times as many buses to meet current demand.

- **Bus Stop Clarity and Infrastructure:** A common concern was the lack of clear bus stop locations, particularly outside urban areas. Riders often wave down buses or disembark at random points, which some see as flexible, but others find confusing or unsafe. Clear signage and designated stops would improve user experience.
- **Transit Center Location:** The current transit hub at Hannaford was seen as inadequate. Stakeholders suggested exploring more appropriate or underutilized locations, such as shopping plazas, to better serve riders and improve access.
- **Security and Safety:** Security was mentioned as one of the biggest challenges, indicating a need for greater investment in safe, welcoming facilities and transit environments.
- **Communication and Coordination:** Riders appreciated UCAT's helpful dispatch service, but called for clearer schedules, better visibility of information, and stronger coordination between county services to streamline bus routes and improve system efficiency.

Business

- **Parking Challenges:** Parking is perceived as an issue in some business areas; lack of parking causes some people to leave. "Gold Parking" (on-street parking) was mentioned as a current strategy. The city is conducting a parking study to address these concerns.
- **Rail Access:** Stakeholders suggested that passenger service on the West Shore Railroad could improve access to jobs and reduce car dependency.
- **Access to Employment:** Reliable transportation is essential for supporting workforce mobility. Improving access to job centers through transit is seen as critical for both employees and businesses.

Transportation Safety

- **Speed and Traffic Control:** Stakeholders noted that the city's recent reduction of speed limits to 25 MPH is a positive step for safety. They highlighted planned traffic calming measures in Kingston as an important improvement. Safety upgrades on highways were also acknowledged.
- **Enforcement and Education:** Many stakeholders appreciated Kingston Police Department's increased traffic enforcement this year, especially by the Traffic Enforcement Unit. Public safety campaigns, including those supported by the Governor's Traffic Safety Board, were seen as valuable. Some mentioned that the YMCA's bicycle education programs contribute to raising safety awareness. Starting safety education at a young age was emphasized as critical by several participants.
- **User Responsibility and Behavior:** Several stakeholders emphasized that much of transportation safety depends on individual behavior. They stressed the importance of pedestrians and cyclists being assertive, planning their routes carefully, and improving visibility through lights and safety vests. Following traffic rules and using crosswalks were commonly mentioned safety practices. One stakeholder shared that they stopped biking on Spring Town Road due to safety concerns.

- **Road Design Approaches:** Stakeholders advocated for applying “complete streets” or “Vision Zero” design approaches to county roads to make them safer for all users.

Environmental Conservation

- **Air Quality:** Ulster County planning area is meeting air quality standards, reflecting positive environmental conditions.
- **Urban Forestry and Greenery:** Street trees provide benefits such as slight traffic calming, cooling effects, and encouraging walking through shaded routes. The Mayor’s goal to plant 1,000 trees in Kingston is progressing well, with nearly half already planted.
- **Green Infrastructure (GI):** Implementation of GI practices like tree pits and bioswales (e.g., on Broadway and Flatbush) helps manage stormwater and supports environmental health. Separating sewer systems during city projects is seen as environmentally beneficial.
- **Road Design and Wildlife Impact:** Wide roads encourage fast driving and create physical barriers for wildlife movement. Suggestions include narrowing lanes and widening shoulders to mitigate these effects.
- **Road surface treatment Concerns:** Use of road salt poses environmental problems. Non-permeable surfaces contribute to increased stormwater runoff, impacting water quality.

Virtual Workshop/Online Survey

The survey (in English and Spanish) was published on April 1st, 2025 and remained open through June 30th, 2025. A total of 250 people responded to the workshop portion of the survey, and we received 314 individual geocoded pin drops on the interactive map portion of the workshop. Survey respondents mainly use vehicles as their main mode of transportation followed by walking, public transportation, and walking. Most people spend most of their time in Kingston followed by Marbleton, New Paltz, Saugerties, Esopus, and Hurley. Most travelers are taking trips between 10 and 20 miles, followed by 5 – 10 miles, and 1 – 5 miles. The least distance traveled was less than one (1) mile, usually an indicator of potential bike/pedestrian trips.



Flyer advertising online survey for Mobility 2050

How often do you use each type of transportation mode? (percentage)

Driving

☐

100

Public Transportation

☐

100

Biking

☐

100

Walking

☐

100

Other

☐

100

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WORKSHOP/BUDGETING EXERCISE

The following workshop results were based on a budgeting exercise for both federal transportation aid spending and federal transit aid spending. Participants were given a budget of \$100 to spend on different categories for each exercise. The results below reflect the categories that were given the most “money”.

Federal Transportation Aid top priorities

- 1) Expanded shoulders on rural roads
- 2) Road surface repair
- 3) Sidewalk repair
- 4) Active transportation

Federal Transit Aid top priorities

- 1) Increase bus service area
- 2) Increase bus service frequency
- 3) Regional bus service connections
- 4) Bus shelter amenities

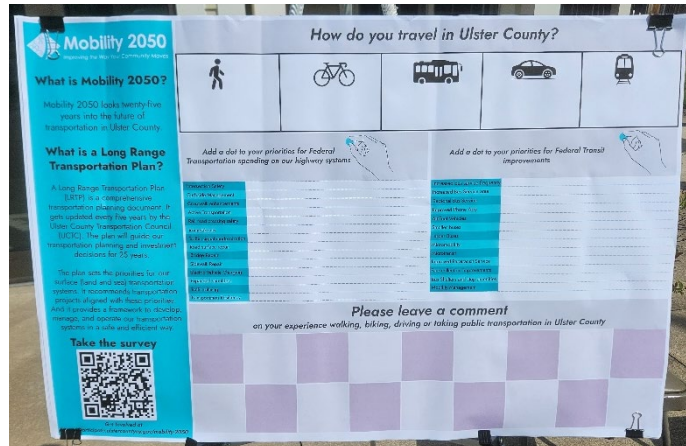


Photo of an engagement board used at pop-ups to mimic the online budgeting exercise in-person

VISION STATEMENTS

General themes and goals from feedback on a vision for the future of transportation in Ulster County.

- The desire for expanded and improved public transportation options, including more bus routes, increased frequency, and better connectivity across all areas of Ulster County, including rural areas.
- The focus is on creating a transportation system that is safe, reliable, and accessible for all residents, including the elderly and disabled.
- There is a strong emphasis on reducing reliance on personal vehicles, promoting alternative modes of transportation such as walking, biking, and public transit.
- There are also concerns about road safety, infrastructure maintenance, and the need for better pedestrian and bike infrastructure.
- The overall vision is for a more sustainable, equitable, and people-focused transportation system that enhances quality of life in Ulster County.

4. PROFILE OF THE REGION

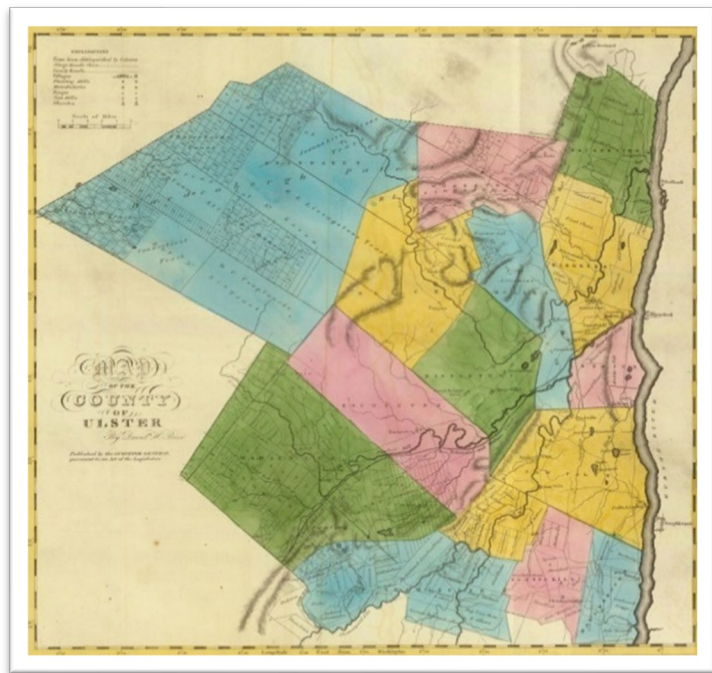
Ulster County has a rich natural, cultural, and commercial history that continues to evolve. The County has experienced reoccurring periods of significant growth followed by subsequent decline and recovery since its settlement in the early 1600's. The region continues to improve its economic outlook as evidenced by increases in employment, improvements in the real estate market, and increases in sales and hotel tax receipts and the strengthening of its ties to the New York Metropolitan area. However, municipal tax caps and lack of

growth in personal income continue to place strains on both municipal and family budgets with increases in housing costs outpacing income growth. Transportation availability and cost is also a major concern for many households. This underscores the need to rethink how mobility can be improved within municipal and family budgets in a manner that allows the region to remain competitive and sustainable.

At 1,124 square miles – an area comparable in size to the State of Rhode Island – Ulster County is a geographically diverse region. The County is characterized by a variety of mountain and valley zones interspersed between two primary features: the Hudson River Valley and the Catskill Mountains. Within these primary features are several minor zones, including the Shawangunk Mountain and Marlboro Mountain regions and the Rondout-Esopus Valley and Wallkill Valley regions. Ulster County's transportation system is heavily influenced by these geographic features. Early forms of freight movement included the Delaware and Hudson Canal (1828 – 1898), Ulster and Delaware Rail Road (1875 – 1932), the New York, Ontario &



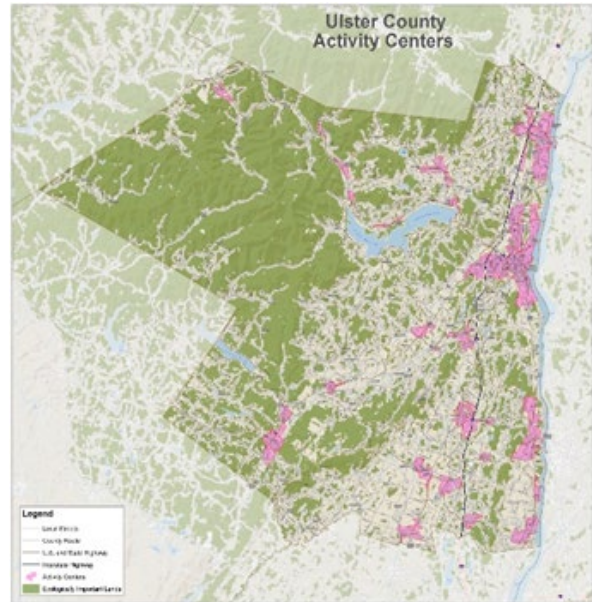
The Four Corners. The Nation's last pre-Revolutionary Intersection is located in Uptown Kingston, NY Source: Governing.com



Ulster County, 1829. Source: David Rumsey Historical Map Collection. Originally published by David H. Burr.

Western Railway (O&W, 1879 – 1957), and the Wallkill Valley Railroad (1866 - 1977). These critical corridors bisected Ulster County’s valleys, ridges, and mountain areas, opening up the largely rural interior of Ulster County and playing significant roles in establishing centers of commerce and trade throughout the county. These historic freight corridors eventually waned and gave way to today’s network of surface highways. They now form the backbone of the County’s trail system that links communities and the region.

Social, demographic, and economic trends directly influence transportation planning. A clear understanding of the region’s current characteristics and expected future trends will aid in the planning of a transportation system that meets the region’s specific needs. These relationships have been described using a “Live”, “Work”, “Play” analogy. Most of the County’s residents live along river valleys – the Rondout, Wallkill, Esopus and Hudson - in the eastern portion of the County. These historic settlements are also future growth areas where investments in transportation infrastructure and transit will be necessary in the future. Similarly, places where people work are located in activity centers of villages and hamlets, in and in and around the City of Kingston. Outside of these activity centers, major road corridors are home to highway-oriented businesses. Few employment centers have developed on these corridors except for the Route 9W corridor in the Towns of Ulster and Saugerties in the northern portion of the County and the Towns of Marlborough and Lloyd in the southern portion of the County.



Activity Centers as depicted in the map above were identified in the Ulster County Planning Department Community Design Manual; it illustrates where major investment in transportation infrastructure will be necessary in the future.

Ulster County is a four-season vacation destination. Its abundant open spaces, trails, access to water, festivals, and similar attractions offer a myriad of opportunities for residents and visitors. These resources shape the demand on the transportation system and its components. In response UCTC has created new opportunities to connect communities with an integrated non-motorized system and sought to address the challenges of peak volumes that occur on weekends and with drivers unfamiliar with the road environment.

POPULATION

According to the 2023 American Community Survey –the latest estimate of demographic statistics available –the population of Ulster County is estimated at 182,109, which is up 2.1% since the 2020 Census but generally in line with the population estimates from the 2010 Census. As shown in Figure 4.1, the City of Kingston has the highest population density in the county with over 3,000 people per square mile. All other municipalities have a population density of less than 500 people per square mile, with the Villages of Ulster, New Paltz, and Marlborough, and the Town of Lloyd having a population density between 300 and 500 people per square mile.

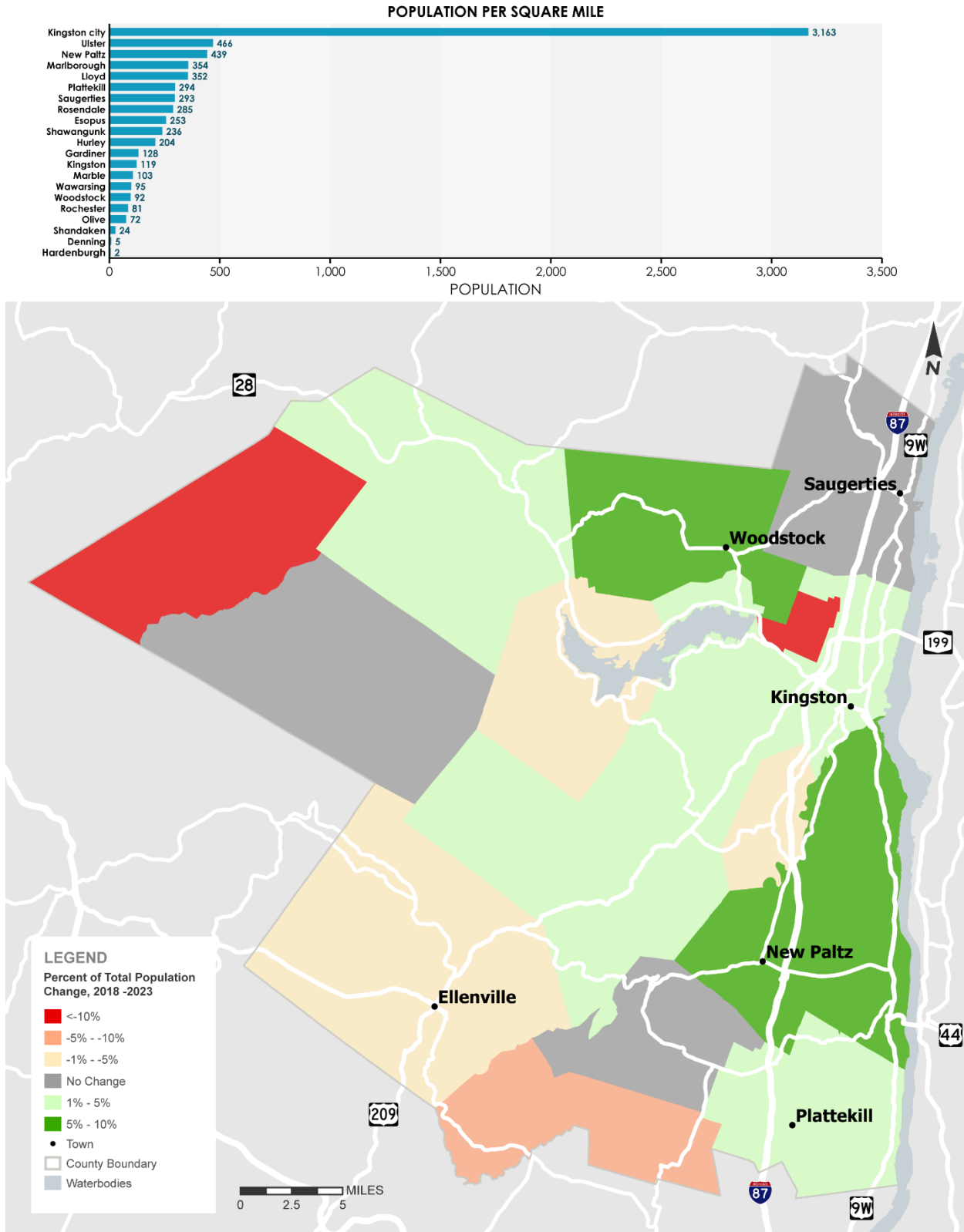


Figure 4.1: Ulster County Population Change, 2018 – 2023 and Population Density by Municipality

As shown in Figure 4.1, local population changes are variable throughout the county between 2018 and 2023.ⁱ The most dramatic percent decrease in population by municipality occurred in the Towns of Kingston and Hardenburgh; however, the actual changes were relatively small with a decrease of 187 and 86 residents, respectively. The changes in these two municipalities express as a higher percentage change due to their relatively low populations. The Towns of Shawangunk and Wawarsing saw the highest total decline in population, with a decrease of 669 and 362 residents, respectively. The Towns of Esopus, Lloyd, and New Paltz, located adjacent to one another, saw high percent and total population increases. Collectively the three municipalities gained over 2,000 residents, where total growth in the County was 2,800 residents between 2018 and 2023. Additionally, the Town of Woodstock and the City of Kingston saw higher levels of growth as compared to the remainder of the County.

An overview of historic population trends in Ulster County reveals steady but declining growth rate from 1950 through to the 2010 decennial census. A strong 28% increase between 1950 and 1960 stands in stark contrast to the less than 3% increase between 2000 and 2010 (Figure 4.2) and the estimated 2.3% **decline** between 2010 and 2020. The population recovered in the post-Covid era with a 2.1% increase between 2020 and 2023 to almost match 2010 population levels.

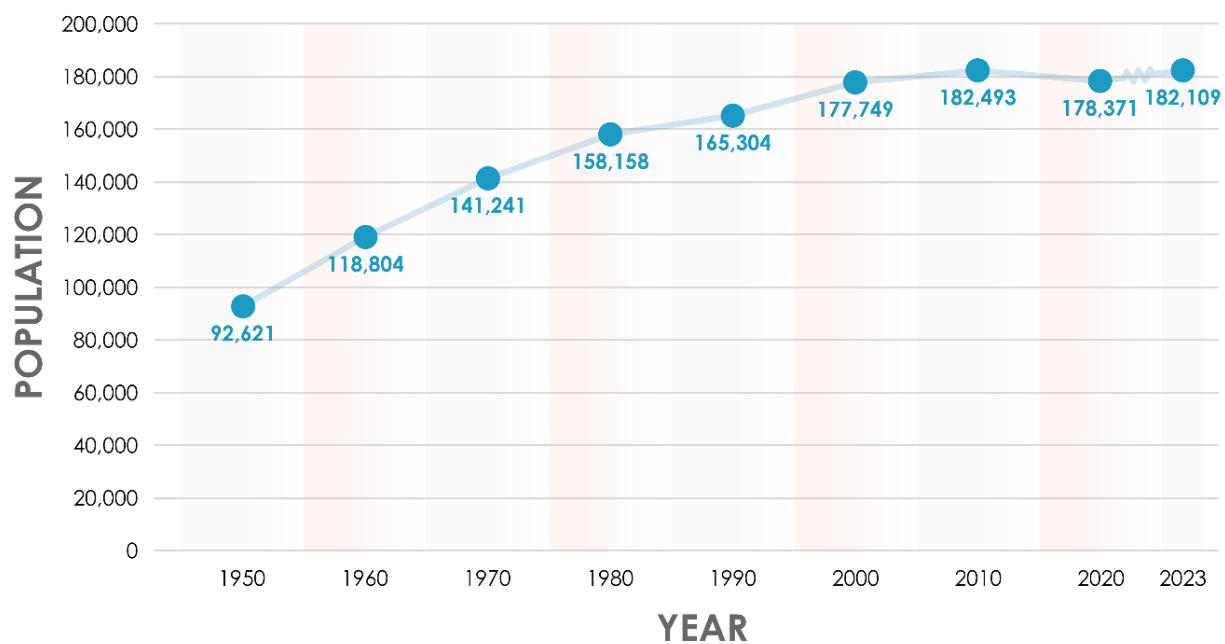


Figure 4.2: Ulster County Population Change, 1950 - 2023

An overall declining rate of population growth can be attributed to four primary factors: mortality, out-migration among older adults, a declining birth rate, and an inability to retain young people as they enter adulthood. As shown in Figure 4.3 below, the number of young people aged 0-14 as a share of the total population declined to 14% in 2023 from 16% in 2013 and 15% in 2018, and this trend is projected to continue. Like many other counties in the Hudson Valley, Ulster County has seen a continuous decrease in birth rates which has impacted and will continue to impact school enrollment, resulting in a total of 7 public school closures since 2013.ⁱⁱ

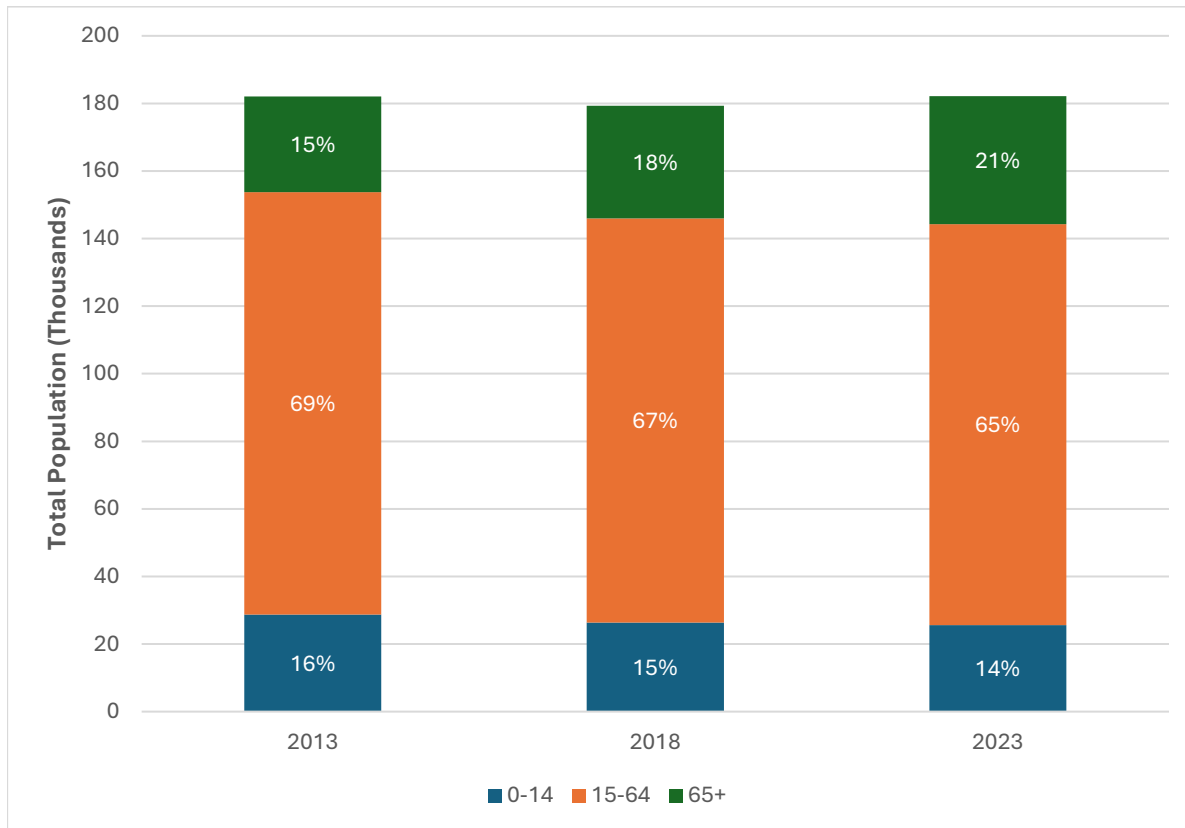


Figure 4.3: Ulster County Population Changes in Age Groups, 2013 - 2023

Ulster County is home to an increasingly “greying” population. Older cohorts show steady growth in the overall share of total population, even though outmigration is occurring as aging seniors continue to live longer lives and members of the ‘Baby Boom’ generation – one of the largest in American history – steadily transition into their retirement years in large numbers. As a result, the median age in Ulster County has steadily increased - estimated to be 44.2 years in 2023 compared to 43.3 years in 2018.

Figure 4.4 illustrates the wide-ranging population estimates that have been produced for Ulster County by various demographic experts over the years. Older estimates tended to predict a steadily increasing population with recent estimates indicating the opposite trend. For example, Cornell University’s Program on Applied Demographics (PAD) projections of Ulster County’s population continue to show a decline in population albeit at a slower rate, while the New York Metropolitan Transportation Council (NYMTC) projections illustrate a steady or growing population.

It is nonetheless challenging to predict Ulster County’s population over several decades with any level of certainty. In general areas south of New Paltz are likely to see increases in population over time due to proximity to employment centers outside of the County while the City of Kingston area enjoys renewed interest due to costs, quality of life, and opportunities for networking with others from the metropolitan area. It should be noted that minority population especially the Hispanic population will continue to grow and that Ulster County borders two of New York State’s fastest growing counties – Dutchess and Orange Counties. All three counties have close economic ties.

The UCTC faces a major challenge in the development and selection of reasonable and accurate population estimates as factors just beyond the region can greatly influence growth prospects. This is already seen in the aftermath of the 2008 recession, the aftermath of the COVID-19 pandemic, and the increasing ability to work remotely. Nevertheless, the current trends discussed above suggest that a positive growth scenario is more likely to occur going forward. UCTC will continue to adjust its population estimates using its knowledge of the region and the data from the informed sources as noted in Figure 4.4.

While future population projections are uncertain, it is important to note that resident population in Ulster County is not indicative of the needs of the transportation system. With significant second home ownership, large and numerous campgrounds, a booming short-term rental market, and multiple state parks; transportation demand soars during the summer months with estimates as high as 50,000 additional people utilizing the transportation infrastructure on a daily basis.

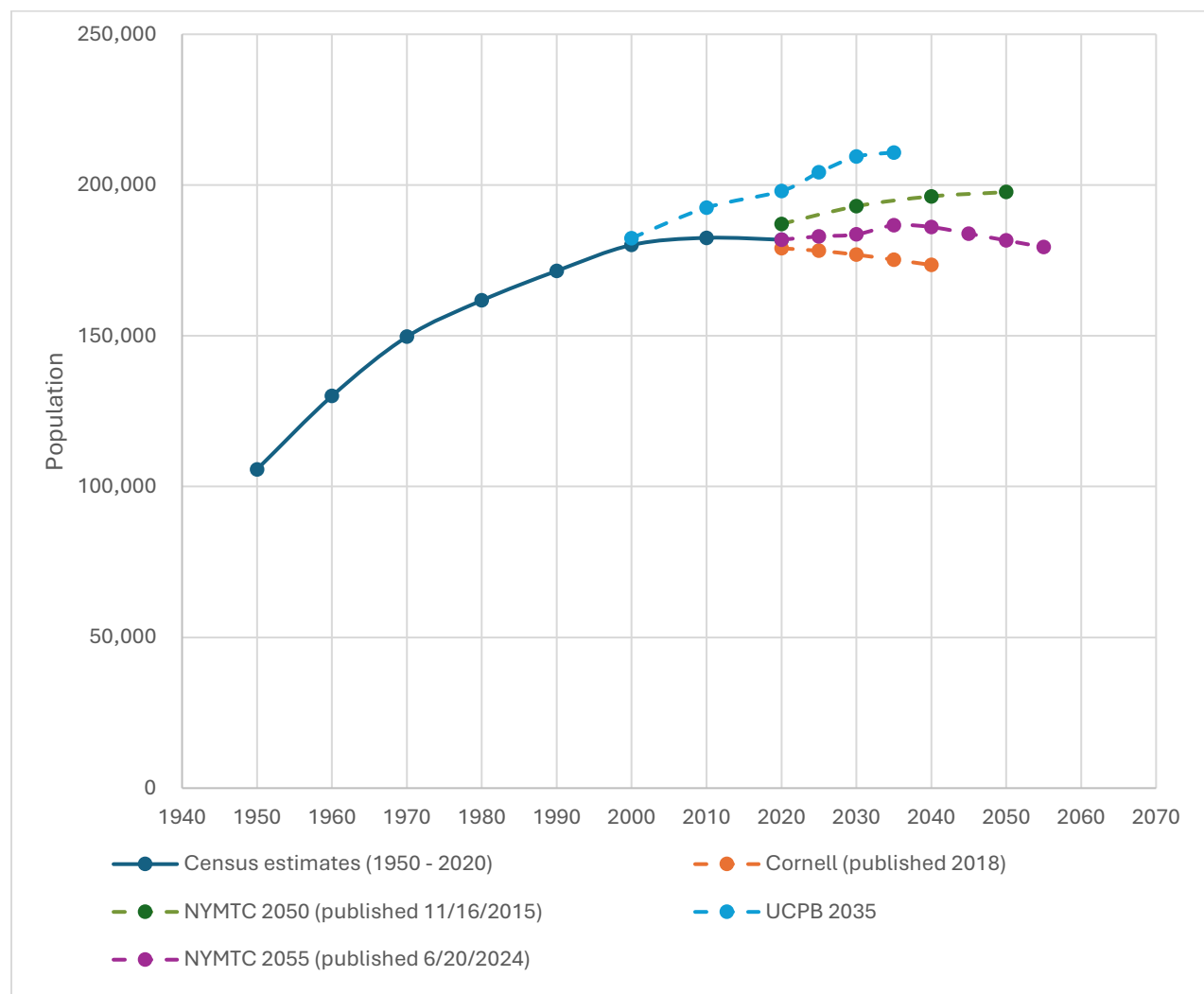


Figure 4.4: Summary of Recent Population Estimates Completed for Ulster County

TITLE VI DEMOGRAPHIC CHARACTERISTICS

Title VI of the Civil Rights Act of 1964 prohibits discrimination by recipients of Federal financial assistance on the basis of race, color, and national origin, including matters related to language access for limited English proficient (LEP) persons.

UCTC uses six demographic categories as indicators to guide its monitoring of Title VI principles. Four categories – those of race, ethnicity, income and English proficiency – are typically recommended by FTA and FHWA in the process of carrying-out Title VI demographic analyses. In addition, UCTC examined the categories of age and physical ability in an effort to develop a comprehensive understanding of mobility-challenged populations in the Ulster County MPA. Data were derived from the 2023 American Community Survey five-year survey data.

Figure 4.5 illustrates the percent share that each category comprises of the total county-wide population. This share is then used to establish a “threshold” that can be used to conduct a more detailed analysis at the census tract or block-group level.ⁱⁱⁱ Any locations showing concentrations greater than the county-wide total are considered to be disproportionately high and should receive additional consideration during the transportation planning process.

As with statistics on population change, demographic indicators in Ulster County are somewhat skewed in certain locations due to group quarters such as prisons or college/university housing facilities. These include the State University of New York at New Paltz (located primarily in the Village of New Paltz), the Eastern and Ulster Correctional Facilities in the Hamlet of Napanoch (Town of Wawarsing), and the Wallkill and Shawangunk Correctional Facilities in the Town of Shawangunk. This is perhaps most evident among the *Minority Populations* category (defined as Asian American, Black or African American, Hispanic or Latino, Native Hawaiian and Other Pacific Islander, American Indian and Alaska Native). The Towns of Shawangunk and Wawarsing show some of the highest concentrations of minority populations in the county, very likely due to the prison population in these areas. Outside of these locations, the City of Kingston reports some of the highest concentrations of minority populations, with nearly every Census block within the City showing concentrations near or above the county average of 26.5% minority in 2023 (Figure 4.7).

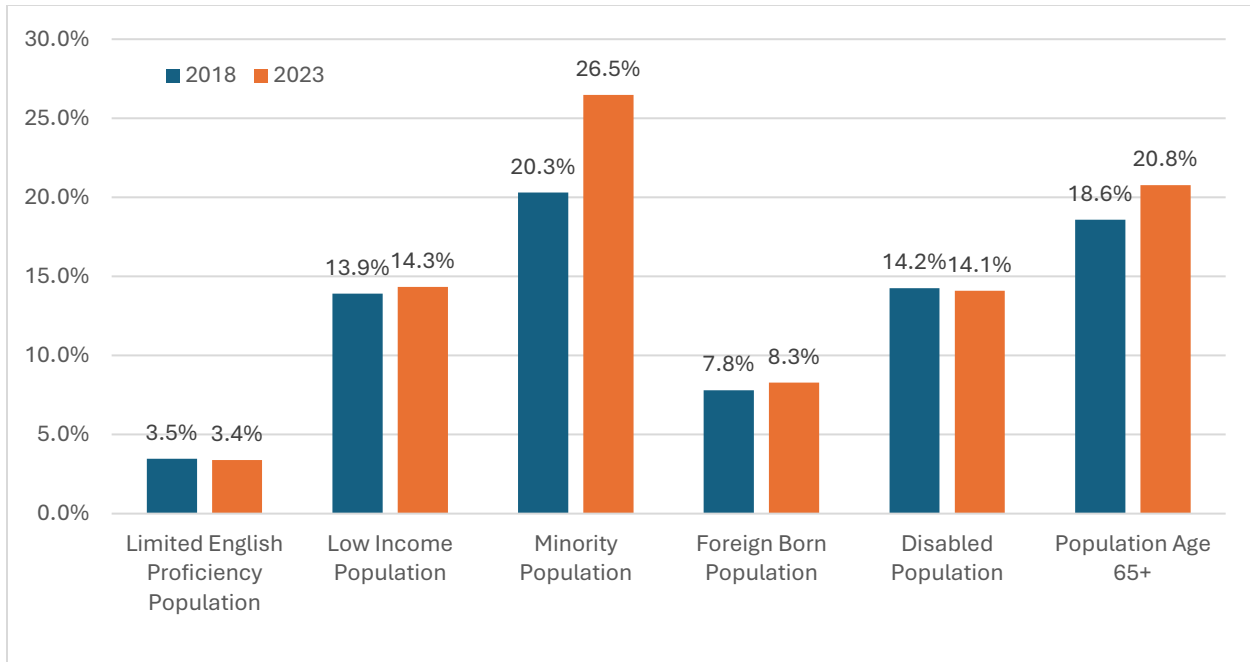


Figure 4.5: Groups Traditionally Under-Represented in the Transportation Planning Process, 2018 & 2023 (% of the Total Ulster County Population)^{iv}

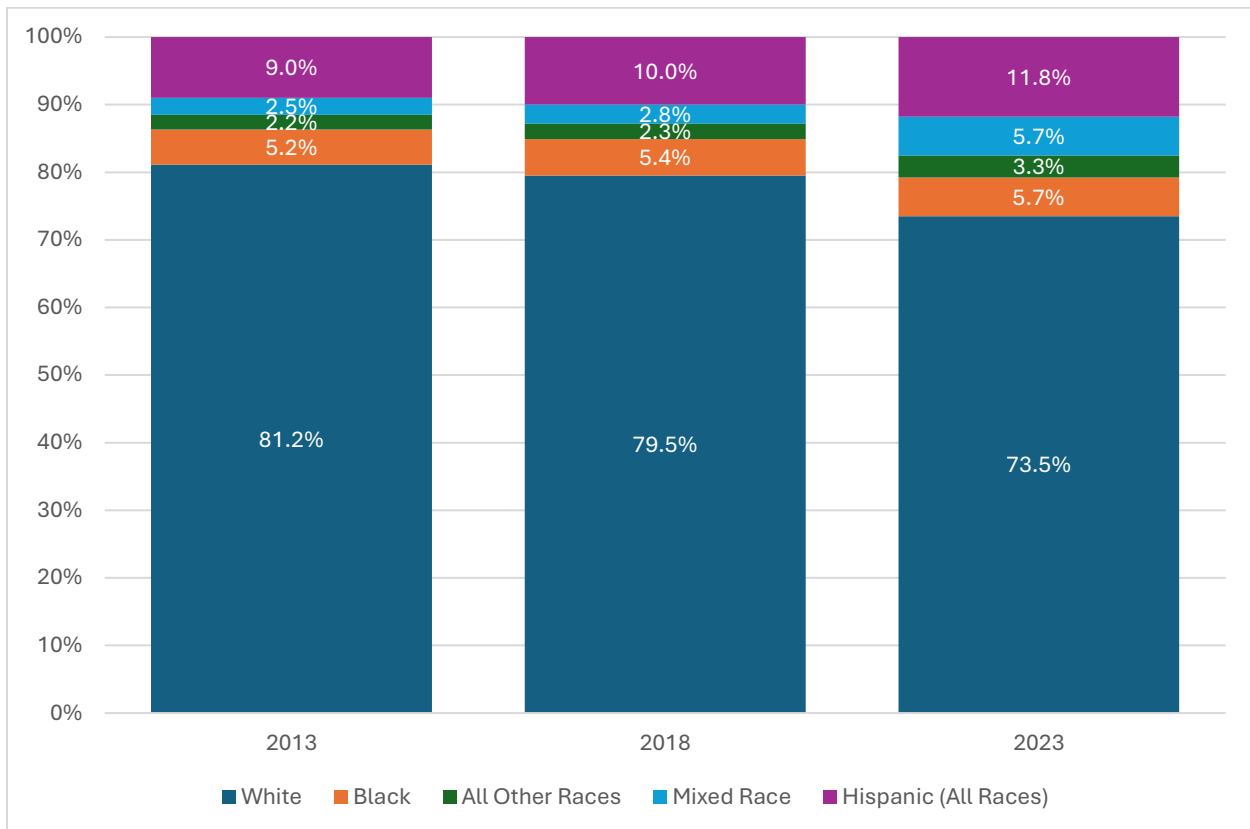
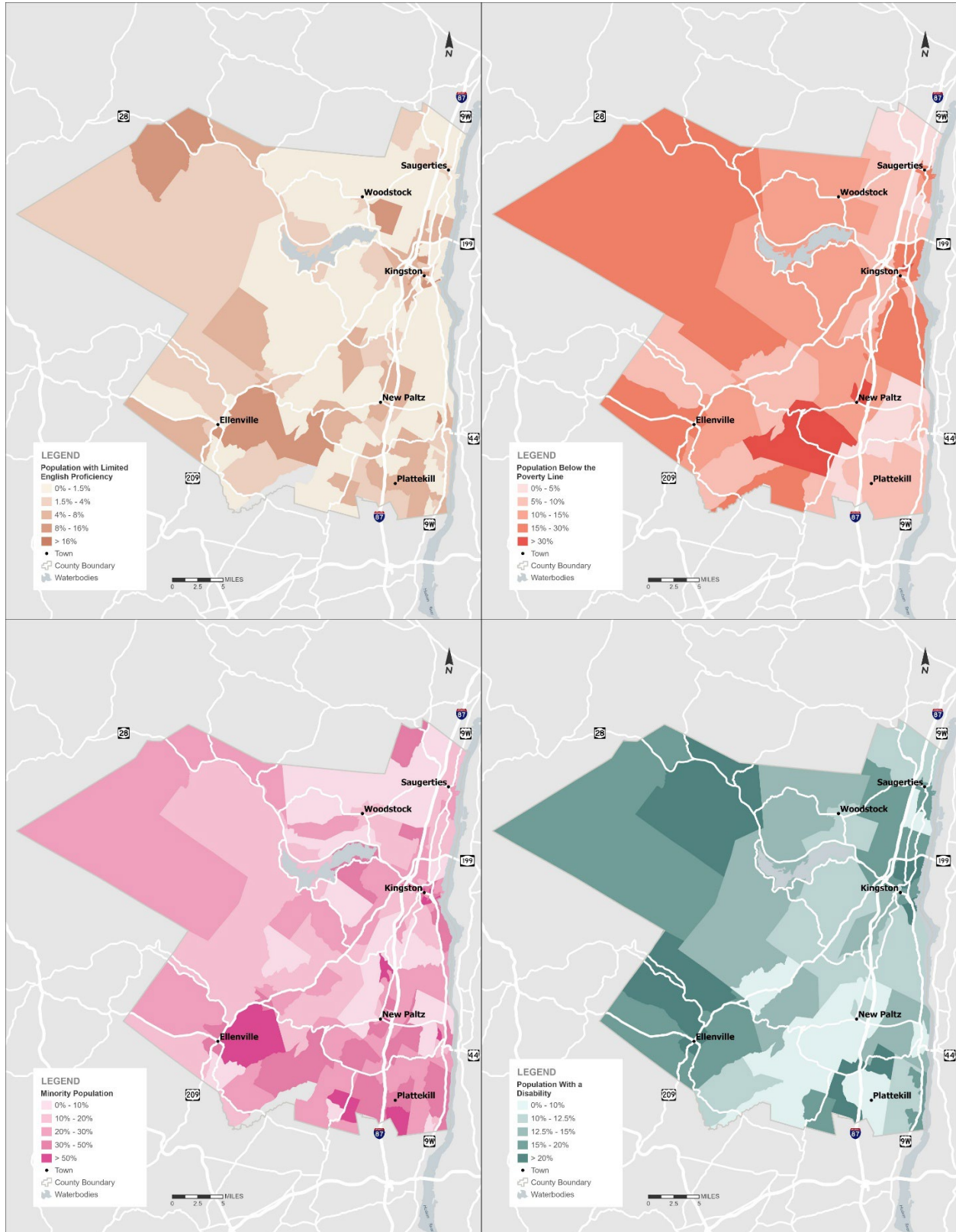
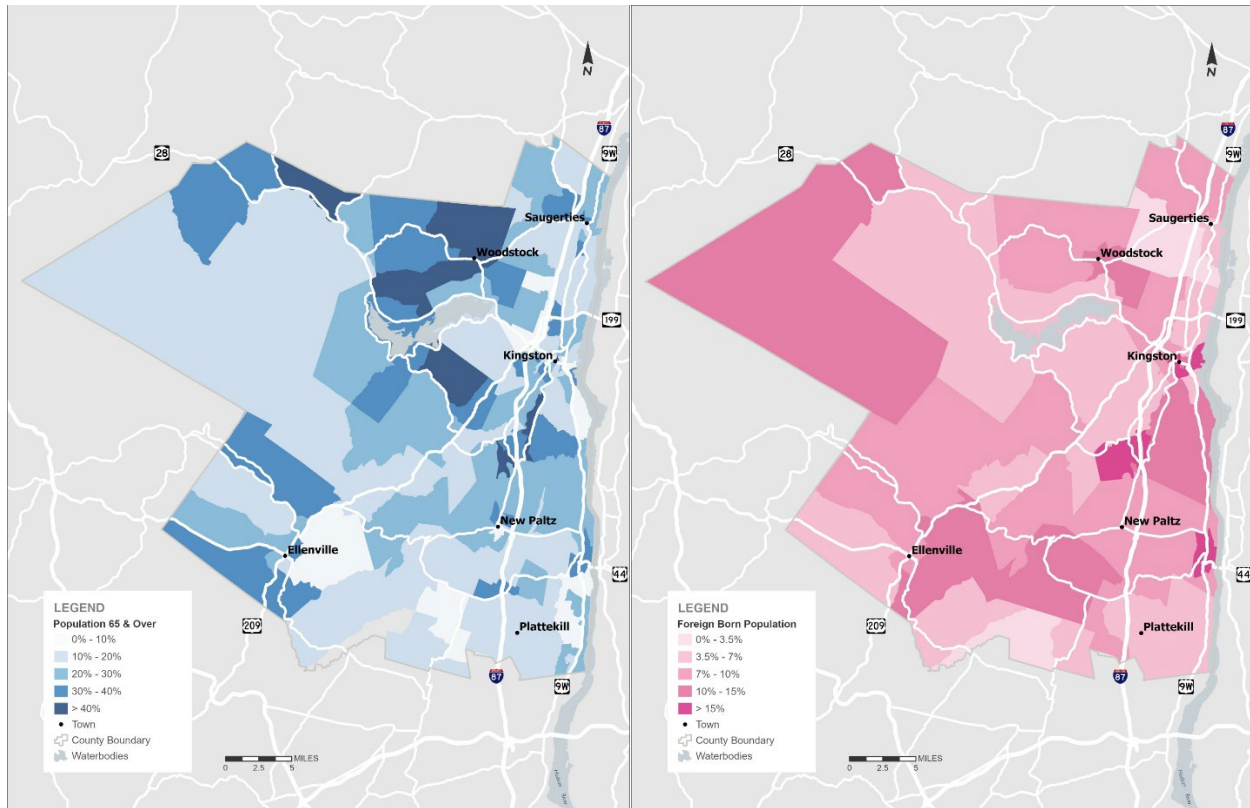


Figure 4.6: Demographic Make-Up by year: 2013, 2018, 2023 (% of Total Ulster County Population)^v

Figure 4.7: Groups Traditionally Under-Represented in the Transportation Planning Process by Location





LABOR AND EMPLOYMENT

The process of monitoring, managing and predicting future travel demand requires at a minimum basic details regarding local and regional employment patterns. The labor market of the United States in the 21st Century is as diverse as it has ever been in history, and it continues to evolve. This holds true for the labor market of Ulster County, which continues to adjust to the demands of the new economy. Peak period travel demand – a primary benchmark by which we rate the transportation system – is largely dictated by the morning and evening commute of workers traveling to and from their places of employment. This trend has been lessening somewhat in the post-COVID era as the labor market continues to diversify into one that features more flexible hours of employment, jobs that are no longer anchored to the traditional office space, and a willingness and ability of workers to travel farther for employment.

According to the Federal Reserve of New York:

“Employment has been essentially flat in the years leading up to the pandemic and has remained about 5 percent below pre-pandemic levels during 2022. The professional and business services industry has been the main driver of job growth in recent years, and the leisure and hospitality sector has also outperformed somewhat, as the area is within a day trip from New York City and includes part of the Catskill Mountains, with its parks, resorts, and nature activities.”^{vi}

Table 4.1: Labor and Employment Snapshot of Ulster County^{vii}

Category	Jan 2018	Jan 2023	Jan 2025
Resident Civilian Labor Force	87,400	85,000	86,200
Employed	83,000	81,900	82,800
Unemployed	4,400	3,100	3,400
Kingston MSA Unemployment Rate	5.1%	3.7%	4.0%
NYS Unemployment Rate	4.9%	4.4%	4.6%
US Unemployment Rate	4.0%	3.5%	4.0%

Unemployment rate in the Kingston Metropolitan Statistical Area (MSA), which includes the entirety of Ulster County, remains below the state rate and has continued to improve since the pandemic. Concurrently, however, the County's labor force has decreased slightly since 2018, very likely a result of out-migration as well as from retirements as people age and chronically-unemployed workers permanently dropping out of the labor force. Table 4.1 shows the most recent snapshot of labor data for the County and how it compares to statewide and national trends. As shown, the unemployment rate in Ulster County has decreased more since 2018 when compared to New York State and US unemployment rates, but remains in line with the national average.

As described by the New York State Department of Labor (DOL) in their monthly labor profile for the Hudson Valley, for the 12-month period ending in January 2025, private sector employment in the Hudson Valley increased by 15,200 or 1.9 percent, to 819,000. DOL confirms that private sector job growth continues on a positive trend, with steady growth in private education and health services driving the growth. Leisure and hospitality is another industry experiencing strong job and wage growth.



Mohunk Mountain House is one of Ulster County's most iconic tourism destinations and one of the region's biggest service industry employers. Photo: MMH.

The Hudson Valley Region's January 2025 unemployment rate at 3.6 percent is lowest among the 10 Labor Market Regions in New York State, with the Capital Region (3.8 percent) and the Long Island Region (3.8 percent) close behind. For comparison within the Hudson Valley Region, the unemployment rate within the Kingston metro area was 4.0% in January 2025, compared to 4.1% in Sullivan County, 4.3% in the City of Poughkeepsie, 4.8% in the City of Middletown, and 5.1% in the City of Newburgh.^{viii}

Figure 4.8 provides a historical context of the labor force from 2005-2024. While the labor force has seen significant recovery from both the 2008 recession and the COVID-19 pandemic, it has been experiencing a long-term downward trend since its peak in 2010. Overall, Ulster County unemployment during this period has experienced a steady rate of decline outside of the sharp spike in 2020 due to the pandemic. The unemployment rate for the state of New York has closely tracked that of Ulster County with the exception of remaining slightly higher since the onset of the COVID-19 pandemic. The overall quality of jobs available in Ulster County continues to be a focus of Ulster County's economic development efforts.

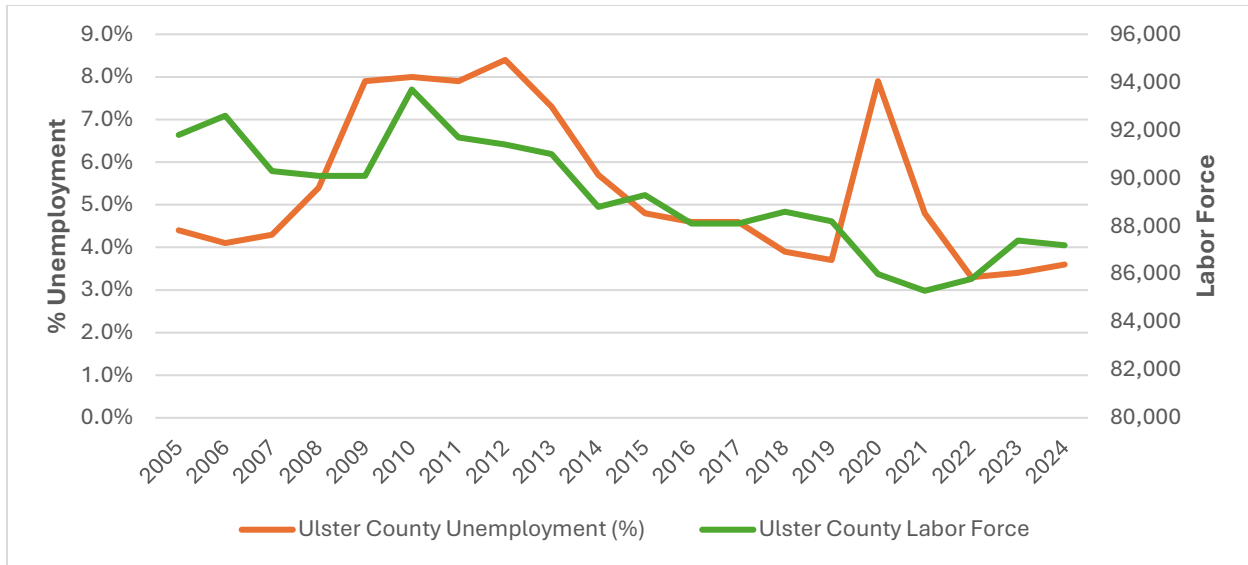


Figure 4.8: Ulster County Labor Force and Unemployment, 2005–2024^{ix}

In 2024 the DOL published its Significant Industries report for the Hudson Valley, providing a description of “priority industries” on which local workforce investment boards should concentrate their workforce development resources. Such significant industries were identified on the basis of job counts, wage levels, job growth (both net and percent) over the 2018-2023 period, and expected job growth based on industry employment projections through 2030. Priority industries that may have been designated by economic development or workforce development officials were also considered. Significant industries identified for the Hudson Valley are listed below:

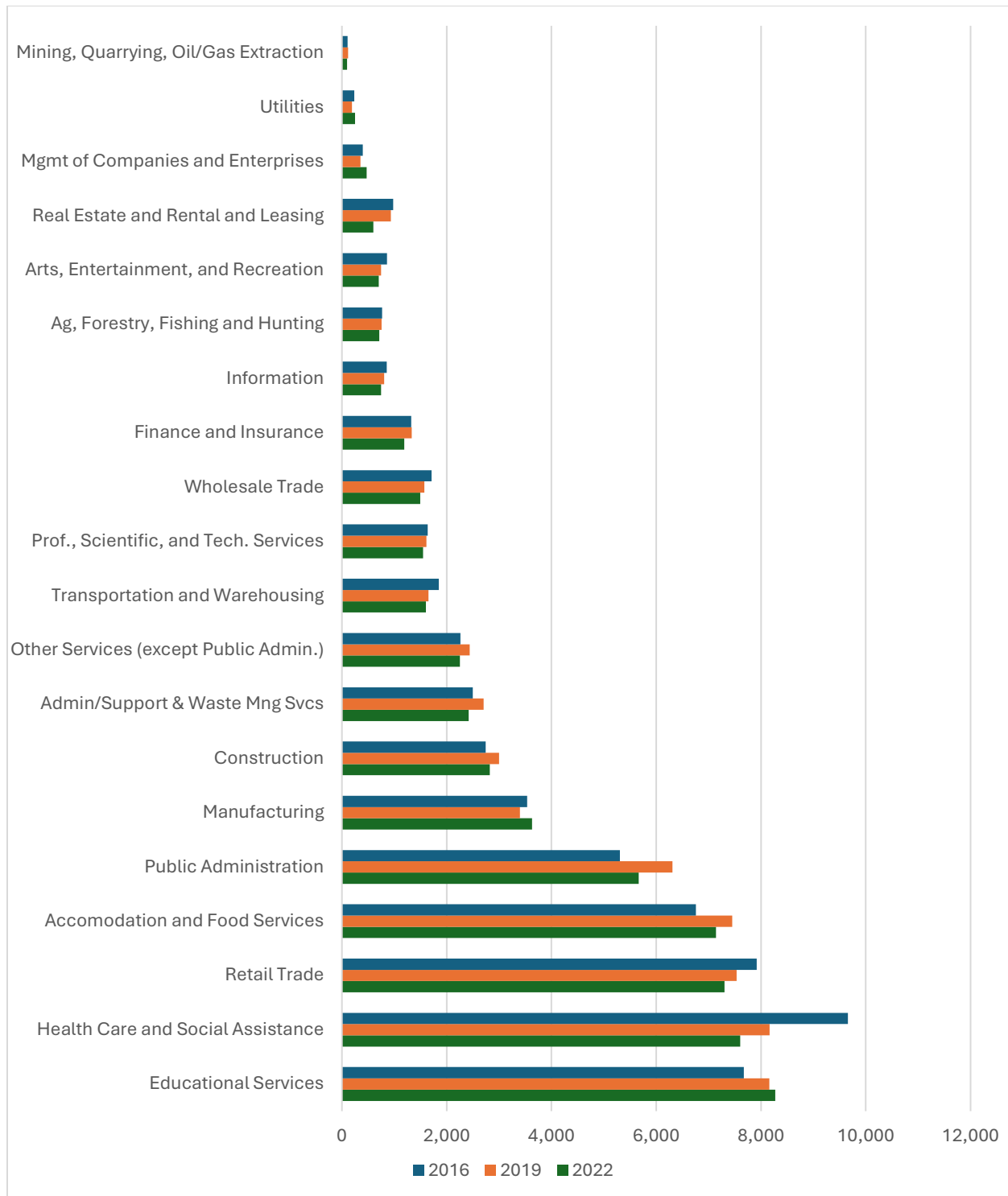
- Accommodation and Food Services:** Accommodation employment, specifically, has seen a decline of 21.4% between 2018 and 2023. However, this industry has seen an increase recently due to the influx of business travelers as well as a vibrant tourism industry. This includes active recreational destinations such as the expansive trail systems, state parks, and ski slopes. In 2022, direct visitor spending reached \$6.3 billion which represents a 20.3% increase from 2021. This industry is projected to grow by 98.3% by 2030. ^x
- Construction:** The pending retirement of the Baby Boomers will contribute to more job opportunities. Local developers are hoping to take advantage of a strong housing market that is partially driven by relatively low interest rates and out-of-town buyers that have been priced out of the New York City housing market.
- Manufacturing:** Job opportunities will arise from food manufacturing (NAICS Industry 311), chemical manufacturing (NAICS Industry 325), and computer and electronic product manufacturing (NAICS Industry 334) are the three manufacturing industries to make the significant industries list. Of the three, food manufacturing was the only industry to gain jobs between 2018 and 2023 — up 8.2%, adding 600 jobs.
- Transportation and Warehousing:** While not necessarily prominent industries in Ulster County, the region has grown as a transportation hub in large part because of its proximity to major highways, especially in Orange County.

- **Information:** The Hudson Valley has become an increasingly popular location for film and television production based on its proximity to New York City. Lionsgate has opened a \$100 million studio complex in Yonkers (Westchester County). A New York State Tax Credit Program has also played a role in cementing New York as one of the top locations for the film industry.
- **Professional and Business Services:** In recent months the sector has shown signs of a turnaround, as the industry has added 5,300 jobs between 2018 and 2023. As corporate profits gradually improve, so does the spending for these type of services, spurring a demand for office workers, computer specialists, engineers, accountants, lawyers and consultants.
- **Educational Services:** Largest employment base of any jobs sector, although area schools are likely to face layoffs in the coming years due to declining enrollment and budget cuts.
- **Health Care:** Demographic changes fueled a demand for nurses, home health aides, medical assistants and other health care specialists.
- **Arts, Amusement and Recreation:** The industry saw a decline of 1.9% between 2018 and 2023 losing about 300 jobs. This industry's average annual wage (\$40,000) was the lowest of all significant industries identified in 2023. However, the outlook for the industry is bright, as the number of jobs has been steadily increasing since 2020 and there is a swell of interest in the County's special events and recreational spaces.

The top employment sectors in Ulster County include Health Care and Social Services, Retail Trade, Accommodation and Food Services, Educational Services, and Public Administration. The sectors showing the most notable gains in total employment share over time include Educational Services and Manufacturing. Many of these industries are still recovering from the COVID-19 pandemic as shown in Figure 3.9 as the 2018 levels are often higher than 2023. However, industries such as Accommodation and Food Services are expected to continue to recover beyond pre-pandemic levels.

Of the top employers in Ulster County reported in 2020, the majority are concentrated in the greater Kingston area, but the county's two largest employers – SUNY New Paltz and Mohonk Mountain House – are located in the greater New Paltz area and together create approximately 3,700 jobs. By comparison, 37 large employers in the Kingston area in 2020 accounted for nearly 10,000 total jobs, while the Ellenville area reports only three firms or organizations that employ 200 people or more. When reviewed by industry classification, the areas of Health Care, Public Administration, Education, Accommodation & Food Services, and Retail account for 81% of the county's top employers, or just over 16,000 employees.

A number of notable pockets of employment can be found outside of the major employment centers. These typically include town centers and hamlets along state or county routes, such as Walkill, Napanoch, Kerhonkson, Marlborough, Boiceville, West Hurley/Woodstock, Rosendale and Saugerties. Locations of resorts can be seen in pockets of rural employment areas away from these centers.



Note: Most of this data comes from the Quarterly Census of Employment and Wages (QCEW). Some 2018 data were unavailable from QCEW data and were derived from the On the Map census tool. This includes 2018 data for Accommodation and Food Services, Educational Services, Admin/Support and Waste Management, Transportation and Warehousing, and Real Estate, Rental, and Leasing.

Figure 4.9: Ulster County Jobs by Industry Sector, 2018 & 2023^{xi}



HOUSING

The national housing market experienced a rapid expansion at the end of the 1990s, which continued through to 2005, but virtually all housing market indicators began to contract sharply around 2006 across the country due in part to the national housing and mortgage crisis. While the local housing market certainly suffered during the worst of the crisis between 2006 and 2008, it remained somewhat isolated from major “boom and bust” cycles seen in other parts of the United States. Existing single family home sales in Ulster County between 2011 and 2020 continued to increase as the economy continued to recover from the 2008 recession (Figure 4.11). A sharp decline was seen after the COVID-19 pandemic as home sales pulled back to mid-2010s levels due to increasingly rising sales prices and interest rates. The data shows a leveling out in 2024 as home sales increased slightly from 2023 after three straight years of sharp declines indicating an improvement. However, elevated sales prices remain challenging for residents, with the median sales price increasing by 47% between 2018 and 2023, from \$262,000 to \$385,000.

As it relates to the rental market, rental costs in Ulster County continue to outpace inflation and growth in median income. While in recent years, the growth in median income has begun increasing at a similar pace as the growth in median rent prices, the long-term trends of imbalance have resulted in renters being burdened by high housing costs. In 2023, 46% of Ulster County renters were housing-cost burdened, defined as paying 30% or more of their income on housing costs, while 26% of Ulster County renters were severely cost-burdened, defined as spending 50% or more on housing costs^{xiii}.

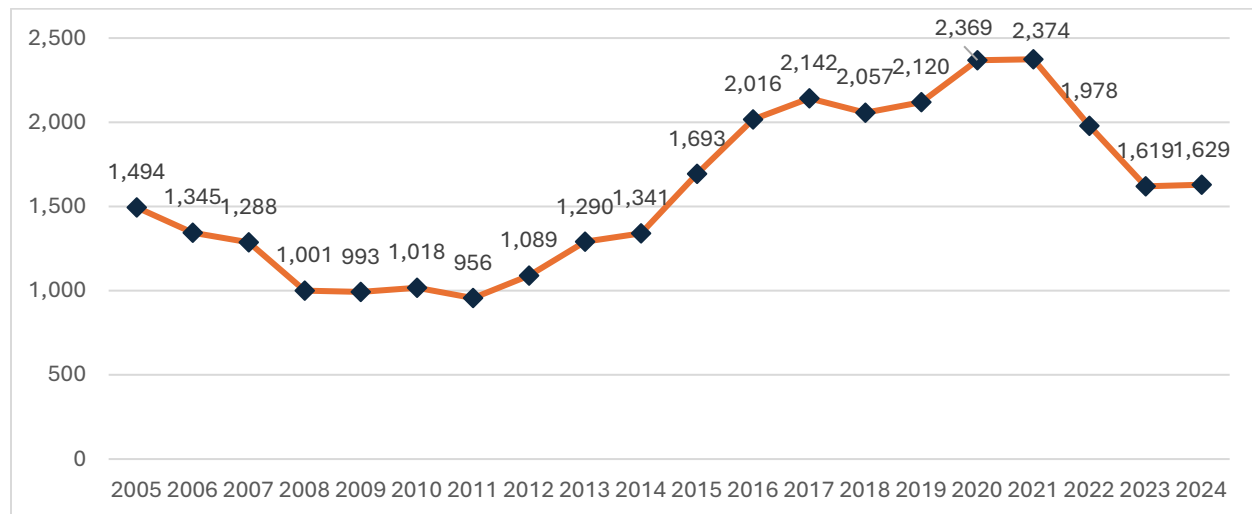


Figure 4.11: Annual Existing Single-Family Homes Sold in Ulster County, 2005-2024^{xiv}

There are a number of factors at the local and regional level that can affect the vacancy rate of an area, including new construction, labor market conditions, and median household income (which affects mobility). The reduction in household size and number of second homes contributes to the rather large increase in number of units as compared to the increase in population.

Vacancy status has long been used as a basic indicator of the housing market and provides information on the stability and quality of housing for certain areas. The data is used to assess the demand for housing, to identify housing turnover within areas, and to better understand the

population within the housing market over time. As shown in the table below, overall homeowner vacancy rate decreased to 1.7% in 2023, and rental vacancy decreased to 4.0% from 5.3% in 2018.

Table 4.2: Ulster County Housing and Occupancy, All Units, 2018-2023^{xv}

2018			2023		
#Units	Homeowner Vacancy Rate	Rental Vacancy Rate	#Units	Homeowner Vacancy Rate	Rental Vacancy Rate
84,874	2.0%	5.3%	86,178	1.7%	4.0%

ANTICIPATED NEW HOUSING AND COMMERCIAL DEVELOPMENTS IN ULSTER COUNTY

There are numerous “major” developments (defined here as exceeding 10,000 sq. feet) in Ulster County that are at various phases in the approval process. Although the ultimate construction of some of these projects remains questionable, the LRTP assumes that housing and commercial projects will be completed within their build-out forecasts and are within the LRTP’s planning horizon. Local traffic impacts resulting from major development projects are required to be addressed through the New York State Environmental Quality Review process; as such, no significant impacts to the transportation system in the immediate vicinity of the projects are anticipated. That said, regional traffic and transportation demand will grow if full build-out of the projects listed below is realized. This important factor is kept in mind as part of the traffic impact participation efforts of UCTC in the Ulster County referral process by using corridor growth percentages during the approval process. Implementation of system improvements is, however, difficult as the percent of traffic added by individual projects is usually only a small portion of the total traffic volume.

Table 4.3 includes a summary of the larger building projects (>10,000 square feet) currently being undertaken within the County along with the approximate amount of development anticipated. As shown, there’s a wide array of development types, with the majority of projects being residential or mixed-use in nature. The majority of new residential units are planned within the Town of Saugerties (1,003), the Town of Ulster (991), and the City of Kingston (689). Much of this residential development is part of two major projects: Winston Farm in Saugerties which includes 799 residential units, a 500-room hotel/resort, and a 250,000 square foot business park and Tech City East in Ulster, the former IBM Campus, which includes 880 residential units and over 625,000 square feet of industrial and commercial space.

Table 4.3: Anticipated Major Developments Pending or Underway in Ulster County^{xvi}

Type	Number of Projects Pending or Underway	Amount of Development
Commercial (Office/Retail)	8	102,500 square feet
Hotel/Lodging	9	732 hotel rooms/units
Industrial	4	890,500 square feet
Mixed Use (residential/hotel/commercial)	11	2,339 residential units; 532 hotel rooms/units; 949,000 square feet commercial space
Residential	23	2,270 residential units
Recreational	1	77,000 square feet

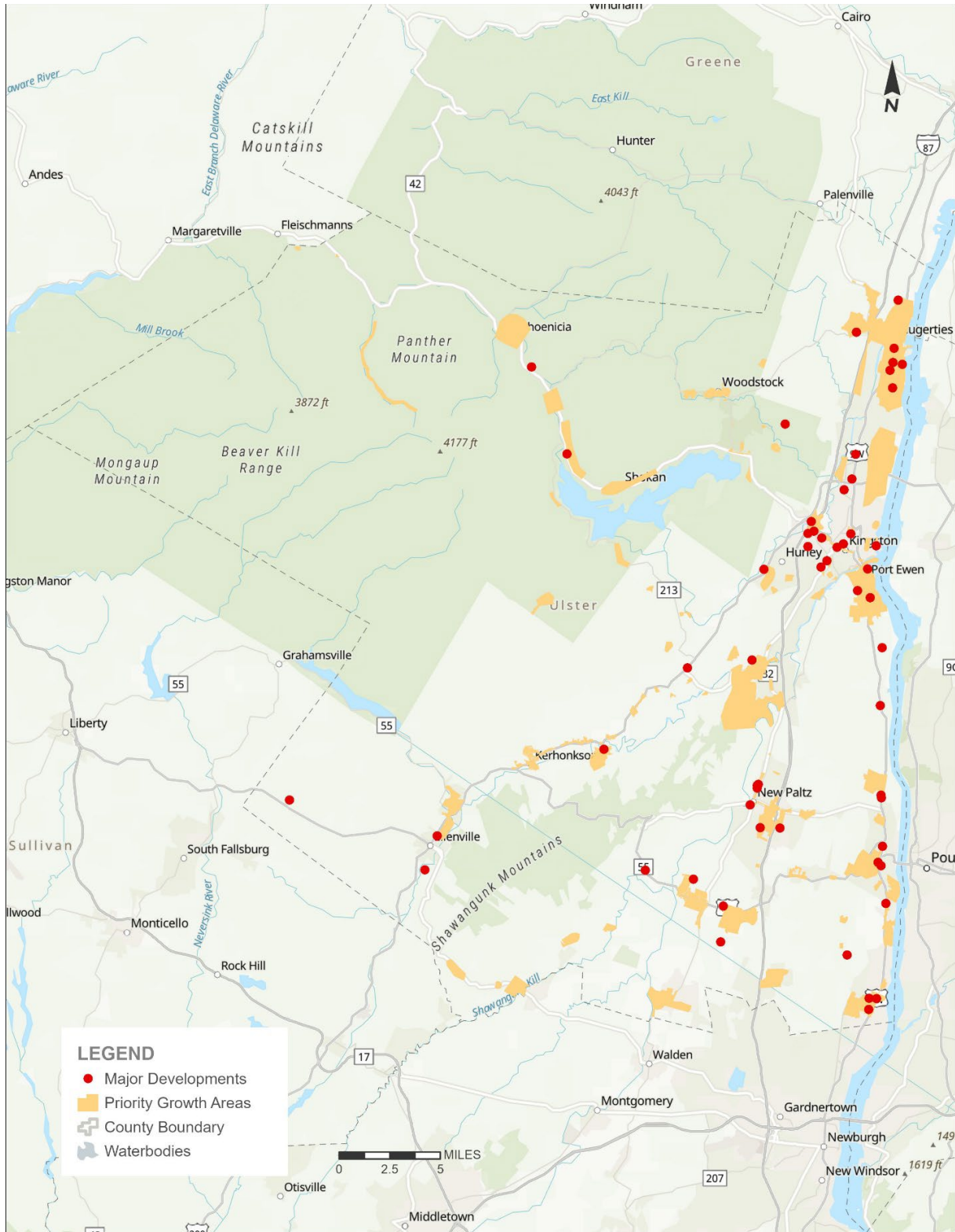


Figure 4.12: Anticipated Major Developments and Priority Growth Areas^{xvii}

ⁱ US Decennial Census of Population, Ulster County 100% count, Census year 2010 & 2018 ACS 5 Year Estimate. Figure 4.1 represents each municipality's percentage of the total absolute (both growth and decline) population change for all Ulster County municipalities, not simple decennial-year-to-decennial-year population change.

ⁱⁱ "Closed Schools, Open Minds." Hudson Valley Patterns for Progress. July 25, 2024. Online at <https://storymaps.arcgis.com/stories/e29e3bbf8d3442f99e1ae3570b52af9c>

ⁱⁱⁱ The term "Limited English Proficiency" is defined by the US Census Bureau as any person age 5 and older who reported speaking English "less than very well." Racial and ethnic minority populations are defined as: Asian American, Black or African American, Hispanic or Latino, Native Hawaiian and Other Pacific Islander, American Indian and Alaska Native.

^{iv} All demographic data derived from 2018 and 2023 US Census ACS 5 Year Estimates.

^v All demographic data derived from 2018 and 2023 US Census ACS 5 Year Estimates."All Others" category includes Asian, Native Hawaiian/Pacific Islander, American Indian/Native Alaskan, Other.

^{vi} "Local Area Conditions: Kingston Metro Area." Federal Reserve Bank of New York. Online at <https://www.newyorkfed.org/regional-economy/profiles/kingston> Last viewed 7/24/25.

^{vii} New York State Dept of Labor Labor Market Profile for the Kingston MSA, issued 1/28/25.

^{viii} NYSDOT. Local Area Unemployment Statistics (Not Seasonally Adjusted), January 2025 Labor Force Data – Hudson Valley.

^{ix} NYSDOL. Unemployment rates and labor force for Kingston MSA; all values are annual averages

^x Significant Industries. NYSDOL 2024. <https://dol.ny.gov/system/files/documents/2024/08/2024-significant-industries-hudson-valley.pdf>

^{xi} Quarterly Workforce Indicators (QWI) Data. U.S. Census Bureau. 2023. Quarterly Workforce Indicators Data. Longitudinal-Employer Household Dynamics Program <http://lehd.ces.census.gov/data/#qwi>. Data represents annual quarterly averages. On-The-Map data was used for the Accommodation and Food Services, Educational Services, Admin/Support & Waster Mng Svcs, Transportation and Warehousing, and Real Estate and Rental and Leasing 2018 data as this was unavailable from the QWI dataset.

^{xii} NYSDOT System Performance & Asset Management Bureau; infogroup.com business point data for establishments with 10 or more employees. 2019. Infogroup data are used under license agreement with NYSDOT. Longitudinal-Employer Household Dynamics Program. U.S. Census Bureau. 2022. OnTheMap Application. <http://onthemap.ces.census.gov/>

^{xiii} 2023 Ulster County Rental Housing Survey

^{xiv} New York State Association of Realtors Annual Existing Single-Family Homes Sold.

^{xv} US Census American Community Survey 5-Year Estimates - 2018 & 2023, Housing Characteristics, Ulster County, New York State (Table CP04).

^{xvi} Source: Ulster County Planning Department

^{xvii} Source: Ulster County Planning Department

5. THE TRANSPORTATION SYSTEM

The regional profile in Section 4 describes Ulster County as a place, its people, and its businesses. The transportation system exists to serve the travel needs of these people and businesses.

This section provides a summary of the modes that collectively comprise the Ulster County transportation system including highways and streets, transit operations, and facilities for non-motorized travel. This section describes the division of travel among these modes, existing safety related issues system wide, and freight movement across highways, railroads, waterways, and pipelines.

HIGHWAY SYSTEM

Roadway Classification and Jurisdiction

Functional classification is a well-established system utilized by the Federal Highway Administration (FHWA) for grouping streets and highways into classes based on roadway characteristics and intended services. Basic to this process is the recognition that individual roads and streets cannot serve travel independently; rather, most travel involves movement through a network of roads. Thus, it is necessary to determine how to channelize travel within the network in a logical and efficient manner. Functional classification defines the extent to which roadways provide for through-travel versus the extent to which they provide access to land parcels. An interstate highway provides service exclusively for through-travel, while a local street is used exclusively for land access. Figure 5.1 illustrates the functional classification system. Figure 5.2 illustrates the Ulster County highway system by functional classification. Each roadway has a classification based on its location, access, and capacity characteristics.

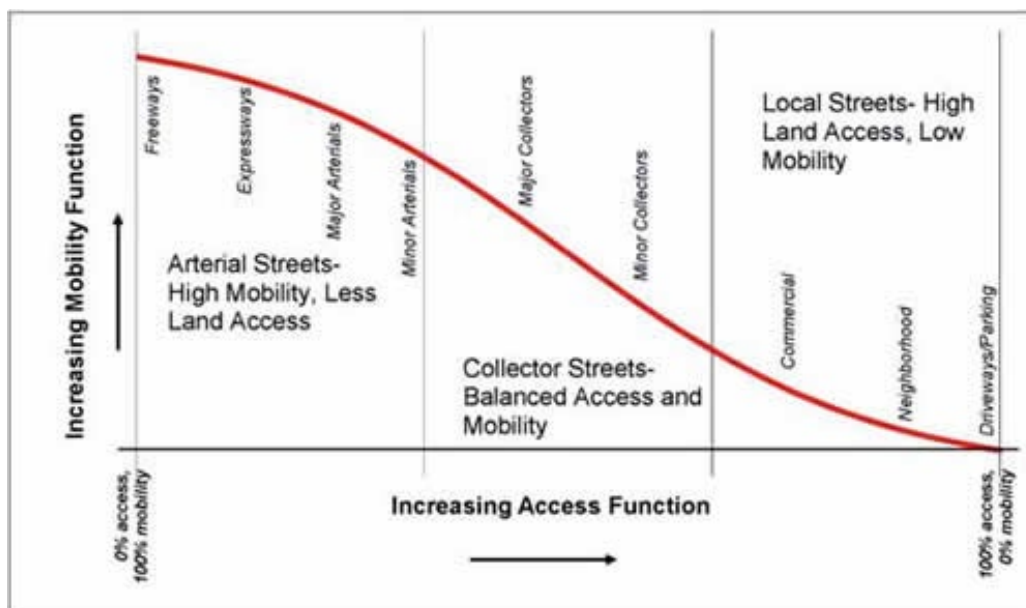


Figure 5.1: Functional Classification of Roadways Source: FHWA

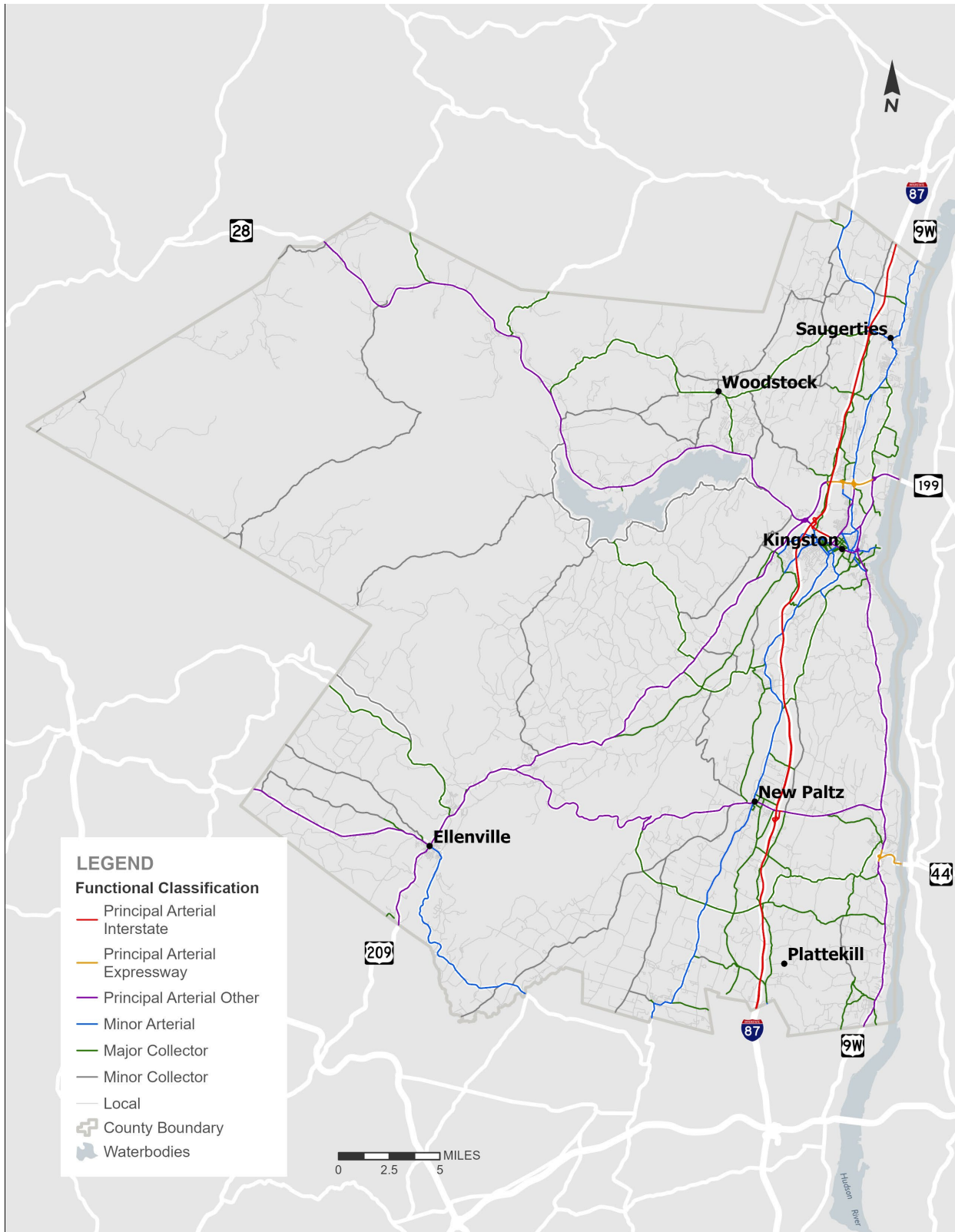


Figure 5.2: Ulster County Roadway Functional Classifications

The majority (nearly 70%) of roads in UCTC's MPA are local roads, with about 45% designated as rural local and about 25% designated as urban local. Interstates comprise nearly 4% of the centerline miles, while other principal arterials comprise about 6% of centerline miles. There are more rural centerline miles (approximately 60%) than urban centerline miles (approximately 40%) in the road system, which is a reflection of the rural land mass compared to urban developed land. Table 5.1 provides a breakdown of UCTC's MPA centerline mileage by functional classification. It is important to note that Rural Local streets which are not eligible for federal funds make up about 45% of the UCTC's road mileage.

Table 5.1: Centerline Mileage by Functional Classificationⁱ

Funct. Class.	Description	Centerline Miles	Percentage
1	Rural Principal Arterial Interstate	7	0.3%
4	Rural Principal Arterial Other	71	2.9%
6	Rural Minor Arterial	19	0.8%
7	Rural Major Collector	73	3.0%
8	Rural Minor Collector	194	7.9%
9	Rural Local	1,099	44.7%
11	Urban Principal Arterial Interstate	84	3.4%
12	Urban Principal Arterial Expressway	10	0.4%
14	Urban Principal Arterial Other	74	3.0%
16	Urban Minor Arterial	64	2.6%
17	Urban Major Collector	146	5.9%
18	Urban Minor Collector	14	0.6%
19	Urban Local	603	24.5%
Total		2,456	100.0%

NYSDOT, the New York State Thruway Authority (NYSTA), Ulster County, the City of Kingston, towns, and villages are responsible for maintaining and operating roadway facilities in Ulster County. The functional classification described above assists in allocating resources and investment for roadways across these agencies.

Table 5.2 summarizes the mileage and percentage of roadways by their respective jurisdiction. Over half (57%) of the roadway centerline miles in UCTC's MPA fall under the jurisdiction of towns. About 17% are county owned roads, 13% are within NYSDOT's responsibility, 5% are city or village-owned, 4% are NYS Thruway, and 4% fall under the category of "other", which consists of: Public – Unclaimed, Other local agencies, Other state agencies, Private or Restricted Access, Local Service, Local Parks, Other Public Instrumentality, Public Restricted, Other Toll Authority, State Parks, Army, Bureau of Fish and Wildlife, and Missing.

Table 5.2: Centerline Mileage by Maintenance Jurisdictionⁱⁱ

Maintenance Jurisdiction	Centerline Miles	Percentage
Town	1,404	57%
County	424	17%
NYSDOT	307	13%
City or village	124	5%
NYS Thruway	89	4%
Other	108	4%
Total	2,456	100%

Functional class and jurisdiction are important not only in relation to operational and maintenance responsibility, but also in how roadway improvement projects can be funded. Funding eligibility limitations include:

- FHWA National Highway Performance Program (NHPP) funds can be used only on the National Highway System (NHS), which comprises the Interstates, all other Principal Arterials, and all designated NHS Connectors.
- FHWA Surface Transportation Program Block Grant program (STPBG) funds can be used on any facility except Local Roads and Rural Minor Collectors, thereby excluding over 77 percent of roads in UCTC's MPA.
- FHWA Highway Safety Improvement Program (HSIP) funds can be used to address safety problems on any public road.
- New York State Dedicated funds can be used only on State owned facilities.
- The Thruway Authority uses toll revenue to maintain its facilities on a self-sustaining basis.

Roadway Asset Condition

Keeping infrastructure in a state of good repair is a central function of transportation agencies. In the case of roadways, this Plan focuses on the condition of pavement and bridges.

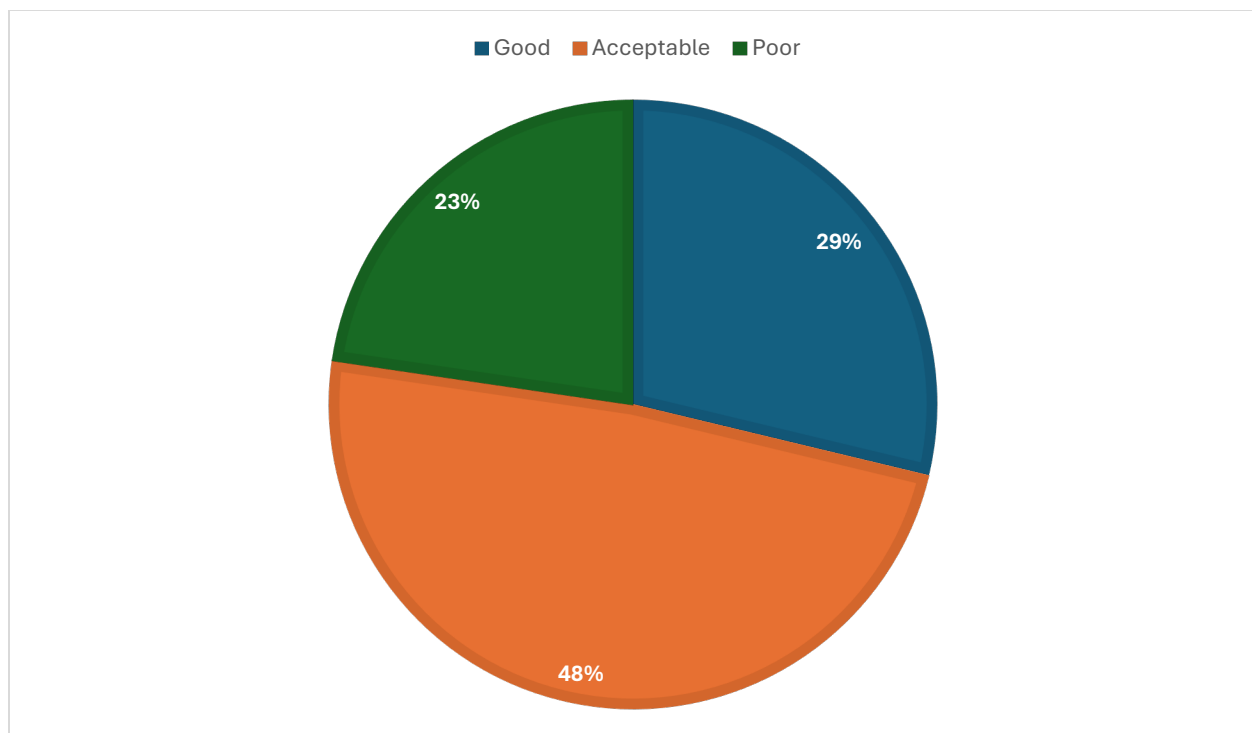
Pavement condition is measured in two ways in New York. The first is surface condition, as measured through a visual scoring methodology. This method has been in place for many years and provides valuable information on underlying pavement problems. The second measure is rideability, as measured by the International Roughness Index (IRI). This is a more user-based metric. NYSDOT typically uses both methods to evaluate State highway system pavements as well as other federal-aid eligible roadways under local jurisdiction. The most recent pavement data does not include visual pavement scoring and only includes IRI condition rating.

The IRI is determined by measuring the collective deviation from a smooth level surface in inches per mile. According to FHWA, an IRI of less than 95 inches/mile is considered "good ride quality" while an IRI between 96 and 170 inches/mile is considered "acceptable ride quality". Anything exceeding 170 inches/mile is "Unacceptable".

Table 5.3 summarizes IRI by functional classification for those roadways in Ulster County that have been evaluated by NYSDOT. While the percent Unacceptable is very small except for rural collector roads, of greater concern is the percent Acceptable. NYSDOT's "Preservation First" approach to asset management is focused on these pavements, where less expensive pavement treatments can move the rating to Good, and more importantly extend the service life of the roadway for a number of years. Figure 5.3 shows that with about 49% of all measured road segments rated Acceptable, NYSDOT and UCTC have a significant challenge in the coming years to maintain those facilities.

Table 5.3: 2023 International Roughness Index (IRI) by Functional Classification

Functional Class.	Centerline Miles Scored		Good		Acceptable		Unacceptable	
	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>
Interstate	6.66	76.42	49%	67%	48%	28%	3%	5%
Expressway/Freeway	0.00	6.16	N/A	41%	N/A	34%	N/A	25%
Principal Arterials	77.03	70.58	29%	33%	55%	43%	16%	24%
Minor Arterials	19.39	61.16	25%	15%	56%	53%	19%	32%
Collectors	102.15	164.76	22%	18%	47%	56%	31%	26%
Totals	205.23	379.08	25%	31%	51%	47%	24%	22%

**Figure 5.3: IRI Summaries, 2023**



Bridge Ownership

Bridges provide necessary linkages across geographic or manmade barriers in the roadway network. A bridge that is not structurally sound and must be closed or load-posted creates a situation where all traffic, or just trucks, must detour. A bridge that is functionally obsolete in terms of narrow lanes can create a bottleneck, while one that has insufficient vertical clearance again results in truck detours.

The Ulster County transportation system includes 393 functional bridges; 39% are county-owned structures, 28% are NYSDOT-owned structures, and 20% are locally-owned. The majority of bridges are classified as local rural facilities in townships, meaning these are generally smaller bridge structures carrying low volumes of traffic.

Bridge Condition

Federal law requires that all bridges be inspected biennially; those that have specific structural problems may require more frequent inspections. Inspections include evaluation and rating of numerous elements of the substructure, superstructure, and deck, with special attention paid to fracture-critical members. Underwater inspections occur no less than every 5 years to check for scour around bridge piers.

As part of the National Bridge Inventory (NBI), four key bridge components are assessed and scored: deck, superstructure, substructure, and culverts. This data is then reported back to FHWA on a regular basis. These components are rated on a 1-9 scale with a score greater than 7 being good, a 5 or 6 rated fair, and less than or equal to 4 being poor or structurally deficient. The lowest rating of the four components determines what condition a bridge is rated. Bridges in good condition suggest a newer or well-maintained bridge with no major investment needed. Bridges in poor or structurally deficient are safe to drive on but are reaching a point where substantial reconstruction or even replacement may be needed.

Table 5.4 and Table 5.5 summarize Ulster County bridges by owner and condition, based on scores reported by FHWA. Current data suggests that the majority of bridges in the Ulster system are in a reliable state of repair, with the percent in good condition increasing over the past 5 years. However, consistent with the previous LRTP update, just under one out of every four bridges in the county are Poor or Structurally Deficient, indicating that there are many structures for which improvement will be necessary to ensure continued access and safety on the transportation system. Figure 5.5 illustrates the locations and ratings of bridges.

Table 5.4: Ulster County Bridges by Owner

Municipality	City	Ulster County	NYC Water Supply	NYS Bridge Authority	NYS Thruway Authority	NYS DOT	State-Other	Town	Village	Authority/Commission	Grand Total
Denning (Town)		19						2			21
Ellenville (Village)		1				5			3		9
Esopus (Town)		3			1	4		4			12
Gardiner (Town)		6				3		3			12
Hardenburgh (Town)		14						8			22
Hurley (Town)		1				1					2
Kingston (City)	1				4	6					11
Kingston (Town)		2									2
Lloyd (Town)		3		2		4	1	3			13
Marbletown (Town)		6	2			2		1			11
Marlborough (Town)						1					1
New Paltz (Town)		1			4	1		1			7
New Paltz (Village)									1		1
Olive (Town)		6	7					1			14
Plattekill (Town)					2	1		1			4
Rochester (Town)		21				4		9			34
Rosendale (Town)		3			5	4					12
Saugerties (Town)		12			5	4		4			25
Saugerties (Village)						2					2
Shandaken (Town)		25				18	1	22		1	67
Shawangunk (Town)		10				3		6			19
Ulster (Town)		3			8	19					30
Wawarsing (Town)		11	1			14		6			31
Woodstock (Town)		6				15		7			28
Grand Total	1	152	10	2	29	111	2	78	4	1	390

Table 5.5: Ulster County Bridges by Owner, Condition, and Sufficiency Rating

Owner	#of Bridges	Good	Fair	% Structurally Deficient
City of Kingston	1	100%	0%	0%
Ulster County	154	16%	57%	27%
NYC Water Supply	10	40%	30%	30%
NYS Bridge Authority	3	0%	100%	0%
NYS Thruway Authority	29	14%	62%	24%
NYS DOT	111	26%	60%	14%
State-Other	2	50%	50%	0%
Town	75	24%	45%	31%
Village	4	25%	25%	50%
Authority or Commission - Other	1	100%	0%	0%
Total	390	21%	55%	24%

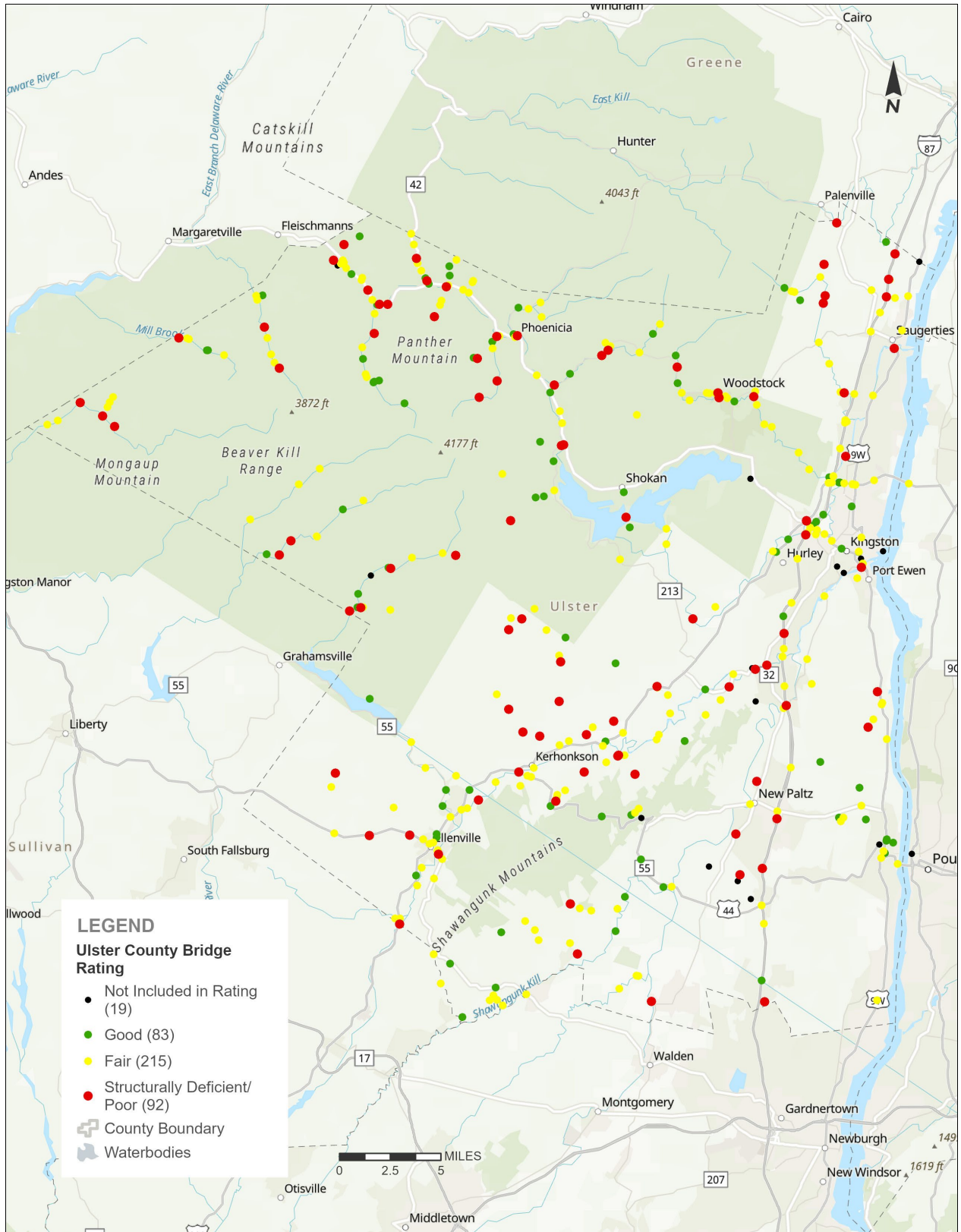


Figure 5.5: Ulster County Bridge Conditions (2023)

As shown in Figure 5.6, Ulster County owns almost half of the structurally deficient bridges in the county, contributing to the fact that 73% of structurally deficient bridges are owned by local governments. This is not unusual and is a consequence of the cost of major bridge projects combined with the limited options local governments have to pay for them, as well as staffing shortages. That said, Ulster County has two bridge superstructure replacements ~~stated for 2025 as well as~~ and five bridge repair projects ~~slated within the next few years~~.

While the rehabilitation and replacement of structurally deficient bridges is a key issue within the County and must continue to be addressed, Ulster County also aims to prolong the service life of bridges that are currently in good and fair condition through the use of bridge preservation programs. These programs allocate funds into cyclical maintenance activities such as bridge washing and deck sealing, delaying more costly repair, rehabilitation or replacement projects. These types of programs have been successfully implemented in other regions of New York State and nationally, with the City of Rochester noting that the condition of city-owned bridges has “improved dramatically” since it initiated its maintenance program in 1981.ⁱⁱⁱ

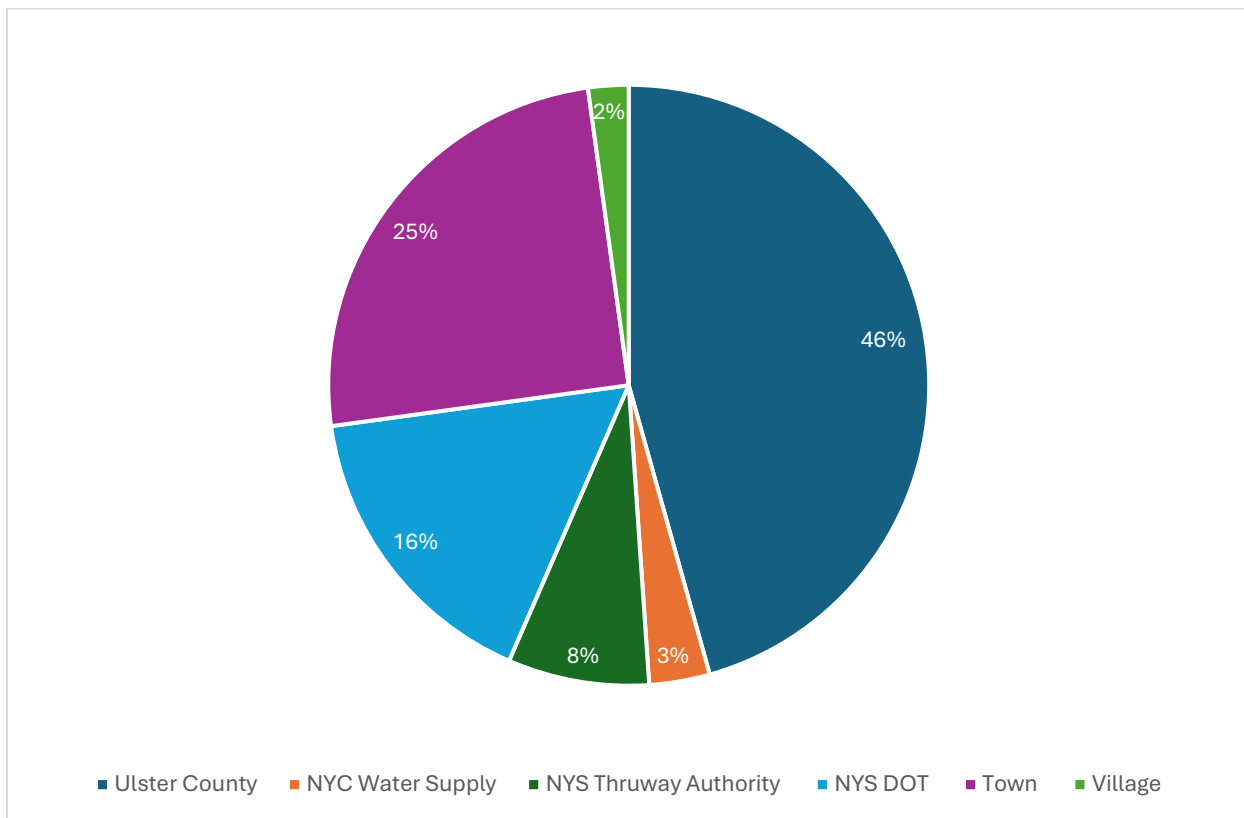


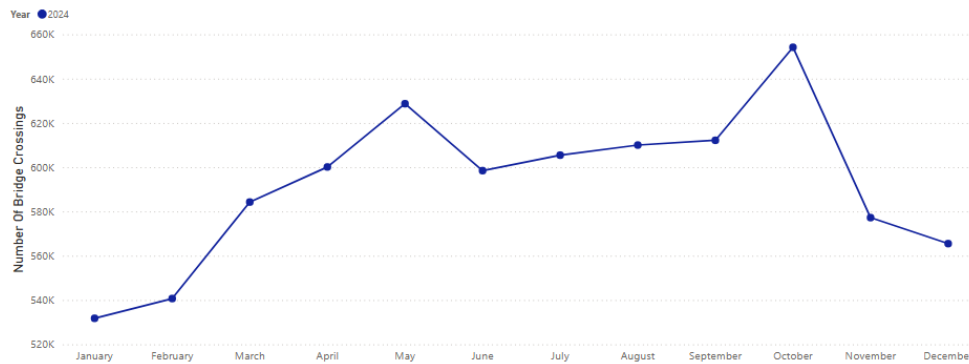
Figure 5.6: Structurally Deficient Bridges by Owner

Crossing the Hudson River

The New York State Bridge Authority monitors traffic and safety data for the Mid-Hudson Bridge and Kingston-Rhinecliff Bridge – two key bridges providing connections across the Hudson River. The following summarizes key findings from this data:

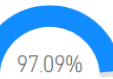
- Bridges saw crossing lows in 2020 caused by the pandemic – by 2024 activity increased by 20%
- In 2024, both bridges experiences saw 97% passenger vehicles and 3% commercial vehicles
- October consistently sees the highest activity and recently, May is also observed to be a seasonal peak
- Pedestrian usage is highest in summer months (5 - 10x over January usage)

Eastbound Crossings - Mid-Hudson - 2024 - All Months

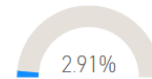


7,108,502
Bridge Crossings

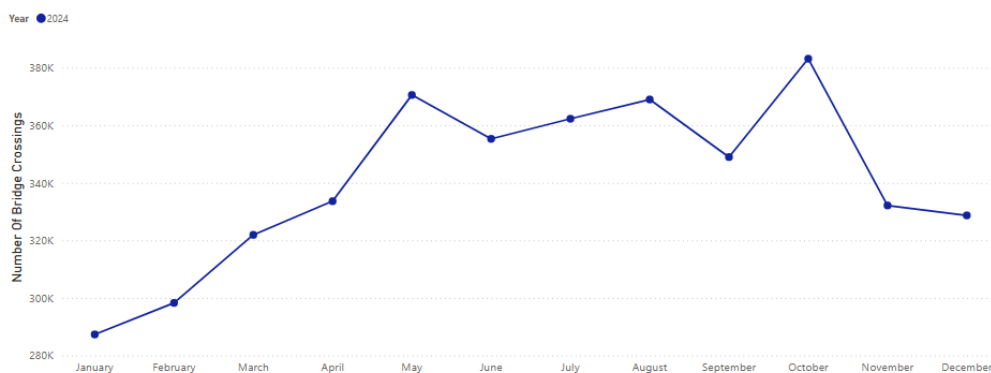
6,901,797
Passenger Crossings



206,705
Commercial Crossings

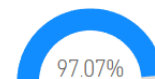


Eastbound Crossings - Kingston-Rhinecliff - 2024 - All Months

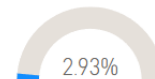


4,091,195
Bridge Crossings

3,971,428
Passenger Crossings



119,767
Commercial Crossings



Source: New York State Bridge Authority

Intersection Traffic Control

Traffic signals are a key element of traffic control. Their location and timing affect the mobility of vehicles and pedestrians. National studies demonstrate that poorly timed traffic signals are responsible for a significant proportion of urban traffic congestion. Signal timing that does not allow sufficient time for pedestrians to cross a street can contribute to safety problems and act as a barrier to walking. The Manual on Uniform Traffic Control Devices (MUTCD) establishes minimum warrants that are to be met for installation of a signal, and for designation of exclusive turn lanes and movements.

To that end, in 2019, working under the guidance of Creighton Manning Engineering (CME), UCTC conducted a systemic evaluation of traffic conditions associated with 12 signalized intersections suspected to no longer meet the minimum traffic and safety warrants. The primary objective was to evaluate traffic conditions at the locations and strategize appropriate measures for optimizing operations and safety for pedestrians, cyclists and the driving public. Removing unnecessary signals and substituting them with more appropriate regulatory and safety features (such as stop signs, warning lights, improved crosswalks and lighting, curb bump-outs, and other engineering improvements) was considered. Of the 12 locations evaluated, 11 were found to not meet any of the criteria required for a traffic signal to be installed. The City of Kingston Department of Public Works has since removed the outdated and unwarranted signals and will monitor each location to ensure safe and efficient traffic operations.

In addition to evaluating the necessity of traffic signals, the City of Kingston has made strides to improve the efficiency and safety of existing traffic signals. As part of the recently completed Broadway Streetscape Project, traffic signals were optimized and coordinated to improve transit and vehicular traffic flow from St James Street to Foxhall Avenue and Leading Pedestrian Intervals were implanted to improve pedestrian safety.

Additionally, NYSDOT has a statewide Signals Laboratory which evaluates emerging signals technology and is available to support NYSDOT regions in rolling out advanced signals technologies as part of statewide deployment. NYSDOT Region 8 staff have identified several corridors for traffic signal modernization and coordination, including Ulster Avenue and Route 9W in the Town of Ulster.

Leading Pedestrian Intervals

Leading pedestrian intervals, or LPIs, give pedestrians the opportunity to enter the crosswalk at an intersection before vehicles are given the green light. Typically, this interval is 3 to 7 seconds and allows pedestrians the opportunity to better establish their presences in a crosswalk before vehicles begin making turns. This treatment, which increases the visibility of pedestrians and the likelihood of vehicles yielding to pedestrians, has been shown to reduce pedestrian-vehicle crashes at intersections by 13%.

In some instances, traffic signals can improve the operational safety of an intersection. In 2019, UCTC's Road Safety Plan identified the intersection of US 44/55 and Brunswick Road (County Rt 7) in the Town of Gardiner as the top-ranked intersection from the network screening process based on crash rates and severity. Stakeholders and members of the project advisory committee ranked this location as a "high" priority. The treatments recommended combined feedback and benefit-cost comparison using the expected crash rate for an intersection of its type. Utilizing this

information, UCTC Chair and County Executive, along with local leaders, requested the installation of a new traffic signal, which was then programmed on the UCTC Transportation Improvement Program for implementation by NYSDOT Region 8. That project was constructed and activated in 2024, much to the delight of area residents.

Beyond traffic signals, Ulster County has been actively incorporating roundabouts into its infrastructure plans to address traffic flow and safety issues. Roundabouts can also be an effective way to address and simplify complex intersection configurations, such as the intersection of I-587, Broadway and Albany Avenue.

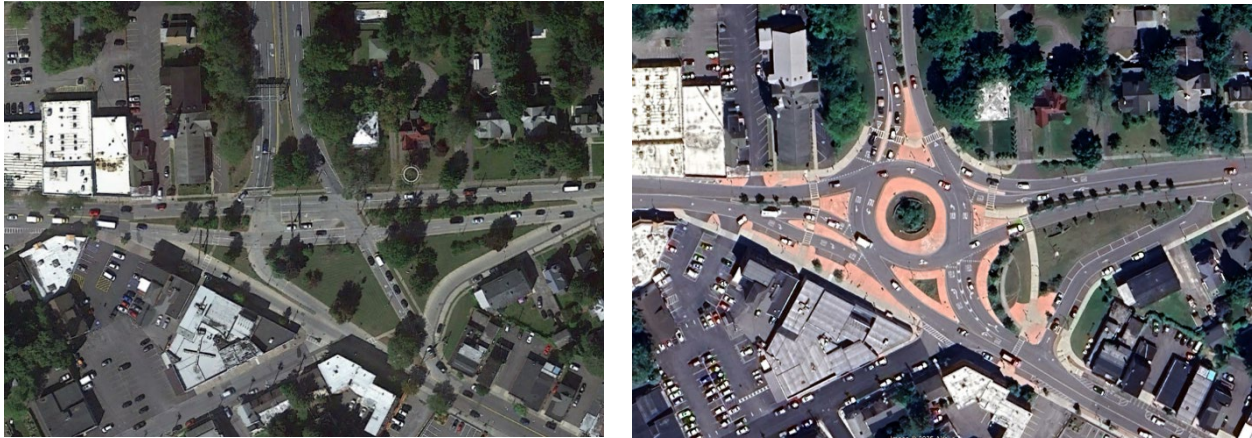


Figure 5.7: I-587, Broadway, and Albany Avenue – Before and After

TRAVEL ON THE ROADWAY SYSTEM

Critical Corridors

One way to view the roadway system is in terms of corridors. Critical corridors are those that serve major population centers including future growth areas; carry higher volumes of through traffic; carry higher volumes of freight movement; and serve primary economic generators, including recreational venues as well as traditional businesses. Ulster County's critical corridors include I-87 (NYS Thruway), I-587, US 9, US 209, NY 28, and NY 299 as illustrated in Figure 5.8. Figure 5.9 illustrates the variation in volume on critical corridors over time. Most volumes fluctuate similarly throughout the 2009 to 2019 timeframe, although volumes along SR 28 and US 209 decreased more precipitously in 2018 and volumes along SR 299 dipped in 2019. Consistent with national trends, volumes along all critical corridors observed a major decline in 2020 concurrent with the COVID-19 pandemic. By 2023, all critical corridors had bounced back to 2019 traffic levels.

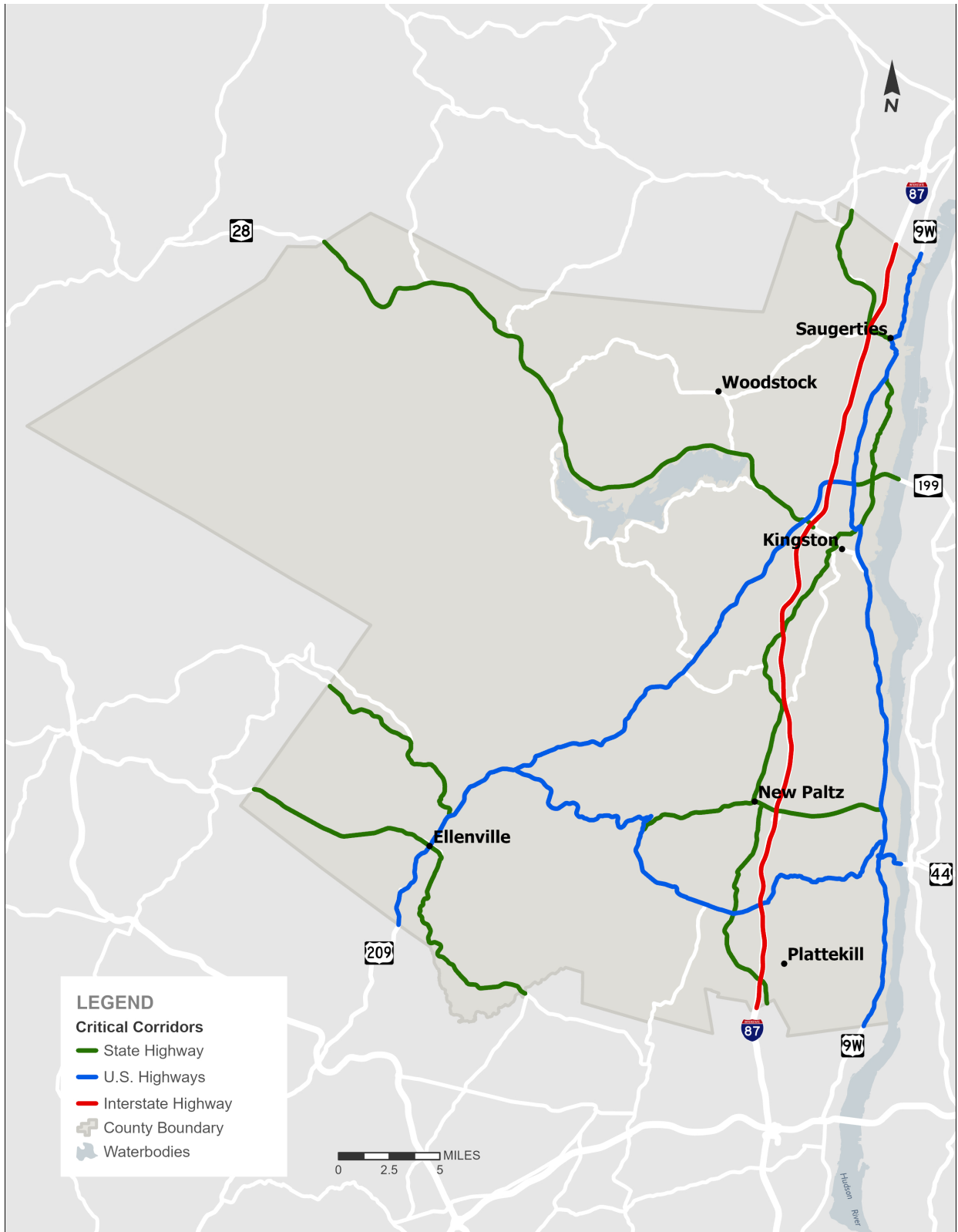


Figure 5.8: Critical Transportation Corridors

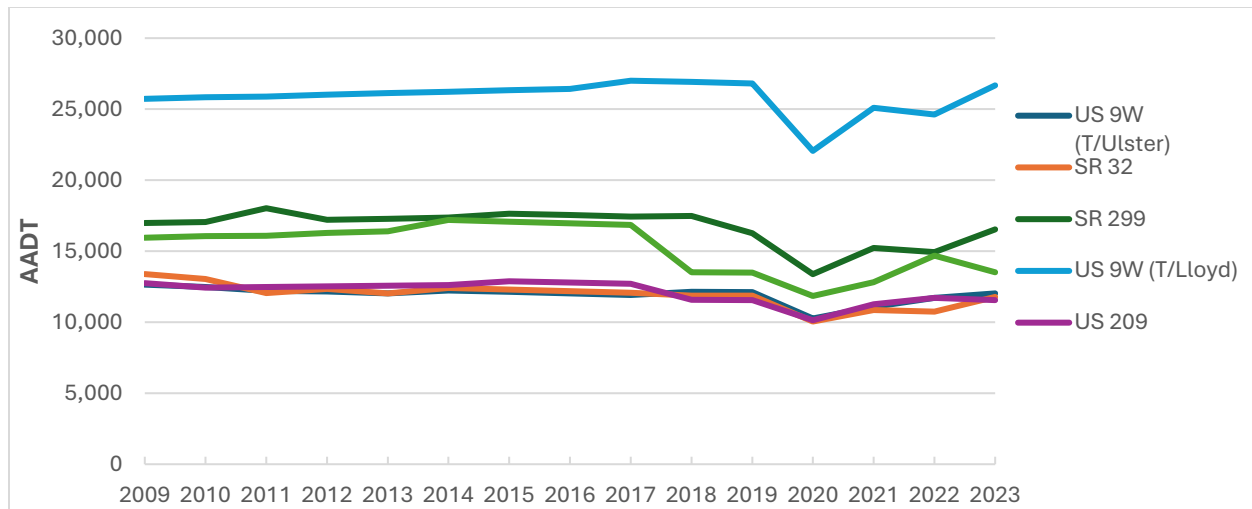


Figure 5.9: Average Annual Daily Traffic on Ulster County's Critical Corridors, 2009-2023

Regional Commutation

The UCTC's highway system exhibits a mid-week PM peaking traffic pattern in most corridors driven by commuter travel, such as Route 28 through the City of Kingston. However, some critical corridors exhibit the highest levels of delay on Friday evenings or weekends and also experience large fluctuations in delay seasonally. The I-87 corridor and its exits also exhibit weekend peaking with backups on Sunday night that often slow traffic to a crawl in the corridor from Kingston south.

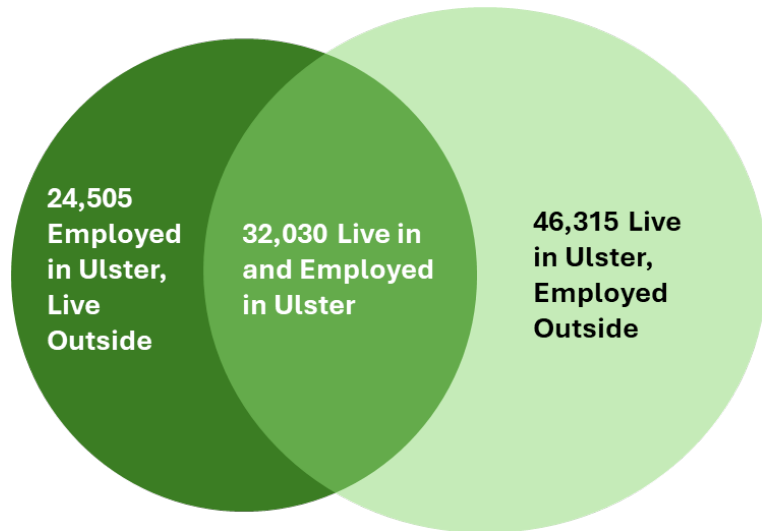


Figure 5.10 depicts the variation in commuting patterns by counties adjacent to or surrounding Ulster County. The TMA region's workforce as a whole is on the move. While a large percentage of the workforce leave Ulster County every day (56%), both Dutchess (55%) and Orange (55%) experience similar commutation patterns. The top counties for Ulster resident commuters were Dutchess, Orange, New York (Manhattan), and Westchester counties. Dutchess, Orange, Greene, Sullivan, and Columbia counties are the top counties contributing to inbound Ulster commuting patterns. These flows have considerable impact on congestion and drive investments in transit, park- and-ride facilities, and corridor improvements.

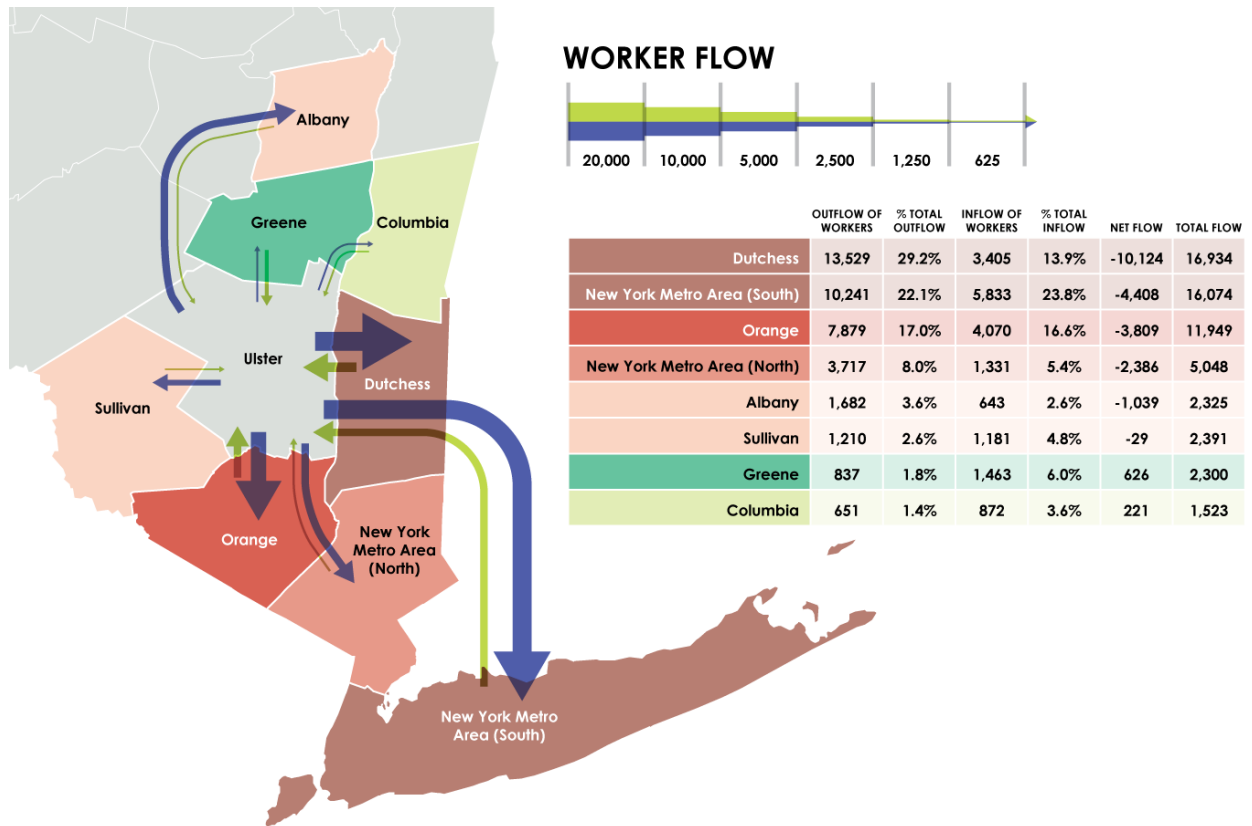


Figure 5.10: Commutation To and From Ulster County

Human Services Transportation Plan

UCTC completed its most recent Human Service Transportation Plan (HSTP) update in September 2024. The primary purpose of an HSTP is to identify the transportation needs of individuals with disabilities, older adults, and people with low incomes, provide strategies for meeting these needs, and priorities transportation services for funding and implementation.

The five key themes that emerged from the HSTP include the following:

- **Additional Transportation Services Where and When Needed:** Enhancing transportation services to cover under-served times and locations is crucial for basic mobility and ensuring equitable access to essential services and employment opportunities.
- **Coordination of Services:** There is a need for more coordinated efforts among the different human services provider organizations to avoid duplication of services, enhance efficiency, and better utilize existing resources.
- **Availability of Drivers:** Ulster County's transportation services currently need more paid and volunteer professional drivers, which has emerged as one of the most pressing issues for the county's transportation operators.
- **Improve Flexibility of Services:** Enhanced flexible and on-demand transportation options could significantly improve service provision by providing critical first and last-mile connections that integrate with the existing network.
- **Consistent and Integrated Communication:** There is a need for more information about public transportation, and there needs to be a central or consistent venue for this information.

Transit System

Public transportation is an important mode of transportation. It provides mobility to those unable to drive – “captive riders”, including young people, senior citizens, those with disabilities -- and drivers who cannot afford to own a car. An efficient transit system also captures “choice riders” – those that choose to travel by bus. Taken together, these transit trips offer an environmental benefit compared to automobile trips through reduced fuel use and pollution and reduced congestion in heavily traveled corridors.

Public transit service in Ulster County changed significantly in July 2019 when Ulster County and the City of Kingston came to an historic agreement to expand Ulster County Area Transit (UCAT) service into the City of Kingston, thereby ceasing Kingston Citibus operations. In addition to local fixed-route service, private intercity bus services continue to operate intercity service through Ulster County (Adirondack Trailways). Finally, commuter parking facilities along the I-87 Corridor complement these transit services and allow for ride sharing.

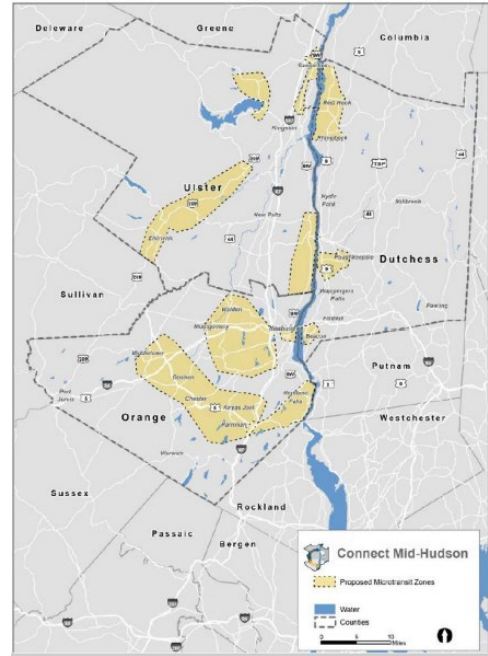
Transformations in Transit

UCAT is currently partnering with UCTC to study how the existing UCAT system can be transformed to better serve the public. The overarching goals of this ongoing project are to:

- Increase UCAT ridership and transit mode share in Ulster County
- Develop recommendations that are adaptable to an electric fleet transition
- Embrace new mobility models (e.g. microtransit) in UCAT's service area where appropriate
- Adopt a new technology platform to operate and monitor UCAT services

While formal recommendations are still in progress, two potential fixed-route service scenarios have been developed that aim to address initial public and stakeholder input, including the desire for more frequent service (highest priority for riders) and service that covers new geographic areas (highest priority for non-riders).

As it relates to microtransit, the Connect Mid-Hudson Study completed in 2021 identified preliminary regional microtransit opportunities, including multiple zones in Ulster County. Microtransit models allow agencies to be more strategic with their fixed-route services by reducing the amount of resources allocated to areas where transit need is high, but transit potential is low.



UCAT presently operates a total 11 scheduled fixed routes throughout Ulster County and three specialty routes: the Belleayre Express (winter) and the Nature Bus (spring-fall) provide weekend service to recreational points of interest, and the T Route provides weekday service between the Kingston Inn and Kingston Plaza. Figure 5.11 provides a spatial reference for the location of UCAT routes throughout the county. In addition, qualifying residents within a 1.5 mile distance of any fixed route are eligible to receive paratransit service. UCAT also offers rural route services by request to passengers in the rural areas of the county not served by the routes listed above. Passengers using this service must make appointments at least one day prior and up to a week in advance and confirm them the morning of the scheduled ride. Finally, passengers who are 60 years or older and registered with the Office for Aging are eligible for one round trip for shopping and two round trips for medical service per week free on the Ulster County Area Transit



One of UCAT's eight electric buses

System or the Office for Aging medical van. Beginning on October 1, 2022, UCAT and its partners implemented a fare-free service which is supplemented by allocated County funds.

As of March 2025, UCAT owns a total of 39 vehicles. Of these, a total of eight are all-electric transit vehicles, accounting for most vehicles purchased since 2021. While UCAT intends to continue expanding its all-electric fleet, there are challenges with this transition. Garage needs are different for battery electric buses compared with existing diesel vehicles, placing limitations on the size of vehicles available. A full inventory of the UCAT vehicle fleet can be found in Appendix B.

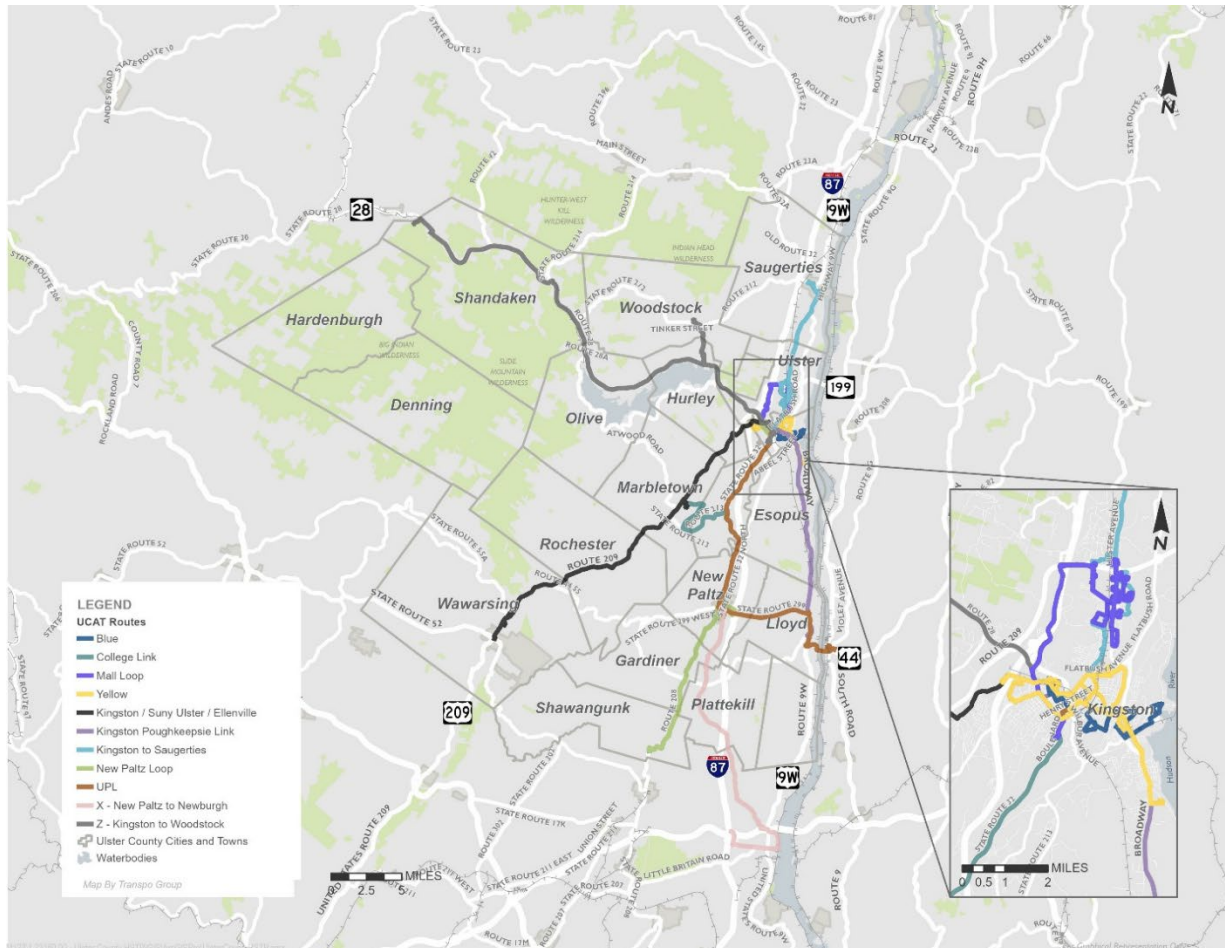


Figure 5.11: UCAT System Map

System Use

Figure 5.12 summarizes UCAT annual ridership for the period 2014 to 2024. Ridership data illustrates relatively stable or slightly waning ridership between 2014 and 2019, with peak ridership occurring in October 2014. In 2019, UCAT absorbed the Kingston Citibus service, thus the resulting jump in ridership during this time. However, ridership was greatly impacted at the onset of the COVID-19 pandemic, consistent with national ridership trends. Since the pandemic, ridership has steadily increased with a slight uptick in rate of recovery following the shift to a fare-free system in October 2022. In fact, towards the latter half of 2024, ridership began exceeding the pre-pandemic peak. Since then, ridership has only continued to climb, with over 280,000 passenger trips provided

in the first six months of 2025, a 12% increase over the number of passenger trips provided in the first half of 2024^{iv}.

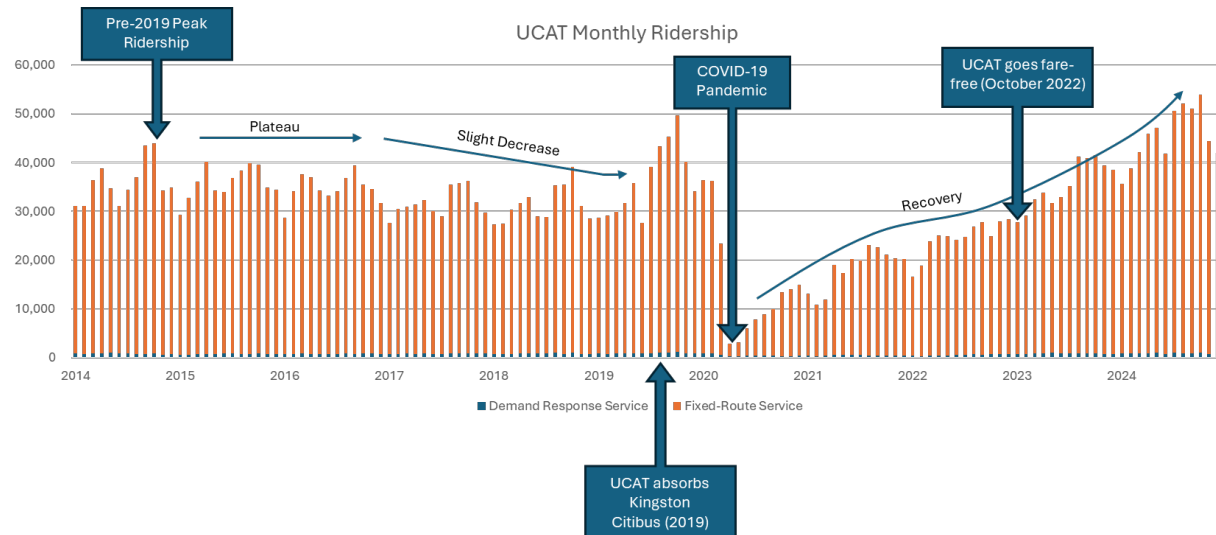


Figure 5.12: UCAT Monthly Ridership (2014-2024)

Since the shift to a fare-free system, fares are supplemented by allocated County funds assuming a full fare of \$1.50 and a half fare of \$0.75. This fare allocation is only a portion of the transit operations. Funding from FTA and the New York State Transit Operating Assistance program provide means to subsidize operations. One measure of financial efficiency is the farebox ratio, which is the percentage of operating expenses covered by fares (in this case the allocated County funds). The UCAT farebox recovery has remained steady at about 8-9% over the past decade. This low recovery rate is typical for a small transit system.

Inter-City Bus

Ulster County is also served by intercity bus carrier Adirondack Trailways. A majority of their operations provide access to a number of destinations outside the county and are used by a significant number of commuters travelling to the New York City metropolitan area. Trailways serves Saugerties, the transit terminal in Kingston, and three locations in New Paltz, including a terminal and location near the Thruway as well as Woodstock and the NYS Rt. 28 corridor. As a result of the service provided, Trailways is eligible to receive “commuter carrier” funds attributable to the Poughkeepsie-Newburgh TMA through a NYSDOT contract. NYSDOT administers the contract and is required to issue an RFP on a regular basis to evaluate proposals from qualified carriers; the FTA funds are distributed by UCTC through the “capital cost of contracting” process.



UCAT has outgrown its current facility located at Golden Hill in Kingston and will begin site selection and design for a new, additional facility in 2025.

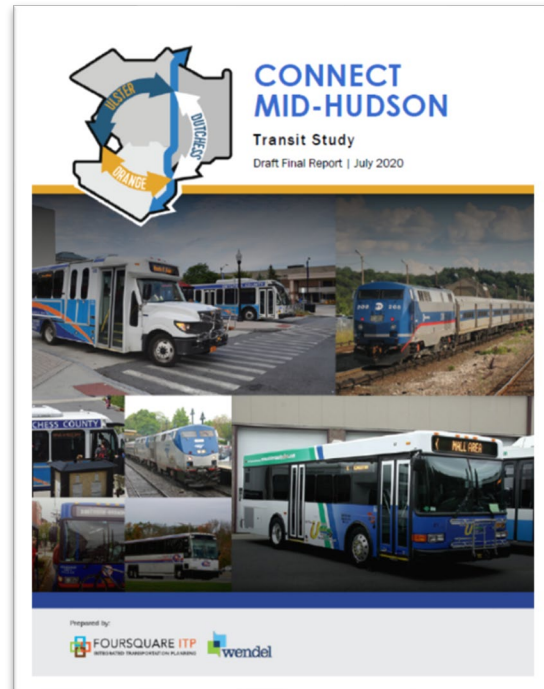
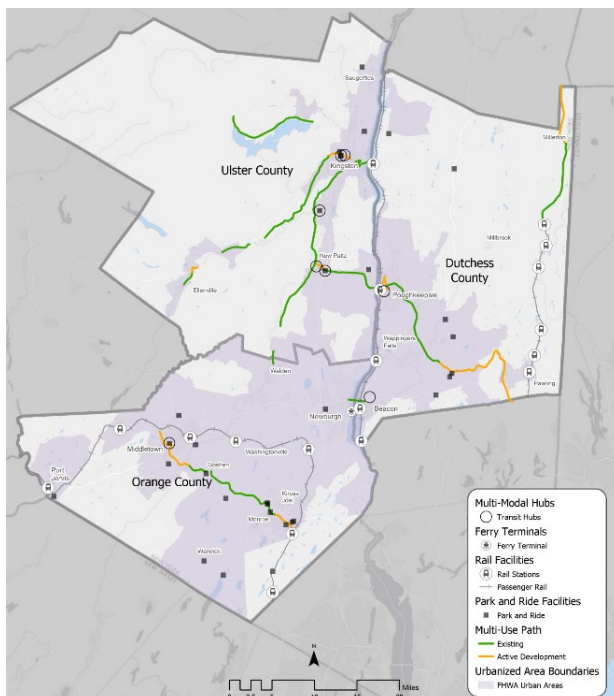
Key Regional Studies

In January 2020, the Mid-Hudson TMA, consisting of Ulster, Dutchess, and Orange counties produced a Technical Memo evaluating existing multi-modal conditions for the Mid-Hudson Valley Transportation Management Area (TMA). This evaluation identified possible gaps in the network and recommends improvements.

In 2019 and 2020, the three Mid-Hudson TMA MPOs partnered with the NYSDOT and regional transit agencies to develop the Connect Mid-Hudson report. The document presents recommendations on ways that the unallocated transit funds could be invested to improve regional transit service for Mid-Hudson Valley residents and commuters. Key recommendations of the study include the following:

- Creation of a Transit Ombudsman to serve as an advocate and point of contact for the region's commuters, especially those who rely on publicly-subsidized but privately-operated commuter bus services.
- Introduction of App-Based Microtransit Service to provide local mobility and regional connections where fixed-route service is either not available or not effective.
- Expansion of Commuter Bus Service to address specific service gaps identified through an analysis of regional commuter patterns and current commuter services.
- Capital Improvements focusing on roadway congestion hot-spots and capacity-constrained park-and-ride lots that impact the efficient operation of regional transit service.
- Creation of a Regional Transit Fund to create a structure for planning and dispensing the region's unallocated Federal transit funding

Since the plan was completed, the MPOs have invested nearly \$20 million into the regional transit system.



ACTIVE TRANSPORTATION

A New Direction

For this iteration of the LRTP, UCTC is transitioning from a non-motorized approach to a more comprehensive active transportation plan. Instead of focusing on walking and biking alone, this plan addresses growing E-bike ridership and other emerging micromobility opportunities - such as bike share systems throughout the region. This reflects significant changes in the transportation landscape including increasing volumes of recreational and commuter cycling following the COVID-19 pandemic as well as the opening of the Empire State Trail, statewide legalization of e-bikes, and unprecedented funding levels for complete-street-focused projects. This is also aligned with the direction of NYSDOT's forthcoming Active Transportation Strategic Plan^v, which expands the scope of traditional bike and pedestrians plans by evaluating not just human-powered modes of transportation – such as walking, bicycling, and operating a wheelchair, but also small-scale electric vehicles such as e-bikes and e-scooters.

Defining Active Transportation

Active transportation includes a variety of self-propelled [mostly] human-powered modes of transportation including walking, biking, and other small-scale modes. Active transportation also encompasses the emerging multimodal shift toward micromobility. While this term technically includes all small-scale modes – including pedal bikes – operating at low to moderate speeds up to 25 miles per hour (MPH), generally this concept is focused on e-bikes, e-scooters, and bike share systems.

System Characteristics

Bicycle and pedestrian mobility represent growing components of the regional transportation network, as well as crucial components of the County's economic development strategy promoting active tourism and recreation. Communities throughout the County are working to improve the bicycle and walking experience for residents and visitors alike through the expansion of trails, bolstering of existing infrastructure, and programmatic efforts for education and encouragement. Ongoing initiatives such as the Shandaken Ulster and Delaware Trail, the Kingston Greenline, and other initiatives continue to expand trail network capacity throughout the region. Local initiatives, such as Kingston's bike rack pilot, expanding the O&W Trail into Orange County, and planned streetscape improvements – such as bike lanes, benches and trash receptacles – in the Town of Ulster are designed to further enhance the walking and biking experience.

Since the statewide legalization of a 3-class framework for e-bikes in 2020, micromobility (including e-scooters and e-bikes) has expanded throughout the county. This represents both an opportunity to enable more individuals to access active transportation, and a regulatory challenge for municipalities as bicycle mode share increases.

First and last mile connections with public transit represents another opportunity to support multimodal transportation. UCAT already has exterior-mounted bike racks on the majority of their passenger bus fleet - enabling customers to bike to or from transit to their final trip destinations.

Walking

Pedestrian Safety

As shown in Figure 5.13, pedestrian crashes sharply decreased to a 10-year low in 2020 at the onset of the COVID-19 pandemic, but began to rise again after 2022 consistent with statewide trends. Fatalities and serious injuries accounted for 25% of all pedestrian crashes between 2014 and 2023. Serious injuries declined significantly in 2019, but rose again steadily throughout the COVID-19 pandemic reaching a 10 year high in 2023. Conversely, pedestrian fatalities have declined in Ulster County since 2019. Statewide, both pedestrian fatalities and injuries have increased since their lows in 2020.

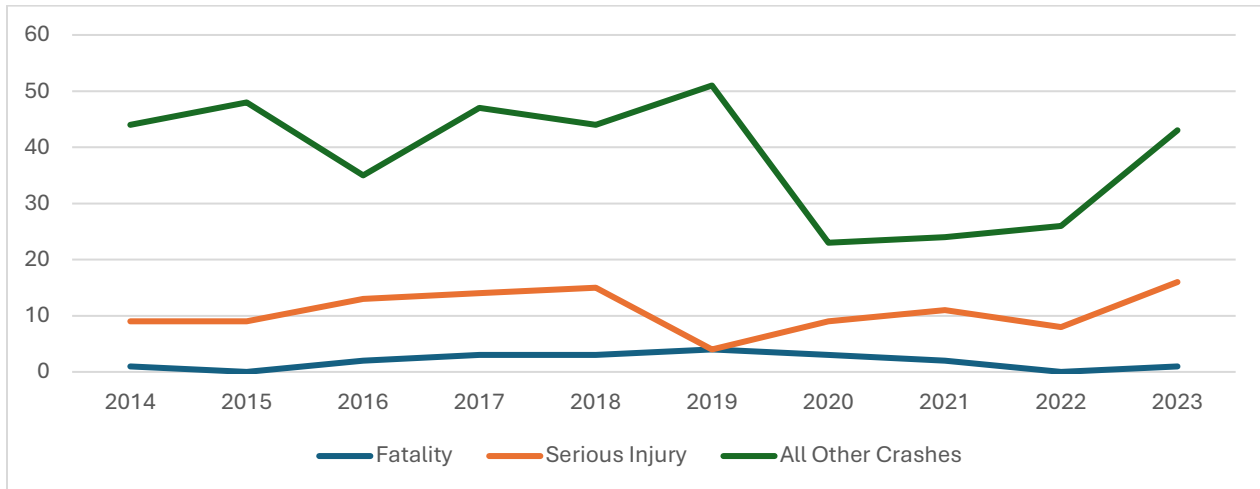


Figure 5.13: Ulster County Pedestrian Crash History (2014-2023) (Source: NYSDOT CLEAR Crash Dashboard)

Infrastructure and Design

Trails and sidewalks support pedestrian mobility throughout the county. UCTC maintains and is in the process of adding to a county-wide inventory of sidewalks which includes nearly 115 miles of sidewalks across 24 communities and includes information on sidewalk material and condition. Sidewalk data for the Hamlet of Wallkill and Town of Shawangunk are in the process of being incorporated into this inventory. According to the inventory, more than half of sidewalks are constructed in either concrete (29.4%) or bluestone (24.9%), with the remainder unclassified. Roughly 12% of sidewalks are considered fully accessible, and 12% reported as not accessible with the majority (65%) falling evenly between these two extremes or not yet rated.

Many jurisdictions throughout the County require individual property owners to maintain their sidewalks, which can create an inconsistent surface, and accessibility barriers, particularly for persons with disabilities or limited mobility. State of good repair is a particularly challenging issue for property owners with bluestone sidewalks which are difficult and costly to replace. More broadly, the abundance of state-operated roadways throughout Ulster County communities – particularly in denser commercial areas – creates jurisdictional barriers to implementing street designs more conducive to bicycle and pedestrian safety.

In denser urban areas and walkable downtowns, pedestrian travel requires a network of sidewalks without gaps and with accommodations for people with disabilities as defined by the Americans with Disabilities Act (ADA). Safe pedestrian travel also requires protected crossings of busy streets with marked crosswalks and pedestrian signals and appropriate pedestrian phases at signalized intersections, including treatments such as Leading Pedestrian Intervals. Maintenance of existing sidewalks is also a constant concern for municipalities and residents. Pedestrian mobility is also an important consideration in more sparsely populated areas as well. There are instances, particularly in rural areas, where a wide shoulder is an acceptable substitute for a sidewalk, particularly when converted to a pedestrian lane. Other treatments such as residential traffic circles, chicanes, and pitch points are examples of complete street elements that provide traffic calming and safety benefits in lower density settings.

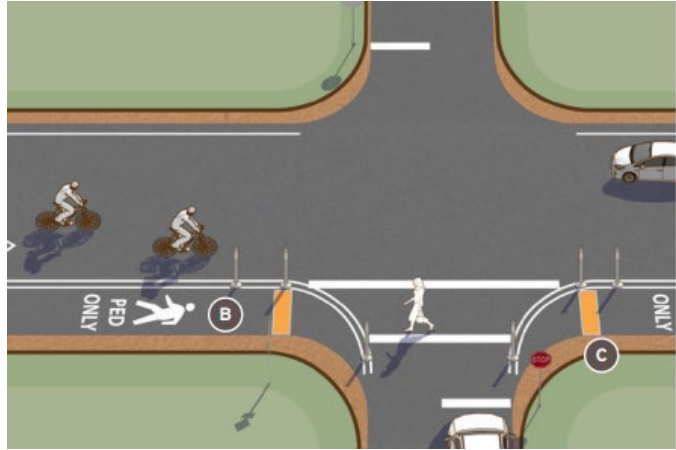


Diagram of pedestrian lane on rural roadways from FHWA's *Small Town and Rural Multimodal Network Guide*

Examples of active transportation focused traffic calming strategies.

Left: Curb extensions in Ithaca, NY

Right: Combined bike/ped crosswalk in Utica, NY



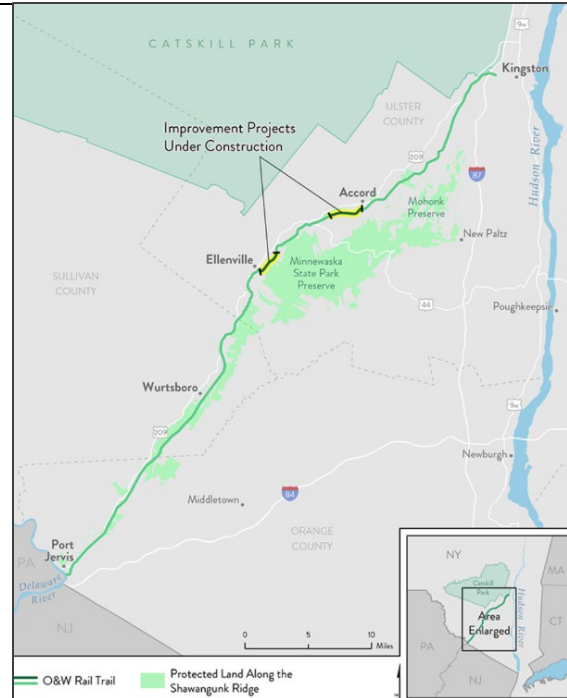
Examples of active transportation focused traffic calming strategies.

Left: Residential traffic circle in Ithaca, NY

Right: Roadway in Rome, NY with sharrows and brick paver crosswalk

Case Study | O & W Rail Trail

Under the leadership of the Open Space Institute (OSI), the Ontario and Western (“O&W”) Rail Trail is a visionary effort to connect a fragmented 57-mile corridor across three Hudson Valley counties between Kingston and Port Jervis. In 2023, OSI announced Comprehensive Feasibility Study and the restoration of two separate sections of the O&W Rail Trail in Ulster County. Ulster County worked in partnership with OSI and the towns of Rochester, Wawarsing, and the Village of Ellenville to reconstruct more than 5 miles of the trail. OSI and the county are continuing to improve a 3.2-mile trail section between Accord and Kerhonkson, and a 1.9-mile section stretching north from the Village of Ellenville toward Port Ben.



Bicycling and Micromobility

Bicycle Safety

As shown in Figure 5.14, bicycle crashes generally declined between 2017 and 2020 with a slight increase in 2021, followed by a peak 10-year low in 2022. Crashes then increased significantly to their highest levels since 2014. Statewide, 2023 saw the highest number of bicycle crashes in the 10-year period with the number of crashes increasing gradually from 2018 to 2020 and more sharply starting in 2021. Fatalities and serious injuries account for 17% of all bicycle crashes between 2014 and 2023. There was a drop in serious bicycle injuries during the pandemic, but that number rose again in 2022 and 2023. Statewide, bicycle fatalities remained relatively consistent over the last several years, with injuries increasing gradually over time.

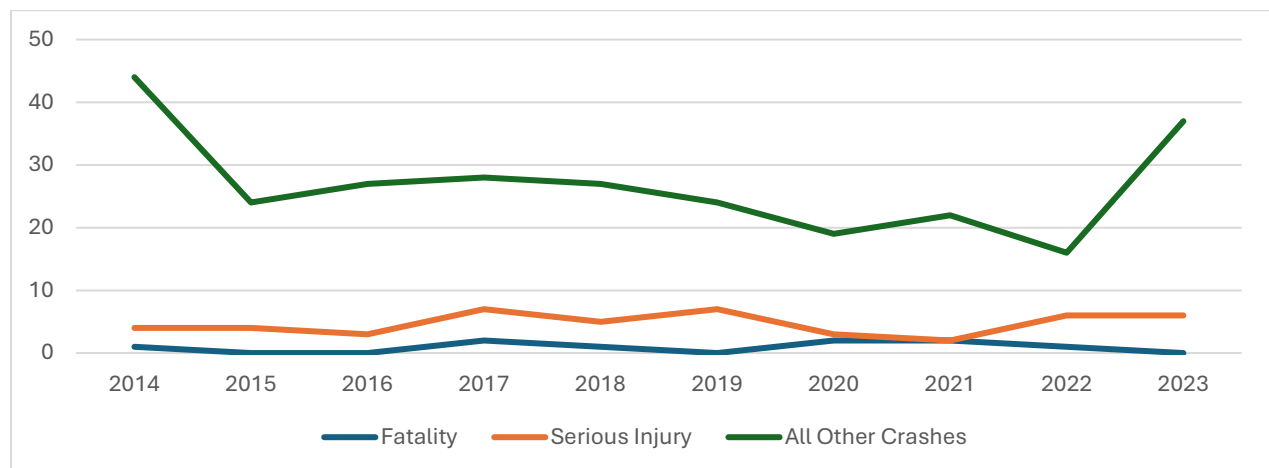


Figure 5.14: Ulster County Bicycle Crash History (2014-2023) (Source: NYSDOT CLEAR Crash Dashboard)

New Insights into Bicycle Behavior

The 2023 New York Cycling Census - the largest statewide consumer cycling survey ever conducted in the US – included 271 respondents from Ulster County. This comprehensive consumer preference survey included a wide variety of insights on barriers and motivators for cycling. Specifically:

- 88% of respondents bike just as much or more than they did before the Covid-19 pandemic.
- The top three barriers to biking amongst Ulster County respondents are 1) lack of bike lanes or safe routes, 2) fear of conflicts with cars and 3) weather.
- The top three reasons respondents choose to bike are 1) Exercise and fitness, 2) fun, and 3) mental health and wellness. More than half of Ulster County respondents indicated that reducing their environmental footprint was a significant factor in their decision to bike.
- Recreation and exercise account for more than 60% of trips.
- 55% of respondents indicated that they would likely bike more if they had access to an e-bike.

Micromobility

Since their statewide legalization in 2020, Ulster County has seen an increase in the volume of e-bikes on regional trails and local corridors. The new law established a three-tiered classification framework for e-bikes, and legalized the use of most types of e-bikes on state roadways with a speed limit of 30 MPH or less. The law also empowers local municipalities to self-regulate e-bikes within their jurisdiction. In March of 2022, the Town of New Paltz enacted a new local law enabling e-bike use on town roads with higher posted speed limits to address enforcement challenges.^{vi}

In 2024, the City of Kingston and SUNY New Paltz received planning grants through the New York State Energy Research and Development Authority (NYSERDA)'s Clean Mobility Program to explore micromobility opportunities. In Kingston, the City is using this grant to investigate the design and launch an innovative zero-emission city-wide transportation program for residents and visitors. This includes various clean mobility solutions including bike share/scooter share and bike libraries, EV rideshare and on-demand services, Micromobility charging hubs, and programs to support bike/scooter ownership.

Similarly, SUNY New Paltz is using this grant to evaluate clean mobility solutions that meet community needs while advancing affordable, accessible, healthy, safe, and low-carbon options that can benefit SUNY New Paltz students, employees, and NYS residents across the region. Like Kingston's, SUNY New Paltz is evaluating the feasibility of a bike share system as well as connections between the campus and local community.

Active Transportation Infrastructure Expansion

Ulster County hosts a variety of regional facilities to support bicycle mobility in tandem with other modes of active transportation. These include the following and are depicted in Figure 5.15:

**The Empire State Trail**

- Officially opened in 2020, the 750-mile Empire State Trail has 16 miles in Ulster County including routes through New Paltz and Kingston.

**Hudson Valley Rail Trail**

- This trail is a 7-mile paved pathway in Ulster County connecting directly with the Walkway Over The Hudson. This trail has been incorporated into the Empire State Trail.

**Wallkill Valley Rail Trail**

- This 21+ mile trail is unpaved, providing an off-road experience along the former Wallkill Valley Railroad corridor.

**Kingston Greenline**

- The City of Kingston's "Greenline" project is a visionary effort to connect 20 linear miles of parks, linear trails and complete street initiatives into a unified network with 9 miles of on-road segments, and nearly 11 miles of off-road trails.

**The O&W Rail Trail**

- This is a partially completed 27-mile trail from Kingston to Ellenville offering a wide variety of cycling experiences for diverse users.

**Ashokan Rail Trail**

- The "ART" trail is an 11.5-mile recreational path running along the Ashokan Reservoir between West Hurley and Boiceville.

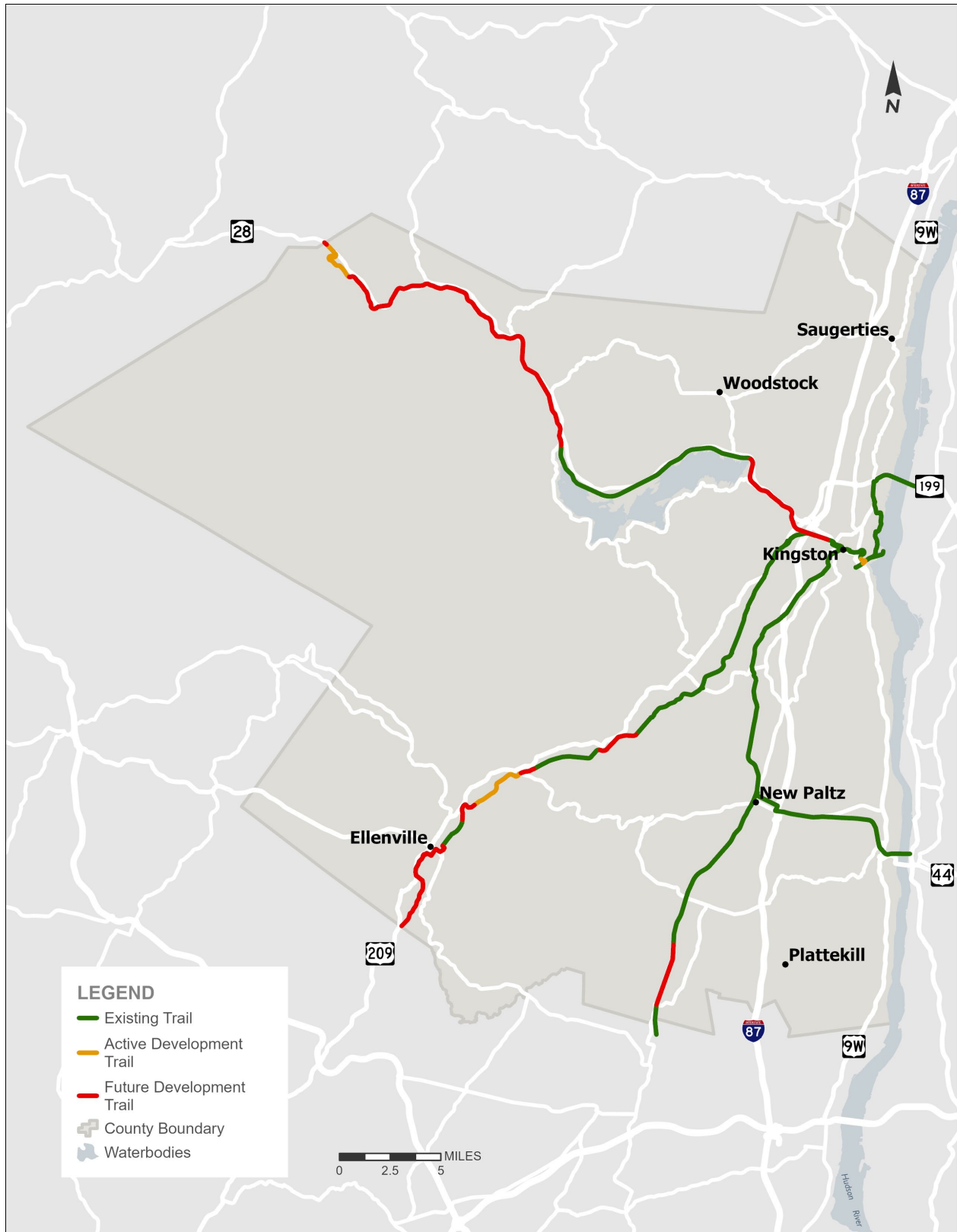


Figure 5.15: Ulster County Trail Network

In addition to these trails with regional scope, many communities throughout Ulster County are working to expand facilities to support bicycle mobility. The City of Kingston’s “Greenline” project is a visionary effort to connect 20 linear miles of parks, linear trails and complete street initiatives into a unified network. When complete approximately 9 miles of the Greenline will be comprised of on-road segments, and nearly 11 miles of off-road trails. The completion of the Greenline represents a collaborative effort between the County, the City of Kingston, and the state.

In addition to the County trail system and the Empire State Trail, New York State Department of Transportation has several designated bike routes that run through Ulster County including Route 32, Route 28, and Route 299 as well as portions of routes 9W, 44, 55 and 209. While designated as bike routes, these corridors have inconsistent designs offering little in the way of protection for cyclists.

Route 9W Mobility Plan

In December of 2024, the Town of Ulster Published the Route 9W Mobility Plan to address traffic safety and connectivity for all users, and traffic congestion



immediate to and surrounding the US Route 9W Corridor in the Town of Ulster, including future travel needs based on major development proposals and trends.

This was an important initiative, as Route 9W corridor is one of the region’s largest commercial retail destinations, bringing with it both high traffic volumes and transformational development patterns as well as increasing demand for multimodal transportation options. The plan identifies a series of transportation improvements to transform the corridor into a vibrant and functional destination that can accommodate all users. The addition of pedestrian facilities including sidewalks along Route 9W, marked crosswalks and enhanced pedestrian signal phasing, will make the corridor more attractive and welcoming to non-motorized users. Likewise, the plan identifies several improvements to address traffic congestion and safety including signal optimization, construction of a roundabout, raised medians, a new connector road/parcel connections and other access management techniques, and changes to the Route 9W/Route 209 interchange.

Recommendations include corridor wide changes - including increasing pedestrian connectivity with continuous sidewalks, building safer pedestrian crossings at intersections, and optimizing signal timing to reduce vehicle delays - as well as a series of site specific short- and long-term recommendations.^{vii}

Planning the Future of Active Transportation

Active Transportation will continue to grow and serve a vital role in the regional transportation system. Looking to the future of bicycling, walking and micromobility, UCTC will continue to support active transportation infrastructure, programs and policies across the following categories:

1. **Develop an Active Transportation Plan** as an update to the 2008 Ulster County Non-Motorized Transportation Plan.
2. **Improving Amenities within the Existing Network** - UCTC is committed to expanding the utility of existing active transportation assets throughout the County. In addition to adding new amenities, UCTC will work with local jurisdiction to ensure that local sections of regional trails maintain a consistent level of quality, cleanliness and investment as the active transportation system ages.
3. **Addressing gaps and optimizing the existing active transportation system** – Ulster County has made tremendous strides expanding the trail network, improving trail crossings on local roadways, and supporting local complete street improvements. The County will prioritize efforts to address crucial gaps in the current system including:
 - a. Establishing a connection between the Ashokan Rail Trail and the Kingston Greenline.
 - b. Identifying feasible options to create a more suitable path through the Hamlet of Accord and the Town of Rochester on the O&W Rail Trail.
 - c. Develop solutions to address security concerns for trail gaps adjacent to NYS Department of Corrections facilities in Shawangunk and Wawarsing, including the potential for re-routing

In addition to filling gaps in the trail and roadway network (where feasible), the County will investigate amenities to support active transportation system utilization. This may include:

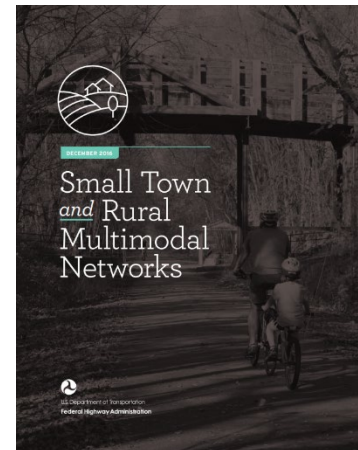
- Additional bike parking at key destinations such as schools, trail heads, libraries, and parks, including canopies for weather protection and adequate capacity for anticipated demand.
- More robust Wayfinding throughout the county to provide a more comfortable and consistent user experience for bicyclists and walkers accessing trails and key destinations.
- Exploring opportunities for comfort stations to make trails more accessible to a more diverse array of users across the county.

The County will also work to ensure that trails, and sidewalks are adequately maintained to maximize safety and comfort for users of all ages and abilities. This may involve more frequent inventory of surface conditions, creating simple avenues for users to report issues, and prioritizing trail maintenance needs as they are addressed.

4. **Expanding connectivity to communities outside the active transportation system** – Ulster County will enable active connections between communities and Ulster County's

abundant open spaces. Beyond the existing network, Ulster County will work to expand the active transportation network to include more communities such as Saugerties and Woodstock. The County will also investigate opportunities to leverage the O&W trail to create additional active transportation connections to Stone Ridge, Ulster County Community College, and other hamlets throughout the southern portions of the County.

- 5. Planning for an expansion of micromobility** – The County recognizes the potential for e-bikes and e-scooters to enable more Ulster County residents and visitors to access active transportation. Despite growing ridership, there is significant uncertainty and inconsistency in relation to e-bike regulation and safety. New York State’s 2020 enabling legislation for e-bikes empowers local jurisdictions to establish regulations within their communities. Ulster County will work to ensure consistent rules across Ulster County’s trail system and individual communities to minimize user confusion.
- 6. Promoting Local Complete Street Improvements in Communities throughout Ulster County** – Ulster County communities like Kingston have made tremendous strides to adopt a complete street approach to local roadway design, culminating in major projects such as the Kingston Greenway, and wayfinding projects. UCTC will continue to support these efforts with resources and collaboration. Recognizing that complete streets aren’t just urban or commercial solutions, UCTC will work with smaller communities throughout the county to identify scaled and customized solutions that increase roadway safety and transportation choices for all potential users. Specifically, UCTC will draw on FHWA’s Small Town and Rural Multimodal Networks guide and other New York State Resources – Such as the forthcoming “Well-Rounded Roads” Training from NYSDOT’s Local Technical Assistance Program – to provide technical trainings on complete street communities for rural roadways and highways and present specific solutions for these unique contexts.



MODAL SPLIT: HOW PEOPLE TRAVEL

The American Community Survey (ACS) is a product of the U.S. Census Bureau. It uses annual sampling to discover many facts about Americans, including travel patterns. According to the 2023 ACS for Ulster County, 71% of work trips are made by a single-occupant automobile. Carpooling and working from home each comprise 22% of the modal distribution. By comparison, based on the 2018 ACS, 77 % of work trips were made by single-occupant automobile and 14% were comprised of carpooling or working from home. Notably, working from home has increased from 7% to over 15% within Ulster County, which is likely a result of remote working trends during and following the pandemic. Among all other modes, approximately 4% of work trips are made by walking or biking, 2% use public transportation to reach work destinations, and another 1% represent “other” methods of commutation. Figure 5.16 illustrates Ulster County’s modal breakdown.

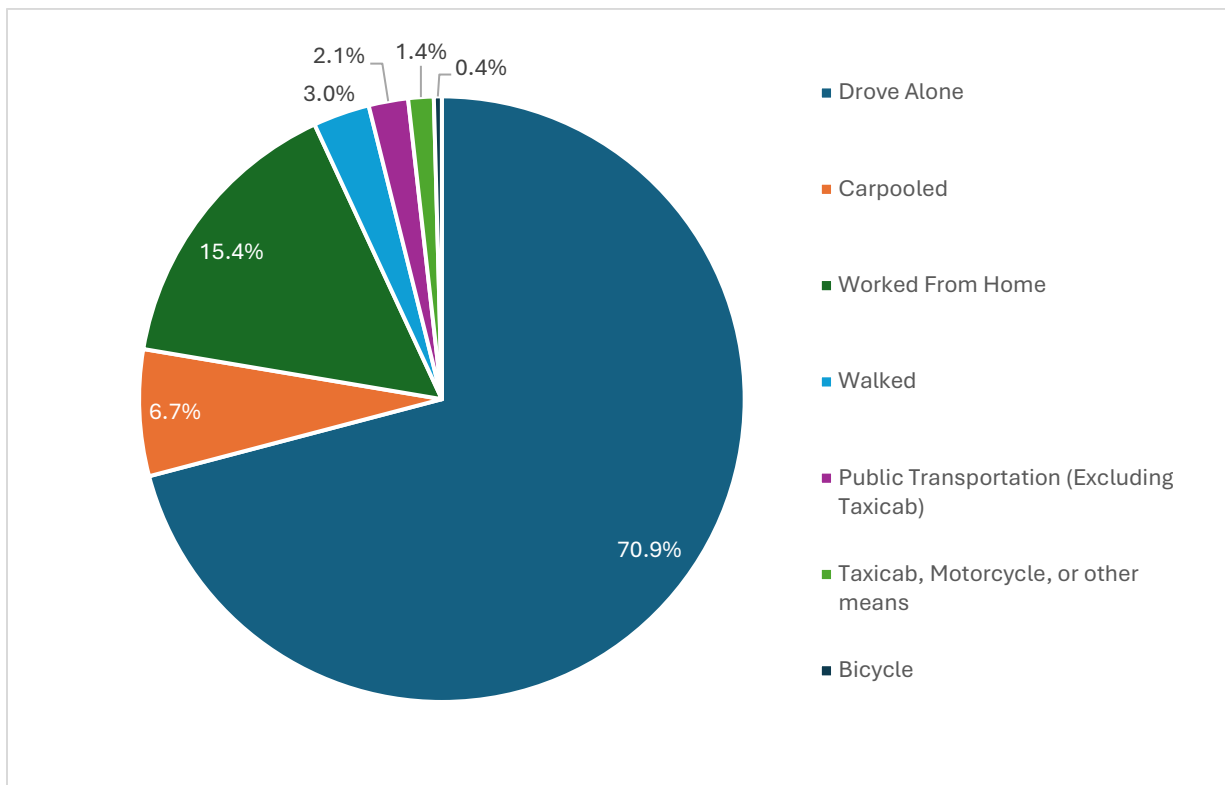


Figure 5.16: Journey to Work Modal Distribution, 2023^{viii}

Replica was used to analyze the impacts of increases in working from home (WFH) following the COVID-19 pandemic on travel patterns in Ulster County. Replica models travel activity based on a synthetic population. To investigate WFH’s impacts, Replica’s data was filtered to model only trips by those employed, resulting in a total population of 67,933. Modeling trips taken by these synthetic travelers on Thursdays in Fall of 2022, there is a difference in peak trip times for travelers working from home (WFH) and those working in person (non-WFH) (Figure 5.17).

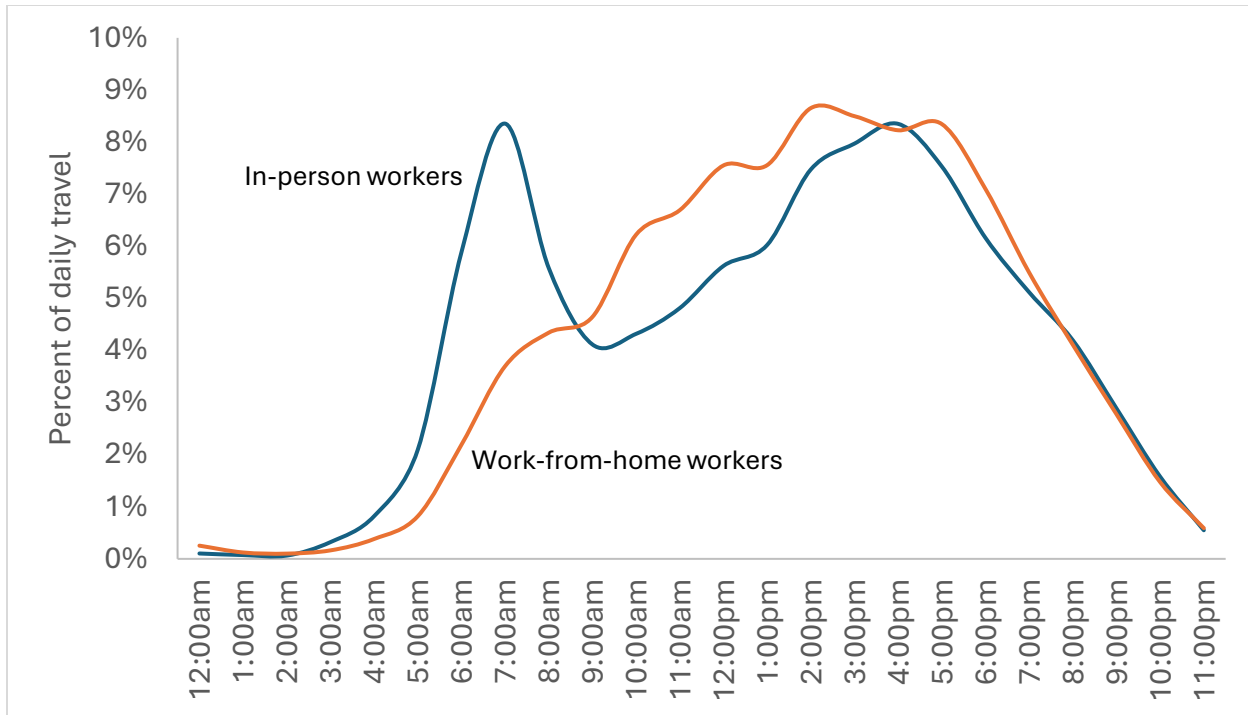


Figure 5.17: Work From Home vs. Non-Work From Home Distribution by Time of Day

Trip times exhibit a more traditional morning and afternoon peak for the non-WFH population, with the sharpest peak occurring during the morning hours between 5 am and 8 am. For those working from home, however, trips are more evenly distributed throughout the day, peaking between roughly noon to 6pm. The most notable difference is the lack of morning commute peak for the WFH trips compared to the non-WFH trips. Median trip distance and duration are also lower for the WFH population than the non-WFH population (Table 5.6). The WFH population takes slightly more trips per person than the non-WFH population.

Table 5.6: Work From Home vs. Non-Work From Home Trip Characteristics

	Trips	Workers	Median distance (mi)	Average distance (mi)	Median duration (mins)	Average duration (mins)	Trips per worker per weekday
Work-from-home workers	59,540	13,795	6.0	12.9	18	29	4.3
In-person workers	219,155	54,138	7.4	14.6	21	31	4.1

AUTO OWNERSHIP

According to the 2023 ACS, about 7.5% of all occupied housing units (both owned and rented) in Ulster County do not have a vehicle available to make daily trips. The majority (71.5%) of households have either one or two vehicles available to make daily trips; however, over 15,000 households (21%) have access to three or more cars. Table 5.7 summarizes auto ownership by household. The high accessibility of vehicles contributes to the high volume of drive-alone commuting by Ulster County residents. Ownership rates are much lower in urbanized areas, with 13.2% of Kingston households and 14.6% of New Paltz Village households estimated to have no vehicle available.

Table 5.7: Auto Ownership by Household in Ulster County, 2023^{ix}

Auto Ownership	Vehicle Availability	Percent of Vehicle Ownership
No Vehicle Available	5,516	8%
1 Vehicle Available	27,446	38%
2 Vehicles Available	24,831	34%
3 Vehicles Available	15,312	21%
Total	73,105	100%

SYSTEM-WIDE SAFETY

Safety is of principle concern to all transportation agencies and the public, and UCTC believes improving transportation safety is a shared responsibility of the owners and operators of transportation facilities and services, travelers, law enforcement, and emergency responders. The major safety goals of this plan are to reduce fatalities and serious injuries in the UCTC planning area, in line with FHWA's Safe System Approach. Strategies to address safety, security, public health and other risks are key to achieving this goal, as well as others. Improving safety in transportation systems can increase efficiency and reliability of the system, encourage use across alternative transportation modes and improve quality of life for the public.



<https://www.transportation.gov/NRSS/SafeSystem>

UCTC also understands that safe transportation systems are created by focusing on identifying, reducing and mitigating risks. Transportation facilities and services must be implemented using proven safety standards and be properly maintained, as well as consider multi-faceted strategies to improving safety. These include:

- Appurtenances like signals, signs, pavement markings, rumble strips and barriers;
- Pedestrian, bicycle and transit facilities that follow current safety and accessibility standards;
- Education and enforcement actions that address driver behavior, a documented contributing cause in the large majority of fatal and serious injury crashes; and
- Prompt emergency response for crash victims.

Crash data is examined for long-term trends and averages to avoid short-term statistical anomalies and outlier datapoints that can lead to improper conclusions. In New York, police agencies submit a standard report after all crashes to the Department of Motor Vehicles (DMV). DMV in turn makes the coded data available to New York State Department of Transportation (NYSDOT), which uses a GIS-based application called the Crash Location and Engineering Analysis Repository (CLEAR) as its safety management information system. MPOs and other agencies may query CLEAR for crash information by location, type, severity and other factors.

Figure 5.18 shows fatalities and serious injuries from 2014 to 2023. Serious Injuries and fatalities generally increased between 2014 and 2018 and have stayed relatively steady from 2019 to 2023, with the exception of 2020 which saw a minor spike in both, resulting in the highest number of serious injuries in the 10-year analysis period, and the second highest number of fatalities. The increase in fatalities during 2020 is consistent with national trends during the pandemic, which resulted in fewer overall crashes but an increase in fatal crashes^x. However, analyses of National 2020 crash data did observe an overall decrease in serious injury crashes, unlike the increase observed in Ulster County. Overall, fatalities and serious injuries have decreased since peaking in 2020. As shown in Figure 5.18 the 5-year moving average for serious injuries peaked in 2022 and decreased in 2023, while the 5-year moving average for fatalities peaked in 2021 and decreased in the following years. The increases and spikes in recent years highlight the importance of reviewing long-term data and addressing consistent safety impacts, but the most recent crash data indicates a positive trend.

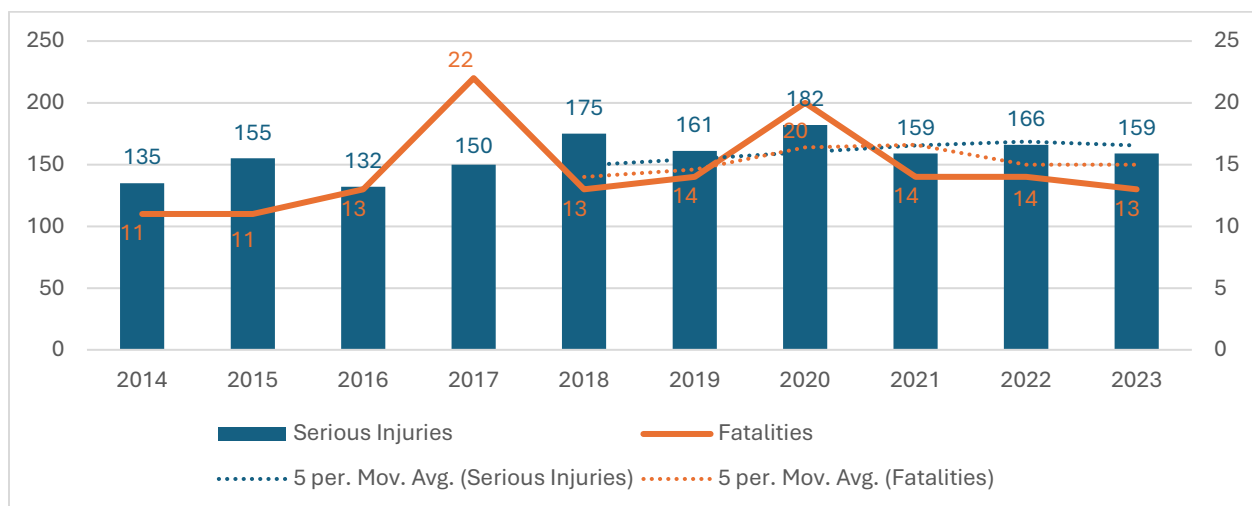


Figure 5.18: Fatalities and Serious Injuries by Year (2014-2023)

Figure 5.19 depicts fatalities and serious injuries by crash type. The leading crash type in both fatalities and serious injuries is roadway departure. However, major contributions to fatalities and serious injuries come from collisions with non-motorists and collisions at intersection/driveway conflict points. Ulster County roadway departure fatalities and serious injuries are slightly overrepresented when compared to New York. While roadway departure crashes account for 34 percent of New York's fatalities and serious injuries, roadway departure contributes to 35 percent of UCTC fatalities and serious injuries. Systemic safety infrastructure treatments are implemented statewide following the guidance of the New York Roadway Departure Safety Action Plan and are an effective strategy for reducing fatalities and serious injuries, especially those in roadway departure crashes. Similarly, UCTC will utilize infrastructure safety countermeasures systemically to address physical risk characteristics found on roadways where severe roadway departure crashes occur the most frequently as outlined in the 2023 UCTC Road Safety Plan.

Figure 5.20 depicts fatalities and serious injuries by emphasis area as outlined in New York's current (2023-2027) Strategic Highway Safety Plan (SHSP). Age-related crashes, which include crashes involving younger drivers (under 25 years of age) and aging drivers (64 and up) lead the way in contributing factors for both fatalities and serious injuries in the planning area. Following age-

related crashes, crashes at or related to intersections result in the highest number of serious injury crashes, while roadway departures result in the highest number of fatalities. However, this graph also identifies several leading contributing factors in crashes resulting in fatalities and serious injuries that are focused on driver behavior, such as alcohol or drug involvement, speeding, distracted driving and road rage. This supports the need for a multipronged approach, utilizing enforcement, education, and emergency services, to supplement engineering and infrastructure improvement strategies.

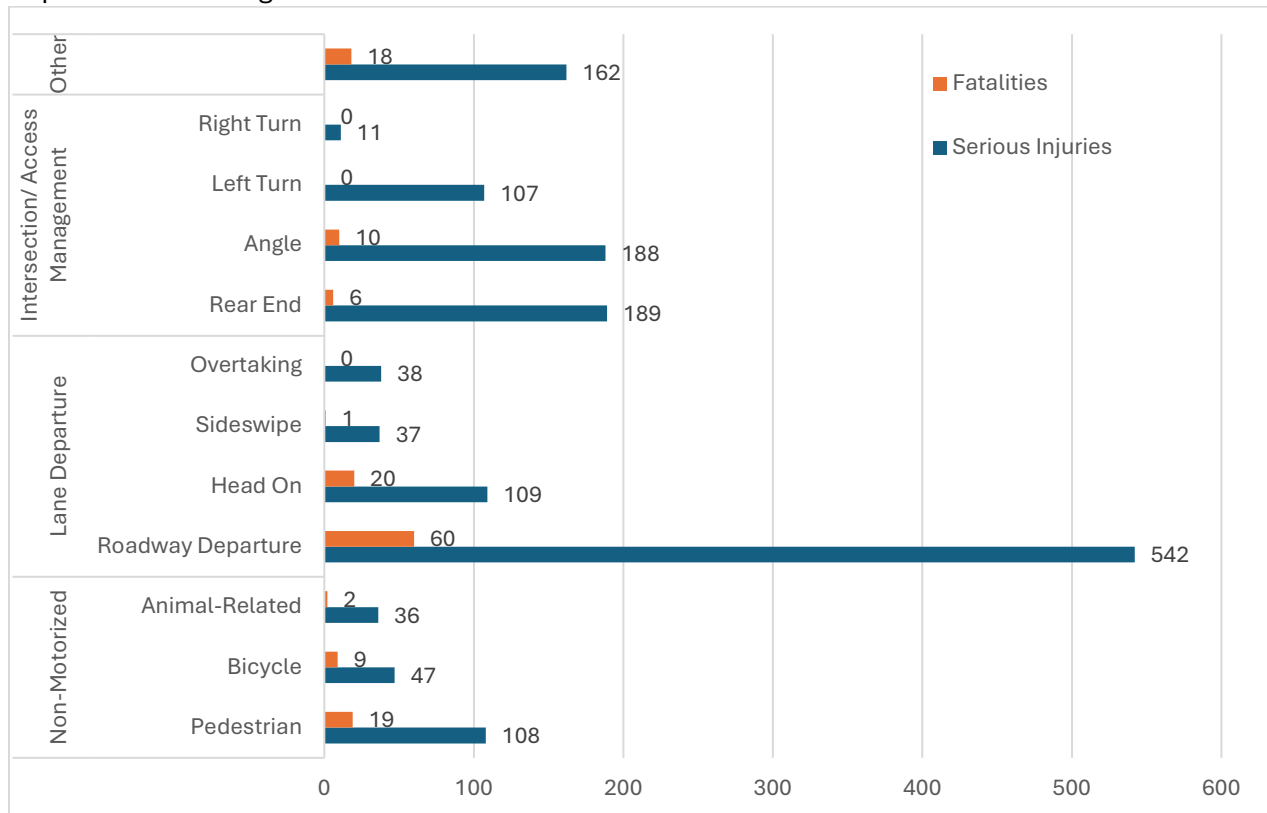


Figure 5.19: Fatalities and Serious Injuries by Crash Type (2014-2023)

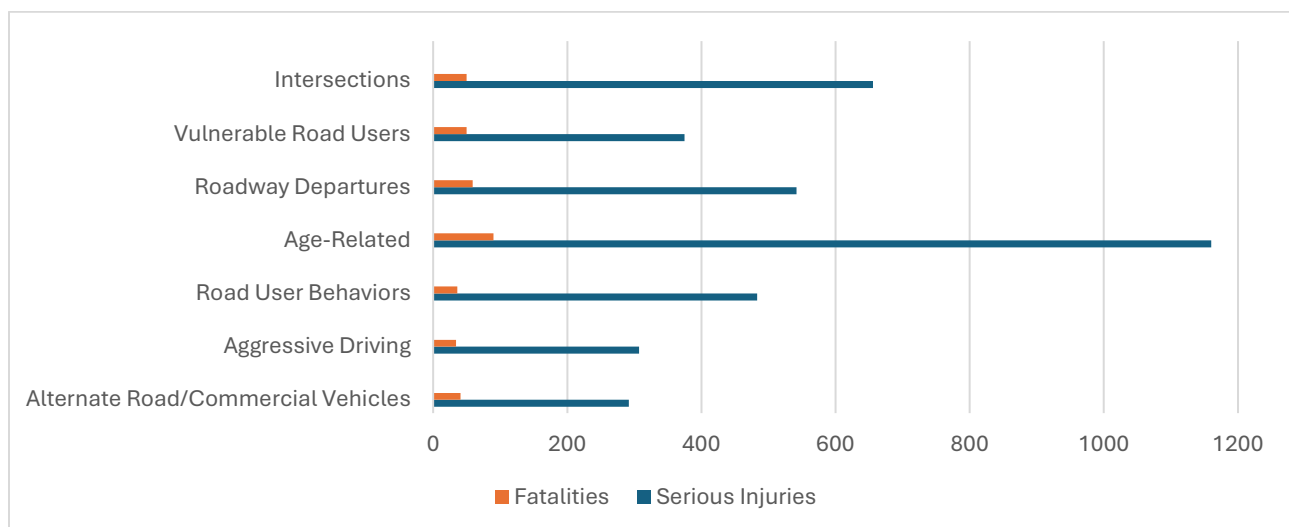


Figure 5.20: Fatalities and Serious Injuries by Emphasis Area (2014-2023)

Table 5.8 summarizes crash data by severity in each jurisdiction from 2014-2023 and Figure 5.21 depicts the locations and density of fatal and serious injury crashes throughout Ulster County. As expected, crashes are generally clustered in the locations with highest vehicle miles travelled (VMT). The two largest municipalities in the county have the highest crash and injury totals: the City of Kingston and Town of Ulster. While the Town of Ulster had a high number of fatalities over the last 10 years (16), the Town of Lloyd had the highest number of fatalities in the county (21). When normalized by population, both the Towns of Lloyd and Ulster are in the top quartile for crashes per capital for total crashes, fatal crashes, and serious injury crashes. The Towns of Kingston, Marblatown, and Wawarsing have also had high per capita crash rates over the last 10 years.

Table 5.8: Crash Severity by Jurisdiction (2014-2023)

Jurisdiction	Number of Crashes by Severity				Crash Severity per Capita			
	Fatalities	Serious Injuries	All Injuries	Total Crashes	Population (People)	Fatal Crashes per 1,000 people	Serious Injury Crashes per 1,000 people	Total Crashes per 1,000 people
Denning (Town)	0	9	21	75	493	0.00	18.26	152.1
Ellenville (Village)	0	29	179	891	4,167	0.00	6.96	213.8
Esopus (Town)	5	84	469	2,191	9,548	0.52	8.80	229.5
Gardiner (Town)	12	51	261	1,624	5,610	2.14	9.09	289.5
Hardenburgh (Town)	0	1	10	36	221	0.00	4.52	162.9
Hurley (Town)	5	45	250	1,258	6,178	0.81	7.28	203.6
Kingston (City)	11	213	1,445	8,997	24,069	0.46	8.85	373.8
Kingston (Town)	1	13	63	291	933	1.07	13.93	311.9
Lloyd (Town)	21	120	815	4,352	11,133	1.89	10.78	390.9
Marblatown (Town)	5	54	339	2,034	5,658	0.88	9.54	359.5
Marlborough (Town)	5	75	442	2,027	8,712	0.57	8.61	232.7
New Paltz (Town)	5	67	653	3,957	7,083	0.71	9.46	558.7
New Paltz (Village)	2	19	199	1,471	7,324	0.27	2.59	200.8
Olive (Town)	5	34	161	855	4,226	1.18	8.05	202.3
Plattekill (Town)	9	66	479	2,364	10,424	0.86	6.33	226.8
Rochester (Town)	6	57	319	1,844	7,272	0.83	7.84	253.6
Rosendale (Town)	6	48	318	1,805	5,782	1.04	8.30	312.2
Saugerties (Town)	12	147	757	4,147	15,139	0.79	9.71	273.9
Saugerties (Village)	2	9	120	1,075	3,899	0.51	2.31	275.7
Shandaken (Town)	3	24	155	921	2,866	1.05	8.37	321.4
Shawangunk (Town)	3	70	398	2,123	13,563	0.22	5.16	156.5
Ulster (Town)	16	230	1,571	8,739	12,660	1.26	18.17	690.3
Wawarsing (Town)	9	83	513	2,866	8,604	1.05	9.65	333.1
Woodstock (Town)	2	26	204	1,349	6,287	0.32	4.14	214.6
Total	145	1,574	10,141	57,292	181,851	0.80	8.66	315.0

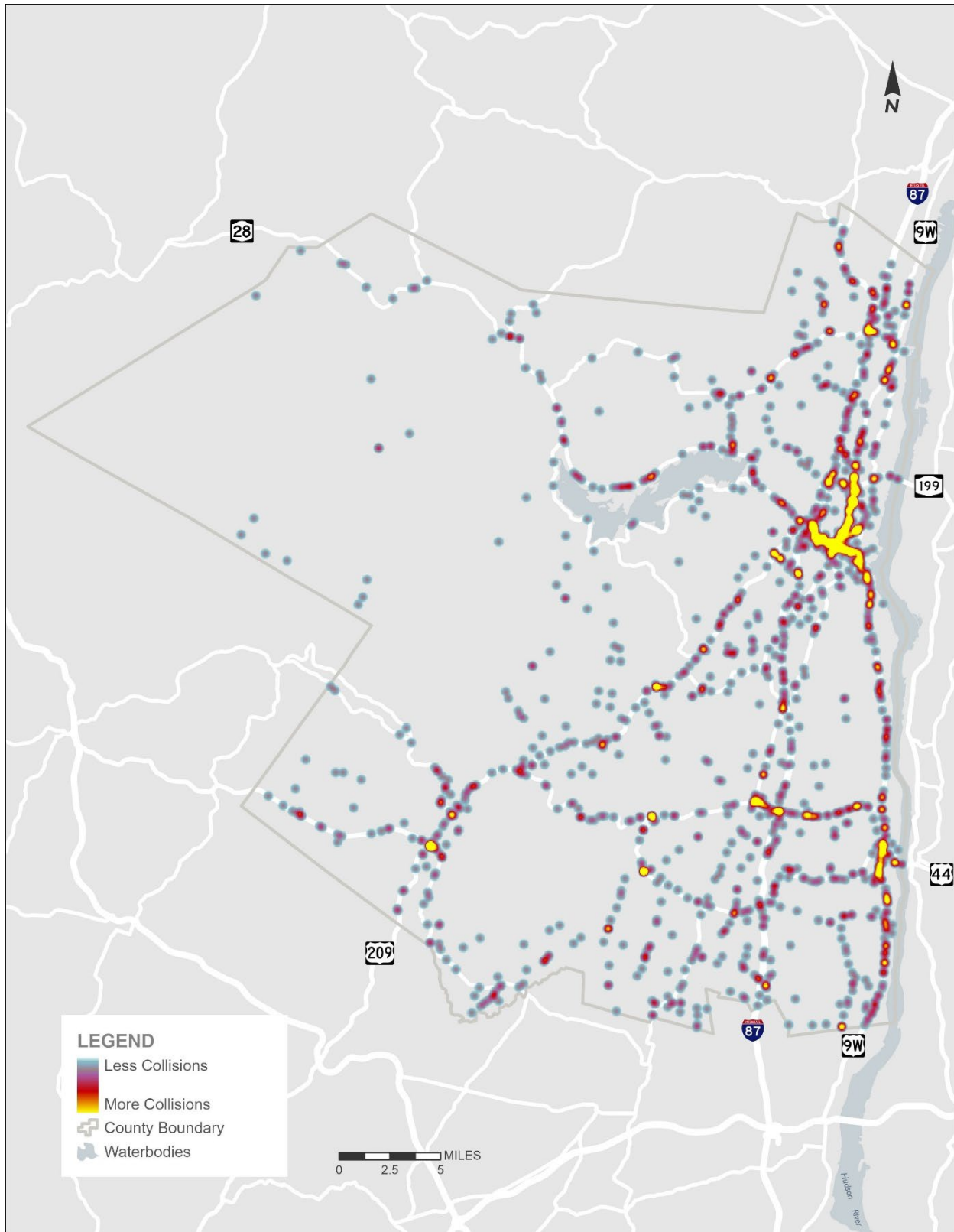


Figure 5.21: Location and Density of Fatal and Serious Injury Crashes in Ulster County (2014-2023)

Figure 5.22 depicts fatalities and serious injuries by roadway ownership, showing mileage of each roadway ownership type throughout the county planning area from 2014 to 2023. While most of the mileage in Ulster County is made up locally-owned roadways, state-owned roadways contribute the highest total of fatalities and serious injuries. However, county facilities have the highest total of fatalities and serious injuries locally, despite accounting for only a third as much roadway mileage as local roadways. VMT, speeds and other factors do contribute to these totals, as shown in other crash datasets, but this does help highlight the need for targeted local roadway strategies and improvements.

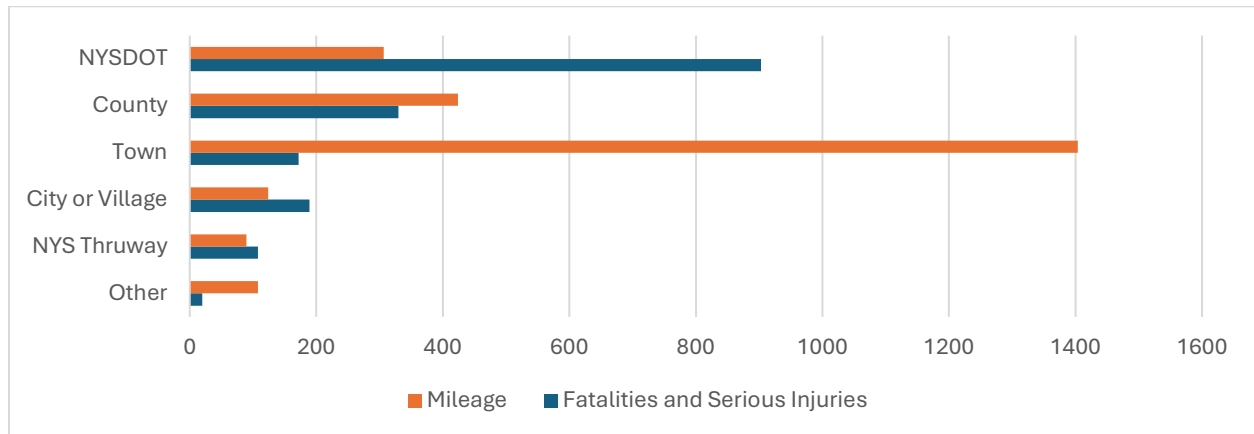
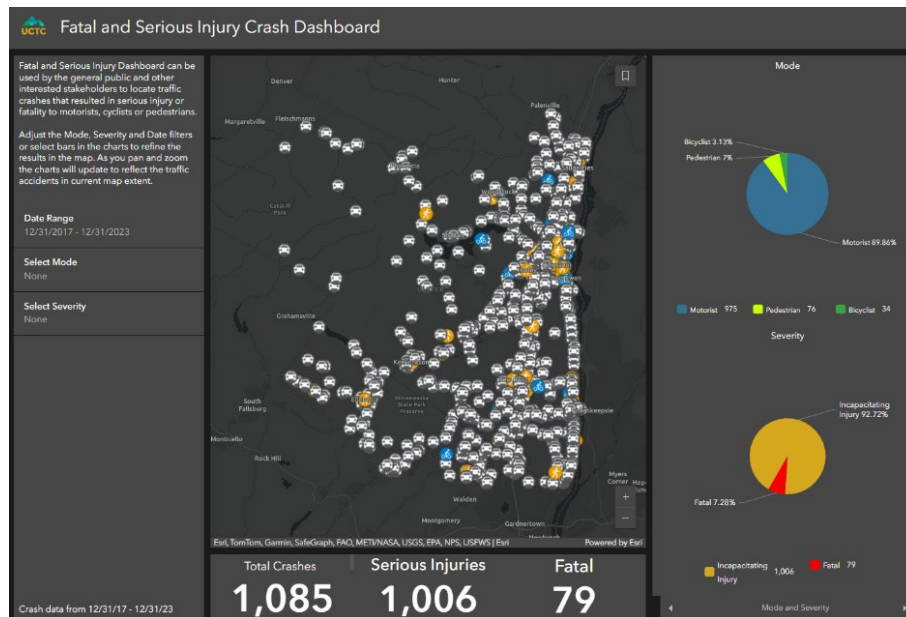


Figure 5.22: Fatalities and Serious Injuries by Roadway Ownership and Centerline Mileage

Monitoring Crash Data

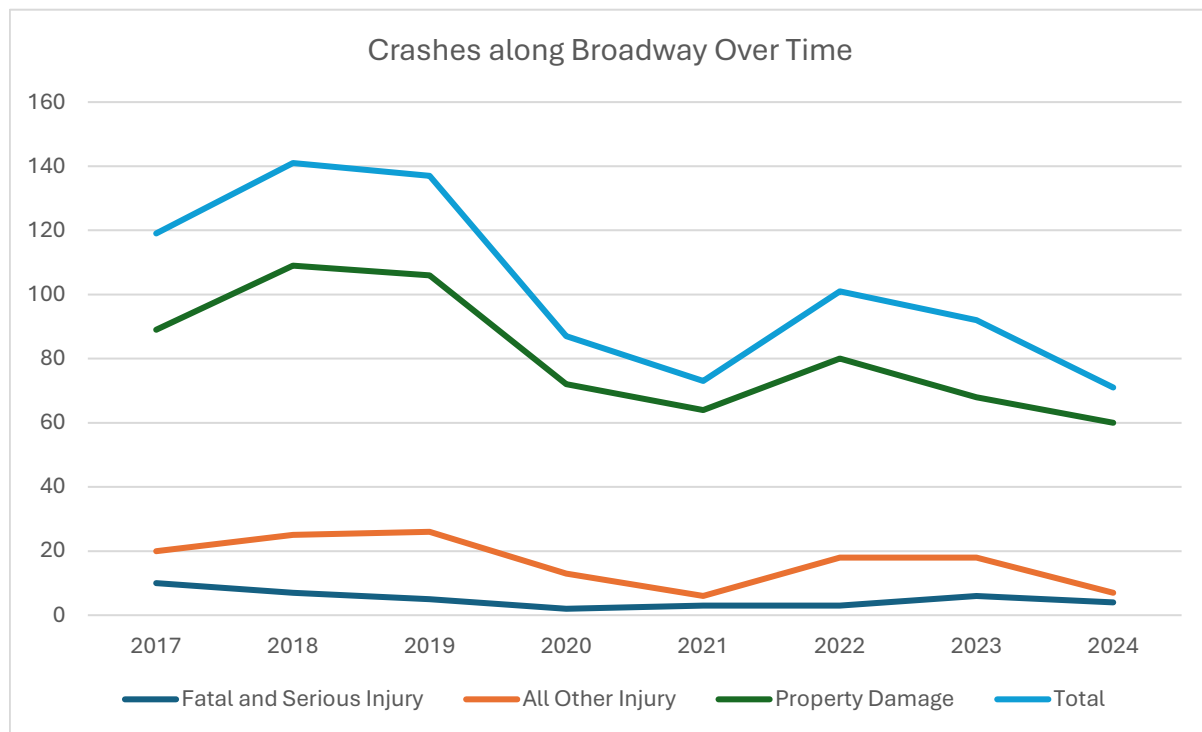
UCTC developed the Fatal and Serious Injury Dashboard to monitor safety throughout the county, including locations of fatal and serious injuries involving vulnerable user groups such as bicycles and pedestrians. This allows UCTC to identify safety hotspots and further investigate contributing factors for elevated high-severity collisions.



Safety Project Spotlight: Broadway Streetscape Project



The Broadway Streetscape Project transformed the Broadway corridor between E St James Street to E Chester Street. From St James Street to Prince Street, the project includes a two-way protected bike lane in conjunction with a road diet, converting the roadway from two lanes in each direction to one lane in each direction with a center left turn lane. Additionally, the full project included new ADA accessible sidewalks, coordinated traffic signals, new traffic and wayfinding signage, bike racks, and sustainable landscaping. The project, which concluded in 2021, appears to have had positive impacts on safety along the corridor, resulting in significant decreases in total crashes (71 total crashes in 2024 compared to the high of 141 crashes in 2018) and decreases in crashes resulting in fatalities or injuries (11 total crashes in 2024 compared to the high of 32 in 2018). UCTC will conduct more detailed measures of effectiveness over time, including crash rates and travel times, as more data becomes available.



THE FREIGHT SYSTEM

System Characteristics

As previously noted, the safe and efficient movement of freight is important to economic prosperity. As is true across the country, the largest share of goods movement is by truck. Trucking offers direct origin to destination movement for both long haul and local delivery.

As part of the FAST Act Under federal law, FHWA has developed a National Highway Freight Network (NHFN) to prioritize the distribution of Federal resources and policy for the betterment of the highway portions of the freight transportation system in the nation. While Ulster County does not include any roads identified in the NHFN, New York State recognizes that the mileage limitations on the national network precluded a number of critical statewide and regional highway freight corridors from designation in these networks. Interstate 87 provides a significant north-south connection through the state. Other major truck corridors in Ulster County include:

- US 9W paralleling the Hudson traversing the eastern portion of the county
- US 44 providing an east-west connection through the southern portion of the county
- US 209 running from the southwest portion of the county north to Kingston
- NY 28 connecting Kingston to the northwest portion of the county
- NY 32 paralleling I-87 as a north-south connector and accessing downtown New Paltz
- NY 212 providing an east-west connection from Saugerties to the Catskill Mountains,
- NY 213 providing a connection from I-87 in Rifton north to Kingston
- NY 299 running east-west in the southern portion of the county through New Paltz

Table 5.9 summarizes truck counts where available in the Ulster County freight network.

Table 5.9: 2023 Truck Counts on Significant Freight Facilities^{xi}

Road Name	Count Location (Station)	From	To	Traffic Count	Truck Ct (Daily)	% Trucks (Daily)
US 9W	TOWN OF ESOPUS (0018)	RT 299	CR 24 NORTH JCT	10,304	624	6%
US 9W	TOWN OF MARLBOROUGH (0036)	ULSTER CO LINE	MILTON TURNPIKE	15,919	1,252	8%
US 44	TOWN OF PLATTEKILL (0278)	CR 10 MILTON TPK	CR 22 MAPLE AVE	4,967	264	5%
US 209	TOWN OF HURLEY (0540)	CR 8 WYNCOOP AVE	RT 28	13,047	873	7%
NY 28	TOWN OF ULSTER (0226)	RT 209	ULSTER/ KINGSTON T/L	16,999	850	5%
NY 28	TOWN OF SHANDAKEN (0230)	RT 212 MT TREMPER	RT 214 PHOENICIA	5,976	221	4%
NY 32	TOWN OF NEW PALTZ (0270)	CR 154 HORSENDEN RD	START 32/ 213 OLAP	10,512	556	5%
NY 32	TOWN OF NEW PALTZ (0025)	START RT 32 OLAP @CHESTNUT	CR 154/ HORSENDEN RD	6,980	217	3%
NY 32	TOWN OF PLATTEKILL (0244)	RTS 44 55 MODENA	ULSTER CO LN	4,674	191	4%
NY 212	TOWN OF WOODSTOCK (0551)	CR 47A ROCK CITY RD	RT 375	9,813	310	3%
NY 213	TOWN OF ROSENDALE (0592)	CR 26A	START 32/ 213 OLAP	6,002	312	5%
NY 299	TOWN OF NEW PALTZ (0573)	SPRINGTOWN RD	START RT 32 OLAP @CHESTNUT	11,197	300	3%

The major industries in Ulster County are construction, manufacturing, financial, professional/ business services, education, and healthcare. Of these industries, construction and

manufacturing will generate the highest amount of freight traffic to and from Ulster County. With the NYS Thruway running through the county, Ulster County is the major source of the high level of through traffic coming from New York City and the Mid-Atlantic to areas further upstate and west to Buffalo. The retail sector generates continuous urban delivery truck movements.

In terms of waterborne cargo, the Hudson River is also designated as “Marine Highway 87”. The harbors at Kingston and Saugerties utilize this highway as do docking facilities for oil transfer along the Hudson within Ulster County. The most significant volume of freight is associated with the connection between Albany to New York City.

CSX owns the only freight rail line in Ulster County, formerly known as the West Shore line which runs north-south along the Hudson River, connecting New York City to Albany. This Class 1 line carries high volume goods to, from, and through Ulster County. A secondary switching yard exists in Kingston. Most of this line is single track with a recently installed double track location in the Town of Esopus.

System Use

The majority of Ulster County’s top trade partners on the state/national level are within the northeast. Pennsylvania, New Jersey, Massachusetts, and Connecticut are all major export and import trade partners.

Through the review of local and national trade partners, it is clear that much of the traffic entering and exiting Ulster County utilizes major interstates, like the NY Thruway. The CSX rail line carries high volume freight cargo to, from, and through the Ulster County, while various low-volume, high-value commodities may arrive via Albany International Airport, north of Ulster County in Albany, or Stewart International Airport, south of Ulster County in Newburgh, and travel to Ulster County via truck.

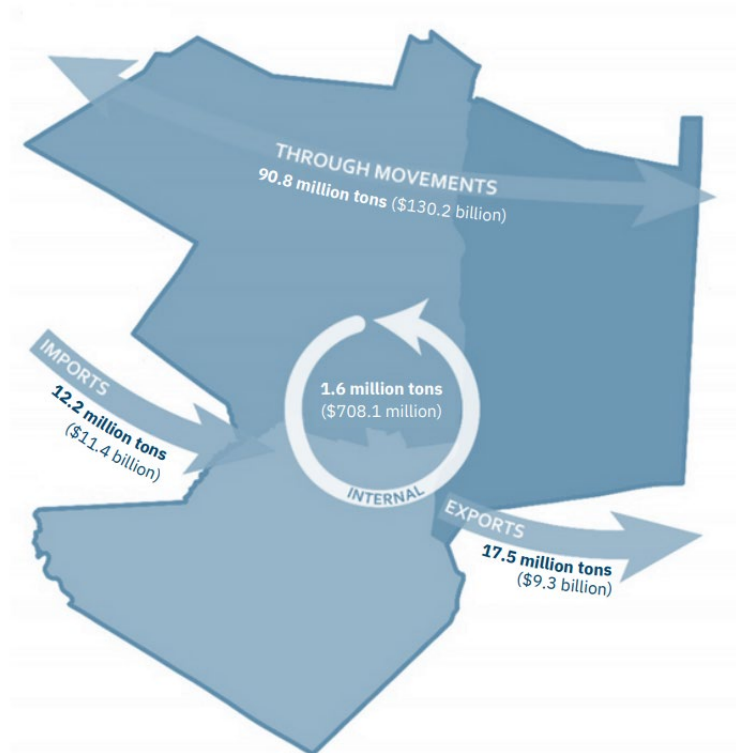


Figure 5.23: Annual Freight Movements By Tonnage and Value for the Mid-Hudson Valley TMA Region^{xii}

Rail Freight

The West Shore Railroad is the only active rail freight line in Ulster County. The line runs from Weehawken, New Jersey, across the Hudson River from New York City, north along the west shore of the river to Albany, New York and then west to Buffalo. Passenger service on the line ended completely by 1960. The line now serves as CSX Transportation's principal freight route



from Western points to New Jersey, via the former NYC Selkirk Yard. West of the Hudson Palisades, beginning at North Bergen Yard in Bergen, NJ, the line is now referred to as the River Subdivision of CSX Transportation and passes directly through Ulster County as shown in Figure 5.24.

Local trains delivering freight to businesses and industries located along the River Subdivision operate out of yards located at North Bergen, NJ; Kingston, NY and Selkirk, NY. Other than local freight, commodities include grain, oil, ethanol, trash, and other mixed intermodal and commodity freight. Bakken crude oil shipments are also travelling more frequently on the corridor as well, with full shipments generally heading south for refinement in New Jersey and empty tank cars returning north.

Rail Safety

The issue of rail safety has become a topic of increasing concern among residents and officials, after several tragic collisions between CSX trains and automobiles and pedestrians in Saugerties and the City of Kingston. In 2019, UCTC joined a panel of staff from agencies including CSX, Federal Railroad Administration, local law enforcement and safety, and NYSDOT to discuss possible measures to reduce these types of collisions in the City and beyond. Education and enforcement of respecting private property where rail operations occur was chief among the suggested recommendations. This was followed by a focused effort to reach out through face-to-face contact, lectures and educational materials to area residents and students that interact directly with CSX properties. According to data tracked by the Federal Rail Administration (FRA), from 2020 to 2024 there have

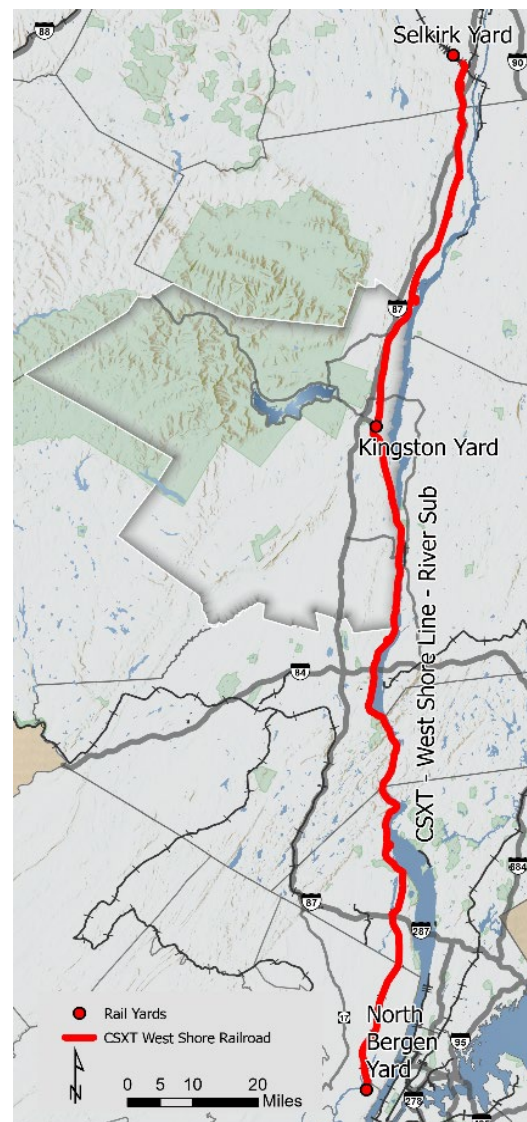


Figure 5.24: CSX West Shore Line

been 11 grade crossing incidents in the UCTC planning area, or approximately two incidents per year. These incidents resulted in one fatality and five injuries. Figure 5.25 shows the location of crashes and casualties as reported through crash and FRA data.

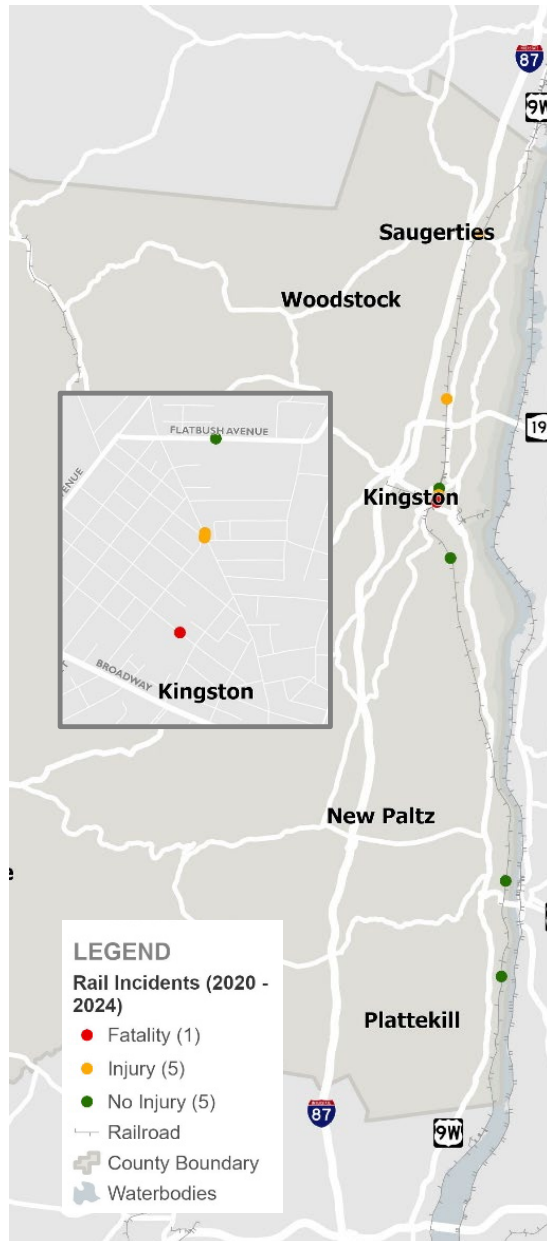


Figure 5.25: Rail Safety Incidents

However, this statistic only examines crashes along the roadway reported through the typical crash reporting methods and does not typically include incidents involving pedestrian trespass along CSX properties. While data related to trespassing is not available for 2020 and 2021, during the 2022 to 2024 time period, there were 7 reported incidents involving trespassers on CSX property resulting in two fatalities and five injuries. The majority of crashes and trespass incidents occur in the City of Kingston.



A mother with three children traverses the uneven gap between sidewalk segments at the CSX track on Foxhall Ave. in Kingston. The City of Kingston has secured funding to provide new sidewalks in this location and is working with NYSDOT to secure HSIP Rail funds to improve the crossing. Source: UCTC July 2018.

SYSTEM OPERATIONS

“F) Operational and management strategies.

Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods.”

23 U.S. Code § 134. (h)(i)(2)(F)

MAP-21, followed through in the FAST Act, shifted the focus of the metropolitan transportation planning process to a performance-based, outcome-oriented perspective. As discussed in the Introduction, this means that UCTC must select projects, actions, and strategies in the long-range plan that will result in a regional transportation system that best meets the needs of the travelling public across a variety of dimensions. These include not only asset management and safety, but also mobility and the reliability of travel.

Traffic Network Overview

Ulster County is served by a network of roadways ranging from interstate expressways to local town and village streets. Recent traffic volume counts and network analyses show that, for the most part, there is limited traffic congestion in Ulster County and travel within the region occurs without excessive delay. However, there are isolated areas where intersections or roadway segments experience moderate to severe recurring delays. One such area is the Route 28 Corridor in the Town of Ulster at the roundabout at the NYS Thruway exit. Traffic congestion in this area is caused by the confluence of State Routes 28, 209, Interstate 587, and the NYS Thruway. Other areas experiencing recurring traffic delays in Ulster County include the Kingston Broadway Corridor, Kingston Uptown Stockade District, Route 9W in the Towns of Ulster and Marlborough, Route 299 in New Paltz and Lloyd, and the Mid Hudson Bridge.

In addition to recurring traffic congestion, several areas in Ulster County experience moderate to severe nonrecurring traffic congestion. Nonrecurring congestion is congestion caused by nonrecurring events such as crashes, disabled vehicles, blocked railroad crossings, work zones, adverse weather events, and planned special events. Portions of the road network in Ulster County experiencing significant nonrecurring congestion include the NYS Thruway and near the West Shore Railroad Corridor area in Kingston. Nonrecurring congestion can occur anywhere at anytime, due to events such as crashes, work zones, passing freight trains, or special events, and is more difficult to measure or predict.

Figure 4.33 shows existing traffic congestion (as of year 2022, the most recent available at time of writing). This data is an example of a “Big Data” resource collected via connected in-vehicle devices and was obtained from the University at Albany’s Albany Visualization and Informatics Lab (AVAIL). The dataset is known as the National Performance Management Research Dataset (NPMRDS). It is used regularly in the Congestion Management Process (CMP) of UCTC and other peer NYS MPOs. The snapshot shown in Figure 5.26 highlights congestion hotspots in Kingston, New Paltz, and the approach to the Mid-Hudson Bridge.

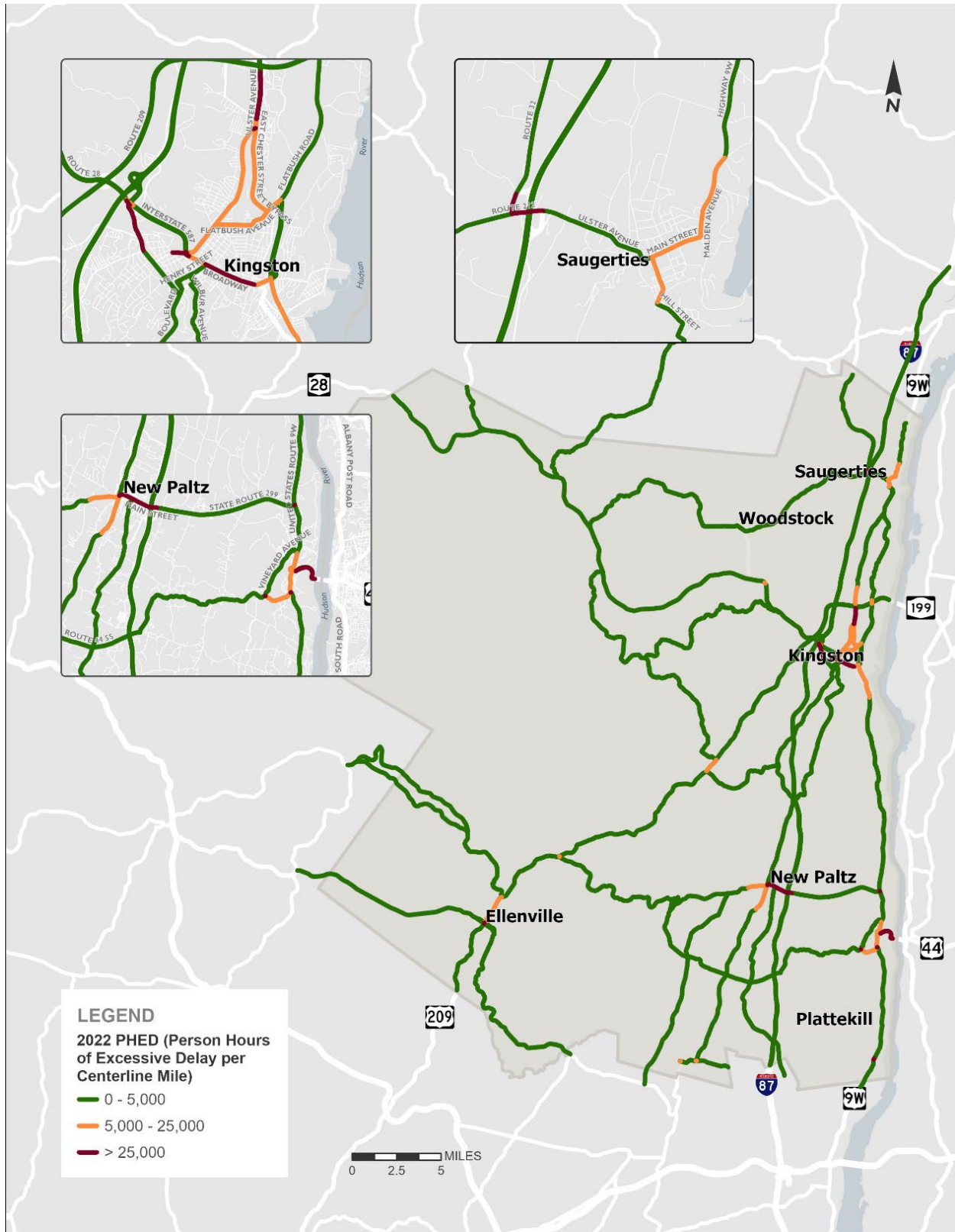
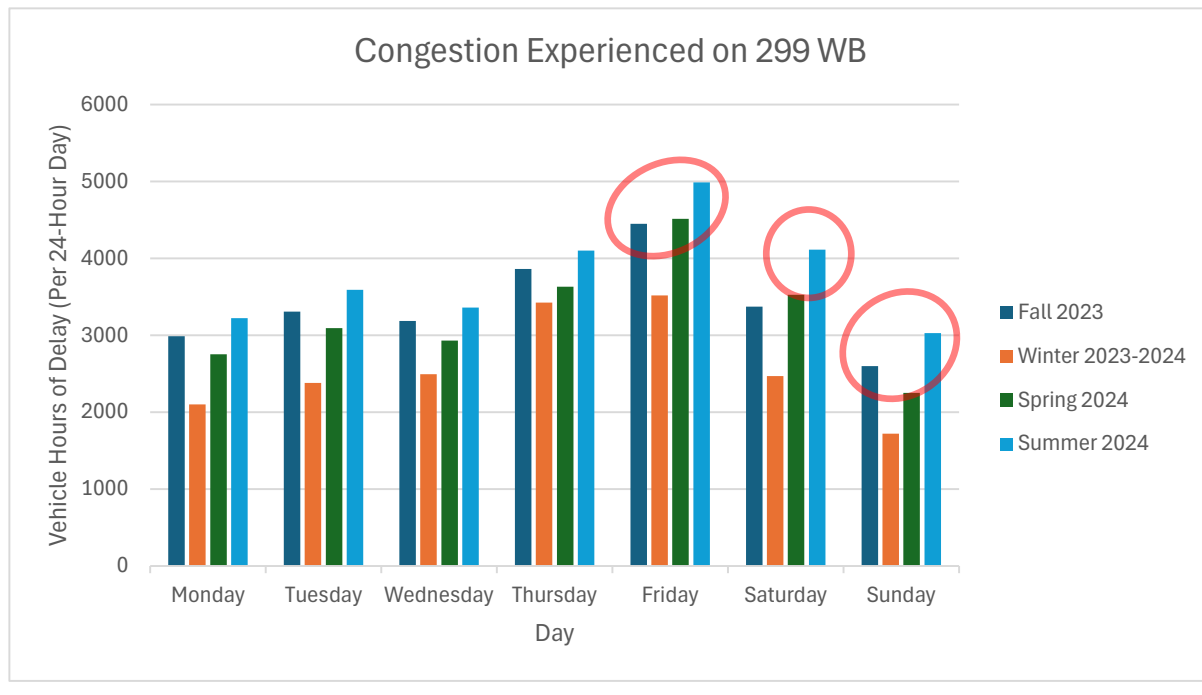


Figure 5.26: Year 2022 Person Hours of Excessive Delay (PHED), Normalized Per Centerline Miles of Roadway (Source: University of Albany AVAIL Labs NPMRDS dataset)

NPMRDS Evaluation

In addition to the use of the NPMRDS data for developing UCTC's federally mandated Congestion Management Process, the dataset provides the opportunity to better understand the "where" and "when" patterns of congestion. This is particularly important for a region like Ulster County where congestion can occur outside of typical weekday peak morning and afternoon periods, due to travel to/from the county's recreational attractions.

To take one example, the chart below shows congestion patterns of westbound (towards the Shawangunks) along Route 299 (Main Street) in New Paltz. The data highlight the occurrence of the slowest travel on summer and fall Fridays and weekends, which are particularly busy times of year for recreational amenities in and around the Shawangunks. In contrast, traffic congestion in the winter (orange bars in the chart) is relatively low.



Prior to the COVID-19 pandemic, Vehicle Miles Travelled (VMT) in Ulster County remained relatively steady, as shown in Figure 5.27. Consistent with statewide and national trends, VMT decreased precipitously in 2020 but has since rebounded. That said, VMT has not yet reached the peak levels observed in 2018.

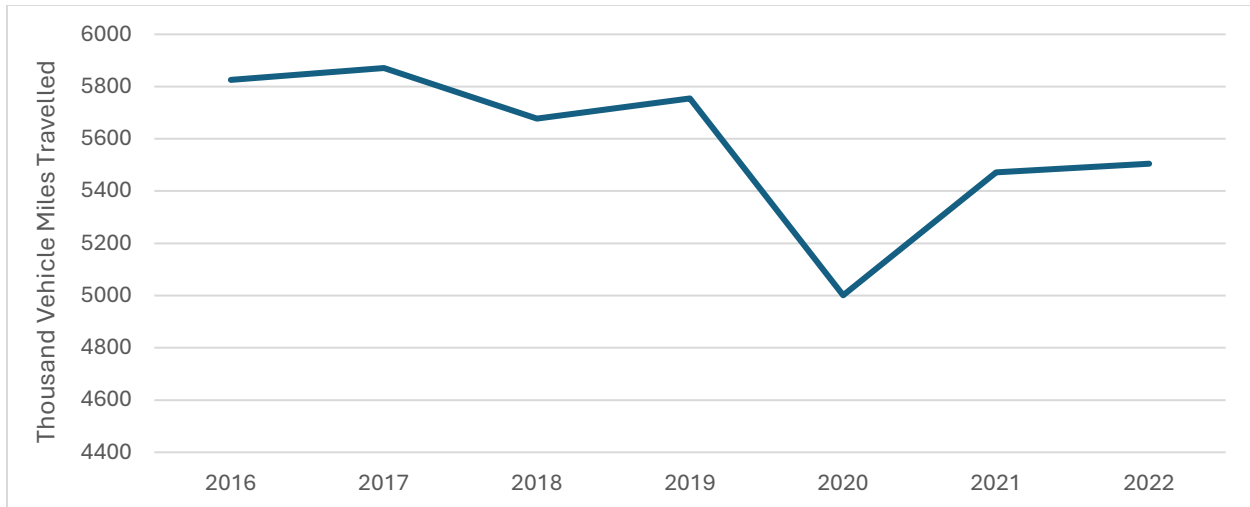


Figure 5.27: Yearly VMT in Ulster County

Our transportation system has evolved from something that is static and provides a defined level of service to something that can be actively managed to optimize the level of service in real time. Technology, generally under the terminology of Intelligent Transportation Systems (ITS), has done a great deal to enable regional transportation system management and operations. This can typically be accomplished at a significantly lower cost than a capital project that constructs new roadway capacity. This approach does result in ongoing annual costs for staffing traffic management centers, software licenses, and the like. Application of management and operations strategies can be grouped in these areas:

- Traffic management.** Actively managing traffic flow results in more efficient mobility. This can be accomplished in a number of ways. Computer-controlled traffic signal systems do a much better job of optimizing signal timing, avoiding unnecessary delay. The most advanced of these systems is known as traffic adaptive signal control that optimizes signal timing continuously in response to the volume of traffic, pedestrians, and other users.

An arterial signal system can be equipped with transit signal priority, which enables buses to trigger a green light to stay on schedule.

In situations where there is high peak volume and very directional flow in opposite directions in the AM and PM periods, reversible lanes can be used. In this case, a center lane is reversed to provide added capacity for the predominant direction.

Variably priced toll lanes, often known as High Occupancy Toll (HOT) lanes because they usually are available to other than single-occupant vehicles, can be created on expressway facilities. The price is adjusted dynamically in response to traffic volume to maintain free flow conditions.

The ability to display variable speed limits is another tool that can be used to improve safety and traffic flow on congested freeways.

- Incident management.** This is a subset of traffic management whose objective is to improve response to highway incidents to restore traffic flow more quickly. This requires promptly

detecting the incident, both through 911 calls and use of closed-circuit television cameras and other devices, and accurately dispatching the appropriate emergency services resources. It also means response agencies, including police, fire, EMS, transportation or public works departments, and towing companies sharing standard operating procedures and training. The Strategic Highway Research Program (SHRP2) developed a multidisciplinary training course for these responder groups. The course is now available through New York State DOT. The National Unified Goal for Traffic Incident Management addresses safe, quick clearance; responder safety; and interoperable communications.

- Traveler information.** Informed travelers make better decisions regarding their mode, route, and time of travel. When information about transportation system conditions is transmitted in real time, the entire system can operate more efficiently. For example, when an incident occurs that closes lanes on a roadway, upstream drivers can be informed to find alternate routes or use preplanned detours, reducing the traffic queue. Similarly, people can be informed ahead of time of severe weather and road conditions, and be provided with routing information for large special events. This can also benefit tourists who are not as familiar with the roadway system as local residents. Systems can also be put in place to assist those who want to use public transit, with applications to plan their trip, see the schedule, and be informed at stops when the next bus or train will arrive. A recent example of this



There are a number of techniques and devices that are used to facilitate traveler information. In 2000, the Federal Communications Commission (FCC) designated 511 as a national traveler information number. In the intervening years, state and local governments developed 511 systems. 511NY can be accessed both by phone and through the Internet at www.511ny.org. It provides both real time information and trip planning services for a variety of modes across the state. Additionally, NYSDOT's Mobility Viewer Tool (www.511mobility.org/web/mobility-viewer) provides a consolidated hub for a number of transportation-related datasets, equipping users with the ability to discern geographic areas where the demand for travel surpasses the available supply of mobility services.

Dynamic or variable message signs (DMS/VMS) have become commonplace on our highways, such as the roadside travel time signage that NYSDOT installed along I-587 recently. Additionally, Highway Advisory Radio (HAR) is commonly used to inform motorists of road conditions. In recent years, there has been a shift from public agency to private sector provision of traveler information. There are a number of Internet applications that perform these functions, including Google™ maps that show current traffic and assist with route selection; and Waze®, which collects data from smart phones of users who are logged on to determine traffic conditions.

- Electronic toll collection (ETC).** Systems like E-Z Pass® New York create multiple benefits. By automating toll collection on the New York State Thruway and various bridges, ETC speeds traffic flow through toll barriers, thereby reducing congestion. Toll tags are required for the HOT lane pricing technique discussed above. Finally, tags can be used as traffic probes to monitor traffic flow and speed through a series of roadside readers. In that instance,



identifying information is stripped from the data to ensure privacy of account holders. ETC can also allow interchanges to be re-designed in new ways in the future to optimize access and mobility, by eliminating the requirement that ramps funnel all traffic through a staffed tollbooth.

- **Commercial vehicle operations.** This is a subset of ITS that is dedicated to making truck transport safer and more efficient. It involves such techniques as electronic verification of a truck's credentials, and weigh-in-motion where appropriately equipped trucks do not have to stop at weigh stations. One of the newer techniques involves electronic logbooks that are transmitted to the trucking company's dispatcher to verify the truck's location and the driver's compliance with federal hours-of-service rules. This is not yet a publicly accessed function but may become so.
- **Other management systems.** Parking management systems are typically deployed in central business districts. They can be used to notify drivers via the Internet of the availability of parking spaces in garages and lots. This can save both time and cost associated with people circulating around a downtown looking for parking. Port and terminal management systems can control the flow of trucks in and out of a facility to maximize mobility and efficiency.

The U.S. DOT connected vehicle research program is a multimodal initiative that aims to enable safe, interoperable networked wireless communications among vehicles, infrastructure, and personal communications devices. Connected vehicle research is sponsored by the DOT and others to leverage the potentially transformative capabilities of wireless technology to make surface transportation safer, smarter, and greener. Research has resulted in a considerable body of work supporting pilot deployments, including concepts of operations and prototyping for more than two dozen applications.

<http://www.its.dot.gov/pilots/>

The use of technology has great potential to expand beyond these applications in order to improve safety and efficiency of travel. The U.S. Department of Transportation has been sponsoring the Connected Vehicle research program (see box). This has a dual focus on vehicle-to-infrastructure communication (V2I) and vehicle-to-vehicle communication (V2V). One example of using this technology to improve safety is the Cooperative Intersection Collision Avoidance System (CICAS). When connected vehicles talk to each other and the traffic signal, crashes caused by red light running may be eliminated. Drivers may receive active warnings of pedestrians waiting to cross the street, or cyclists in a bike lane.

The ultimate success of the Connected Vehicle program will require commitments from public agencies to instrument the infrastructure, and from automobile and truck manufacturers to instrument their vehicles according to communications standards promulgated by USDOT.

Congestion Management Process

Congestion continues to be an issue that UCTC has worked to measure and define, locate, manage, and integrate and evaluate in the planning process. Member agencies of the Mid-Hudson TMA including UCTC, OCTC, and DCTC, last undertook efforts to address congestion concerns in the region through the Congestion Management Process (CMP) in 2019. As part of the work

completed, a macro analysis was conducted to identify key congested areas in the region on the National Highway System (NHS) utilizing data from the National Performance Management Research Data Set (NPMRDS) and the assistance of AVAIL Labs. These areas were identified using a number of congestion measures including Level of Travel Time Reliability (LOTTR), Truck Travel Time Reliability (TTTR), Travel Time Index (TTI), and Total Excessive Delay per Mile (TED/mile).

Each of the congestion measures—LOTTR, TTTR, TTI, and TED/mile—employs a threshold of acceptability for road segments on the NHS.

For LOTTR, there is a national threshold of 1.5, indicating that travel time during the worst period fluctuates by 50 percent. This threshold was set by FHWA in their performance measure reporting and adopted by all three Mid-Hudson MPOs. For TTTR the CMP analysis used 3.99, which is the threshold established for the Upstate region (including the Mid- Hudson TMA) in the NYS Freight Plan^{xiii}. For TTI, there is no such national standard. The CMP analysis used a threshold of 2.0, meaning that it takes twice as long to traverse a segment during the most congested period as it does during a free-flow period. There is also no national threshold for TED/mile, and values range widely across different areas. The CMP analysis used 40,000, which is the same figure chosen by the Syracuse Metropolitan Transportation Council and results in a similar passing rate to the LOTTR and TTI thresholds.

Table 5.10 provides a summary of NHS roadways in the Mid-Hudson TMA and their relation to the threshold values for the identified congestion measures.

Table 5.10: TMA – Overall Congestion & Reliability

Measure	Threshold	% of Segments Passing	% of Roadway Miles Passing
TTI – peak period congestion	2.0	94%	97%
TED/mile – total congestion	40,000	90%	96%
LOTTR – reliability	1.5	89%	94%
TTTR – freight reliability (interstates only)	3.99	95%	98%

Based on 2018 data, 94% of Traffic Message Channels (TMCs) that meet the data completeness threshold ‘passed’ the peak period congestion (TTI) threshold of 2.0. For reliability (LOTTR), 89% of segments ‘passed’ the threshold of 1.5, while 90% of segments ‘passed’ the threshold of 40,000 for total congestion (TED/mile), and 95% of interstate segments ‘passed’ the threshold of 3.99 for truck reliability (TTTR). Because many of the failing segments are small fragments near intersections and interchanges, the percentage of roadway miles that pass these thresholds is even higher. The majority of the roadway mileage that does not meet the threshold values in the TMA occurs outside of the UCTC planning area. Figure 5.28 provides the locations of segments not meeting the thresholds set out in the CMP.

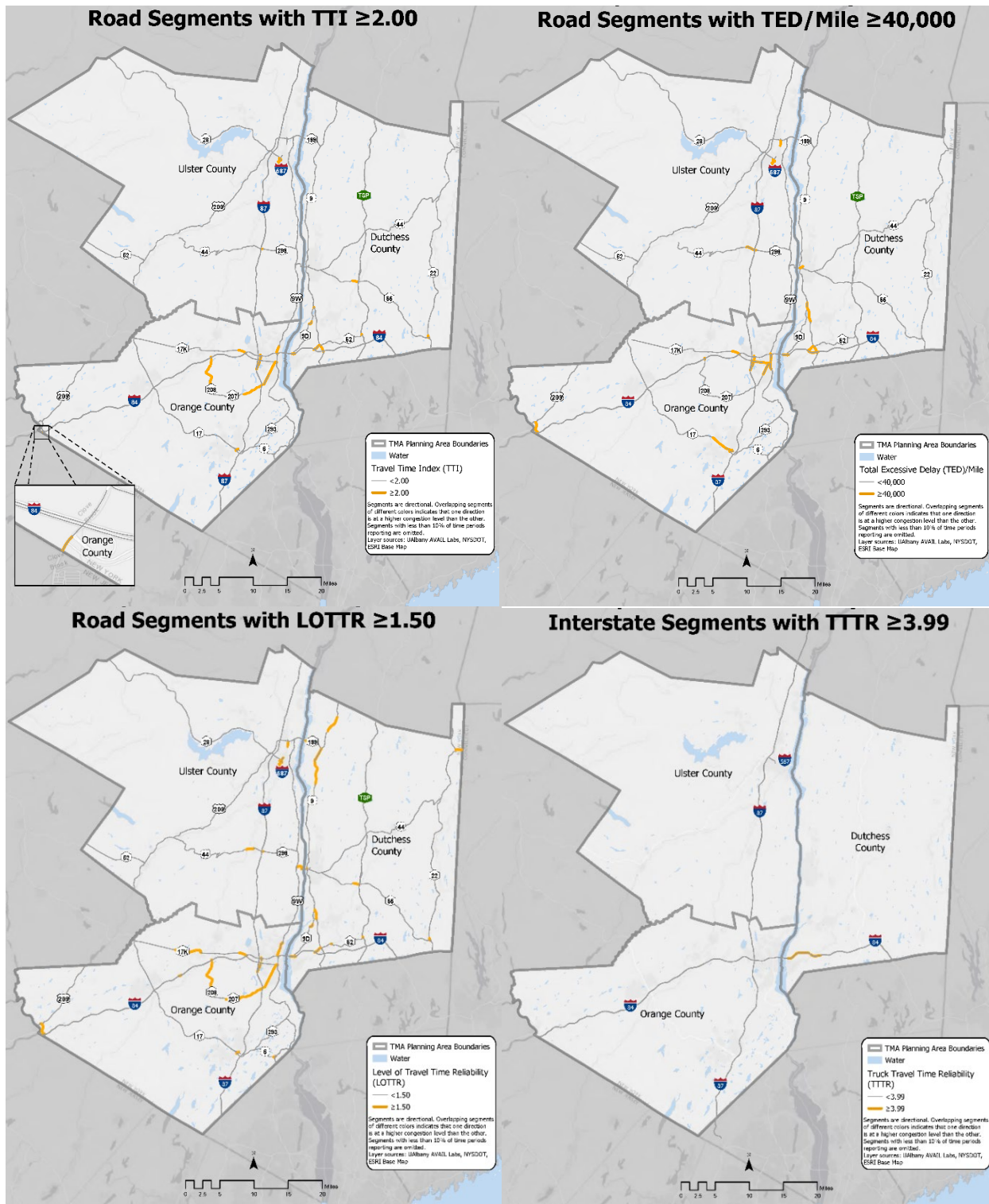


Figure 5.28: Mid-Hudson TMA CMP Segment Threshold Analysis^{xiv}

In addition to the threshold analysis, the CMP also established a list of Priority Analysis Locations of the worst performing segments in the TMA for further review. Through the next step of the CMP, these locations will be examined to identify the underlying issues and consideration will be given to

TMA Planning Area Boundaries

Water

Priority Congestion Location
 Location Number (see Report Table 14)

Layer sources: UAlbany AVAIL Labs, NYSDOT, ESRI Base Map

The Priority Locations identified in Ulster County include I-587 and Route 32 (14), Route 299 near I-87 (15), Route 299 near Route 32 (16), Route 44/55 near the Mid-Hudson Bridge (17), and Route 9W near Route 199 (18). Following this plan, a roundabout was constructed at the intersection of I-597

and Route 32 to help alleviate some of the congestion experience at this intersection. Additionally, UCTC completed the Town of Ulster Route 9W Mobility Plan in late 2024 which lays the groundwork for addressing traffic safety, connectivity, and congestion along this key stretch of Route 9W. UCTC will continue to advocate for the advancement of plans and projects to address congestion throughout the planning area and region, with a specific focus on those locations cited above.

ⁱ New York State Department of Transportation Road Inventory System (RIS)

ⁱⁱ New York State Department of Transportation Road Inventory System (RIS).

ⁱⁱⁱ <https://www.ithacajournal.com/story/news/local/new-york/2025/04/25/can-washing-bridges-help-delay-expensive-repair-projects-in-ny/83256113007/#:~:text=In%20New%20York%2C%20specifically%2C%20preservation,harshness%20of%20the%20state's%20winters.>

^{iv} [Ulster County bus ridership continues to soar in first half of year – Daily Freeman](#)

^v <https://nysdotwalkbikeplan.com/>

^{vi} <https://hudsonvalleyone.com/2022/03/19/electric-bicycle-law-passed-in-new-paltz/>

^{vii} https://uctc.ulstercountyny.gov/wp-content/uploads/2025/01/20250129_Ulster-9W-Final-Report.pdf

^{viii} American Community Survey, 2023. Commuting Characteristics by Sex. Table S0801

^{ix} US Census, Table S2504: Physical Housing Characteristics for Occupied Housing Units, Ulster County, ACS 5 Year.

^x <https://www.nhtsa.gov/press-releases/2020-traffic-crash-data-fatalities>

^{xi} New York State Department of Transportation Traffic Data Viewer, <https://www.dot.ny.gov/tdv>

^{xii} Freight in the Mid-Hudson Valley, 2024

^{xiii} New York State Department of Transportation New York State Freight Transportation Plan 2019

^{xiv} Congestion Management Process for the Mid- Hudson Valley Transportation Management Area: Technical Memo 1: TMA-wide Macro-Level Screening

^{xv} Congestion Management Process for the Mid- Hudson Valley Transportation Management Area: Technical Memo 1: TMA-wide Macro-Level Screening

6. TRANSPORTATION AND THE ENVIRONMENT

“A long-range transportation plan shall include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.”

23USC134(i)(2)(D)

MITIGATION OF TRANSPORTATION IMPACTS ON THE ENVIRONMENT

It is incumbent on UCTC to broadly consider the potential environmental impacts of the actions proposed in the long-range transportation plan, and programmatic means to mitigate those impacts. In doing so, it is important to differentiate this discussion relating to long-range planning from the detailed project-level environmental analysis that is required under the federal National Environmental Protection Act (NEPA) and NYS’s Statewide Environmental Quality Review (SEQR). An example of a programmatic mitigation is addressing air quality impacts from construction equipment pollution involved in pavement and bridge projects.

There are many different types of environmentally sensitive areas and potential impacts to the natural and human environment that may be affected by various actions associated with the 2050 LRTP. These include (but are not necessarily limited to):

- Threatened and Endangered Species
- Wetlands
- Floodplains
- Surface and Ground Waters
- Stormwater Management and Erosion and Sediment Control
- Hazardous Materials
- Litter and Odors
- Air Quality
- Historical/Cultural Resources
- Right-of-Way/Property Impacts, Including Impacts to Parks, Farmland and Neighborhoods
- Scenic Viewsheds
- Traffic and Train Noise
- Extreme weather events

Procedure and technical guidance on environmental matters relating to the planning, design, construction, operation, and maintenance of transportation facilities is detailed in the NYSDOT Environmental Procedures Manual.ⁱ In addition, Chapter 7 (“Overview of Environmental Process”) of the NYSDOT Procedures for Locally Administered Federal Aid Projects (PLAFAP) manual discusses the project advancement and environmental procedures that must be followed to satisfy applicable environmental laws, including the NYS Smart Growth Public Infrastructure Policy Act.ⁱⁱ NEPA and SEQR, and many other State and federal environmental regulations, require that

environmental considerations be addressed in transportation decision making, plans and programs. Most transportation capital and maintenance projects have the potential to affect natural and human-made resources in both positive and negative ways. Lead agencies and project sponsors in charge of transportation projects and MPOs must strive to ensure full and objective consideration of all reasonable alternatives that avoid adverse impacts to the environment and communities. Where adverse impacts are unavoidable, lead agencies and project sponsors must identify the impacts and incorporate measures to mitigate impacts to the maximum extent practicable.

Certain environmentally-sensitive areas are easily identified and mapped through well-established state and federal programs and their associated digital resources. These include state and federally-protected wetlands and floodplains. In addition, the locations of historical/cultural resources and threatened or endangered species can be accessed and evaluated on a location-specific basis through available mapping and databases as well as through consultation with state and federal agencies such as the NYS Department of Environmental Conservation, the State Office of Parks, Recreation and Historic Preservation, the US Army Corps of Engineers, and the Federal Fish and Wildlife Service, as well as other similar or supporting local, state and federal offices.

The Ulster County Planning Department and the Ulster County Department of the Environment have developed several geographic resources to help communities in Ulster County plan for the protection of sensitive areas and focus development in areas capable of supporting growth and having access to needed infrastructure. These “Activity Centers” are shown in the map located in Section 4. The UCTC, through *Mobility 2050*, will utilize this geographic resource as a tool to assist in the development of plans and projects that will enable the transportation system in these areas to meet the challenges that come with growth.

All of these resources together provide the foundation for programmatic environmental mitigation. UCTC is committed to examining the potential for negative impacts from the overall program of projects, actions, and strategies that comprise *Mobility 2050*, and to institute programmatic responses.

Consultation with Resource Agencies

In an effort to coordinate the discussion of potential environmental mitigation activities, the UCTC contacted appropriate Federal, State, and tribal, wildlife, land management, regulatory and resource agencies regarding *Mobility 2050*. This correspondence is documented in Appendix C, but UCTC did not receive any responses.

SUSTAINABLE TRANSPORTATION

Sustainability is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”ⁱⁱⁱ The concept known as the “triple bottom line” functions as the predominant theory addressing sustainability in practice. Triple bottom line (TBL) accounting expands the traditional reporting framework to consider not only financial performance, but also environmental and social performance, and explicitly accounting for life-cycle costs. The theory and practice of sustainable transportation has evolved from these basic concepts. Today it is regarded by federal and state agencies as an important component of transportation planning and it is one that UCTC strives to integrate into its daily operations.

Sustainable transportation is achieved through a variety of mechanisms at programmatic and project levels. On a programmatic level, it includes adherence to federal aid procedures for projects – in particular, federal and state permitting and environmental review processes. It also includes serious evaluation of the need for new facilities in the first place, seeking to avoid unnecessary investments and their possible negative long-term impacts. On a project level, it involves the integration of innovative approaches that mitigate or diminish negative impacts on the environment into the design and construction process. Techniques are being developed that extend the life of transportation infrastructure and make maintenance activities more environmentally friendly. Of increasing importance in our understanding of transportation's impacts on the environment is the recognition of the transportation-land use connection, which identifies cumulative impacts that transportation systems can have on communities and the environment over time, primarily through induced growth brought on by the presence of new or expanded transportation facilities. Finally, identifying and encouraging technologies that can reduce transportation's contribution to harmful air pollution represents a central component to the implementation of sustainable transportation.



Triple Bottom Line of Sustainability

Vulnerability Assessment

UCTC initiated the Vulnerability Assessment to address the vulnerability of critical surface transportation infrastructure elements to hazards, defined as the degree to which a system is susceptible to, or unable to cope with adverse effects of extreme weather events. In the transportation context, it is a function of transportation asset's exposure (the likelihood of an asset to be subjected to climate stressors), sensitivity (how an asset responds to or is affected by exposure to climate stressors) and adaptive capacity (how easily/quickly a disrupted asset can be restored or resume normal operations).

Asset Type	Composite Vulnerability 2030			Composite Vulnerability 2050		
	Low vulnerability (%)	Medium vulnerability (%)	High vulnerability (%)	Low vulnerability (%)	Medium vulnerability (%)	High vulnerability (%)
Roads (miles) 	660 (28%)	1567 (67%)	113 (5%)	122 (5%)	1940 (83%)	278 (12%)
Bridges (Deck Area sqft) 	2,220 (0.12%)	1,187,533 (62%)	712,267 (37%)	0 (0%)	865,158 (45%)	1,036,862 (55%)

The results show that from 2030 to 2050, an increase is projected in the medium and high vulnerability range for both roads and bridges. Bridges are set to see a particularly large increase in deck area square footage that would fall in the high vulnerability range, going from 37% in 2030 to 55% in 2050. The increase in high vulnerability is less for roads with the percentage only going up to 12% from 5%. This study further highlights the need to incorporate sustainable transportation design into future bridge and roadway projects.

A Closer Look: Transportation and Harmful Air Pollution in New York and Ulster County

Ambient air quality in the U.S. is regulated through the National Ambient Air Quality Standards (NAAQS), which were established by the Clean Air Act and are overseen by the federal environmental protection agency.

Six types of air pollution are regulated under the NAAQS:

- Carbon monoxide (CO)
- Lead (Pb)
- Nitrogen Dioxide (NO₂)
- Ozone (O₃)
- Particulate matter (PM)
- Sulfur Oxide (SO₂)

Each of these pollutants has its own unique sources, rate of persistence in the atmosphere, and pattern of harm to humans and the natural environment.

While most of these types of air pollution monitored under the NAAQS is due to combustion of fossil fuels, much of which comes from the transportation sector, certain types of air pollution would exist even in the absence of fossil fuel usage. For instance, particulate matter can be generated by the braking systems of vehicles as well as the contact between rolling wheels and the road surface, processes which occur regardless of a vehicle's propulsion type. Overall, fuel-efficiency regulations as well as separate regulations governing pollution from vehicles' tailpipes during the past roughly half-century have led to a cleaner transportation system in terms of important NAAQS pollutants (notably nitrogen oxides, carbon monoxide and sulfur oxides).

Ulster County is in attainment of all of the NAAQS standards, and UCTC takes account of the risks of air pollution even below the federal standards in the transportation planning process. Should Ulster County ever become out of attainment with any of the NAAQS standards at any future point, UCTC would work with stakeholders and partner agencies to address the non-attainment condition using appropriate methods and approaches.

According to the US Census bureau, 71% of people employed in Ulster County travel to work alone (see Figure 6.1). Private vehicle commuter travel (primarily in cars and SUVs) accounts for a total of 78% of trips to work, further underscoring the impacts that cars and SUVs have on air pollution in Ulster County.

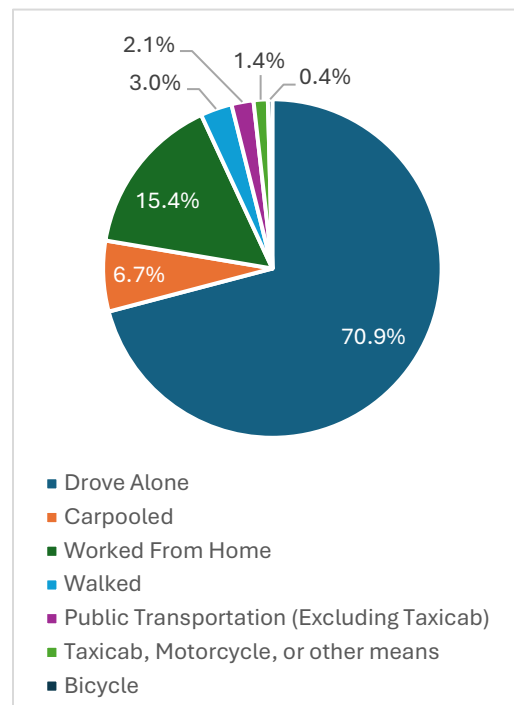


Figure 6.1: Journey to Work Modal Distribution, Ulster County, 2023

In addition to policies that encourage drivers to leave their cars at home and seek alternatives to single-occupancy motor vehicle travel, solutions that make those vehicles cleaner to use (i.e. reduce air pollution) must be deployed if further tangible reductions in key pollutants are to be achieved. Electric vehicles (EVs) have the potential to contribute, and despite currently accounting for a small fraction (under 2%) of vehicles in Ulster County (see Figure 6.2), there are other parts of the Hudson Valley where EVs are much more prevalent (e.g. Westchester County, see Figure 6.3).

Denser metropolitan areas generally have the largest share of EVs at this time due to a variety of factors, such as shorter average trip distances, higher concentration of charging stations, and larger household incomes, and the speed and extent of the rollout of EVs in Ulster County remains to be seen.

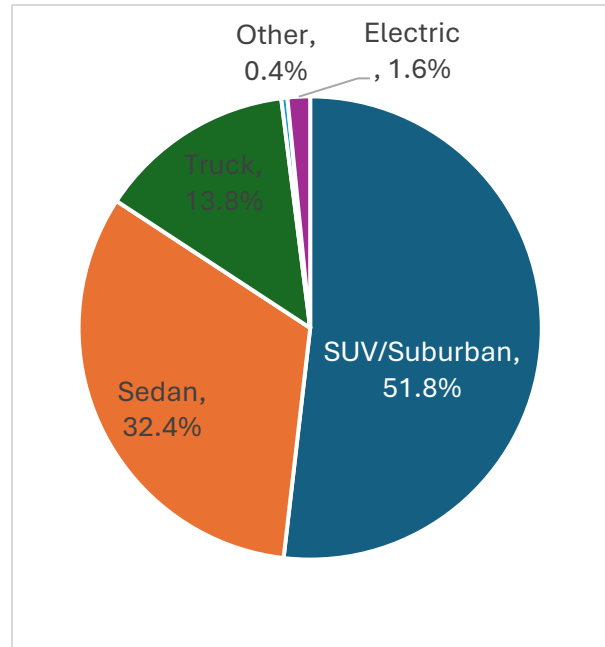
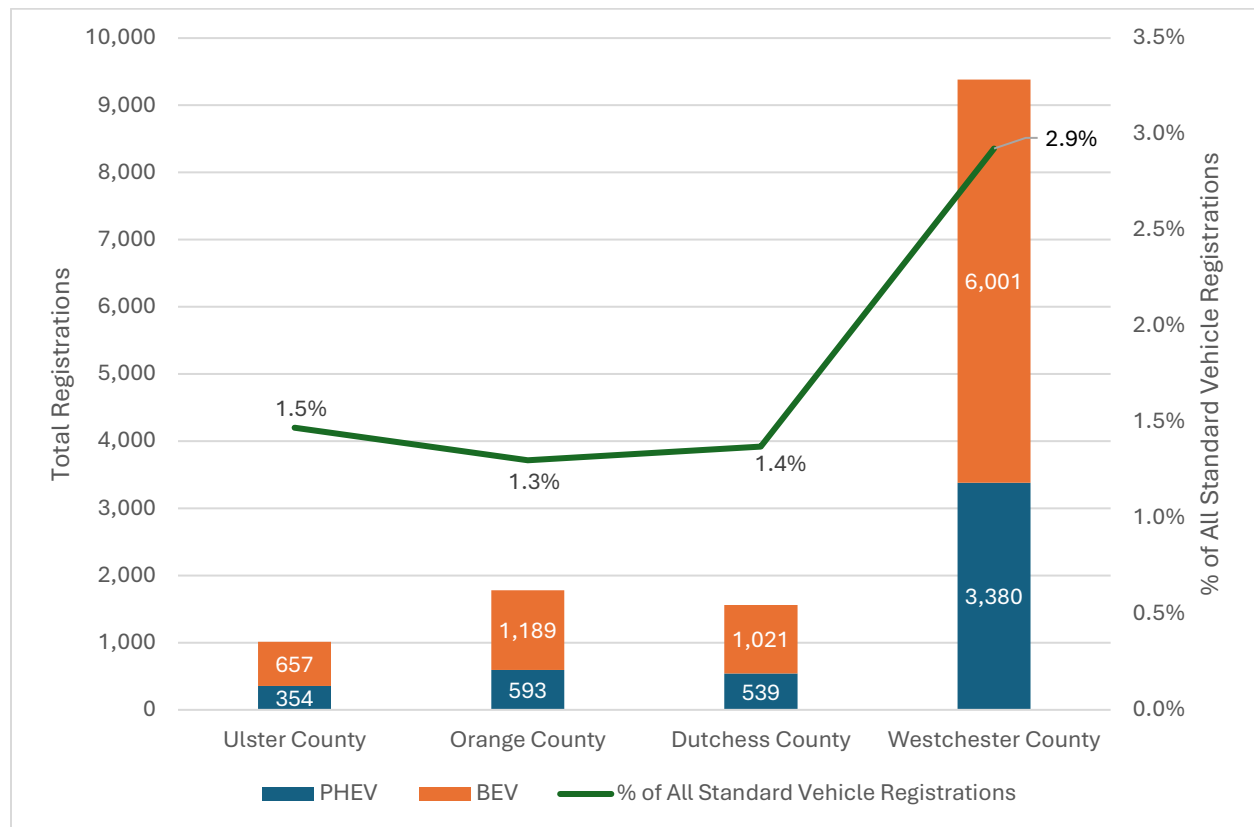


Fig. 6.2: Share of Vehicles on the Road, Ulster County, 2024



PHEV = Plug In Hybrid Vehicle BEV = Battery Electric Vehicle

Figure 6.3: EV Registrations for Selected Counties, 2024

While the total number of registered EVs in Ulster County is relatively small compared to all vehicles, the share has been growing rapidly. As shown below, the number of EVs registered in the county nearly **quadrupled** between 2020 and 2024. Over time, while it is expected that EV adoption continues to increase, the rate of change and share of EVs may depend on economic conditions, state and federal financial incentives for purchase, fuel costs, EV range per charge, and proximity to EV charging stations (shown in Figure 6.5). Ulster County currently has 109 EV charging stations, including four high-speed chargers in the City of Kingston, which were built as New York's first National Electric Vehicle Infrastructure (NEVI) funded project^{iv}.

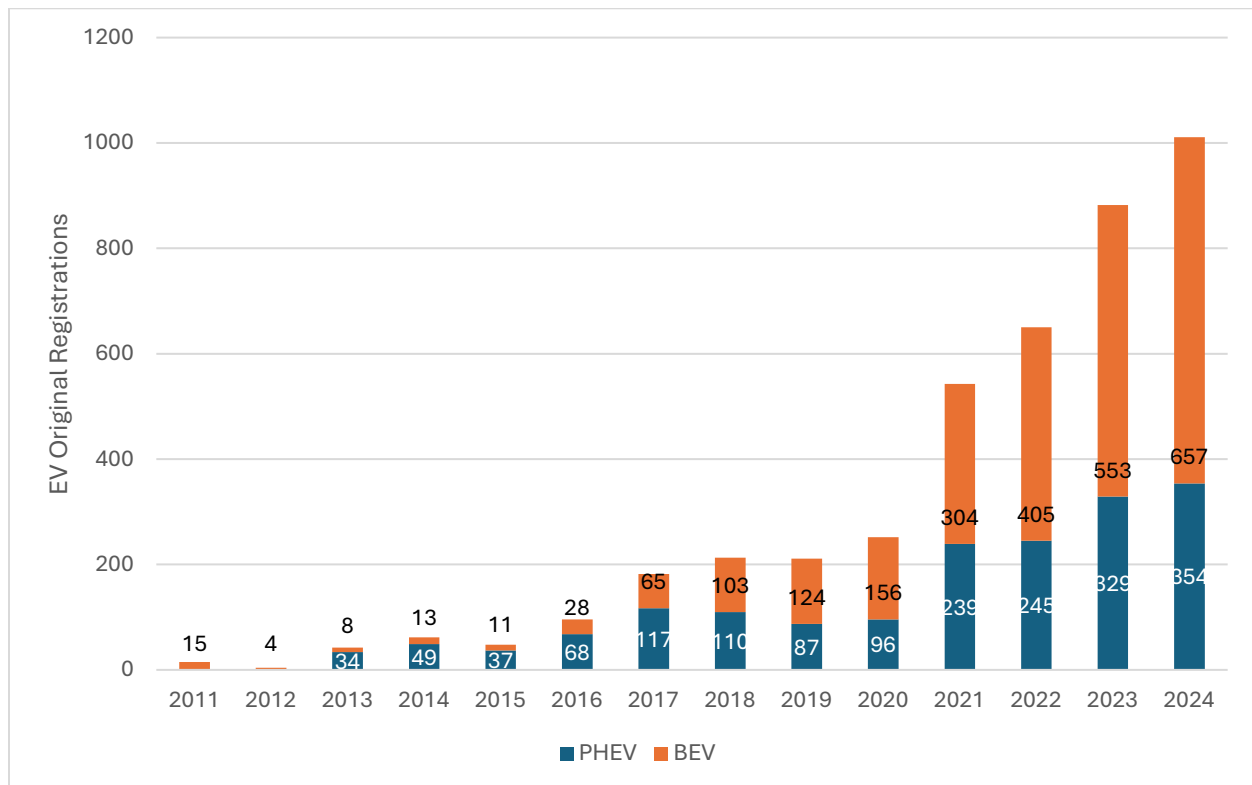


Figure 6.4: EV Registrations in Ulster County Over Time

In the longer-run, it is unclear which vehicle-propulsion technology will become dominant. In addition to battery-electric vehicles (BEVs), other competing technologies include hydrogen as well as petroleum-like fuels that are sourced from renewable sources rather than fossil fuels. Examples of the latter include renewable diesel (“R99”), which can be made from fats, oils, or greases and is increasingly replacing fossil diesel on the West Coast^v. For instance, in 2024, renewable diesel accounted for 65-70% of all diesel consumed in California.

Beyond electric vehicles, other forms of small-scale electric vehicles such as e-scooters and e-bicycles have become more prominent in the region, following the statewide legalization of e-bikes. These forms of transportation, commonly referred to as micromobility, provide additional transportation options, particularly for short trips. While micromobility is relatively new to the state, NYSDOT’s forthcoming Active Transportation Strategic Plan^{vi} will address the states plans and strategies for safely incorporating these modes into the transportation network through infrastructure and policy recommendations.

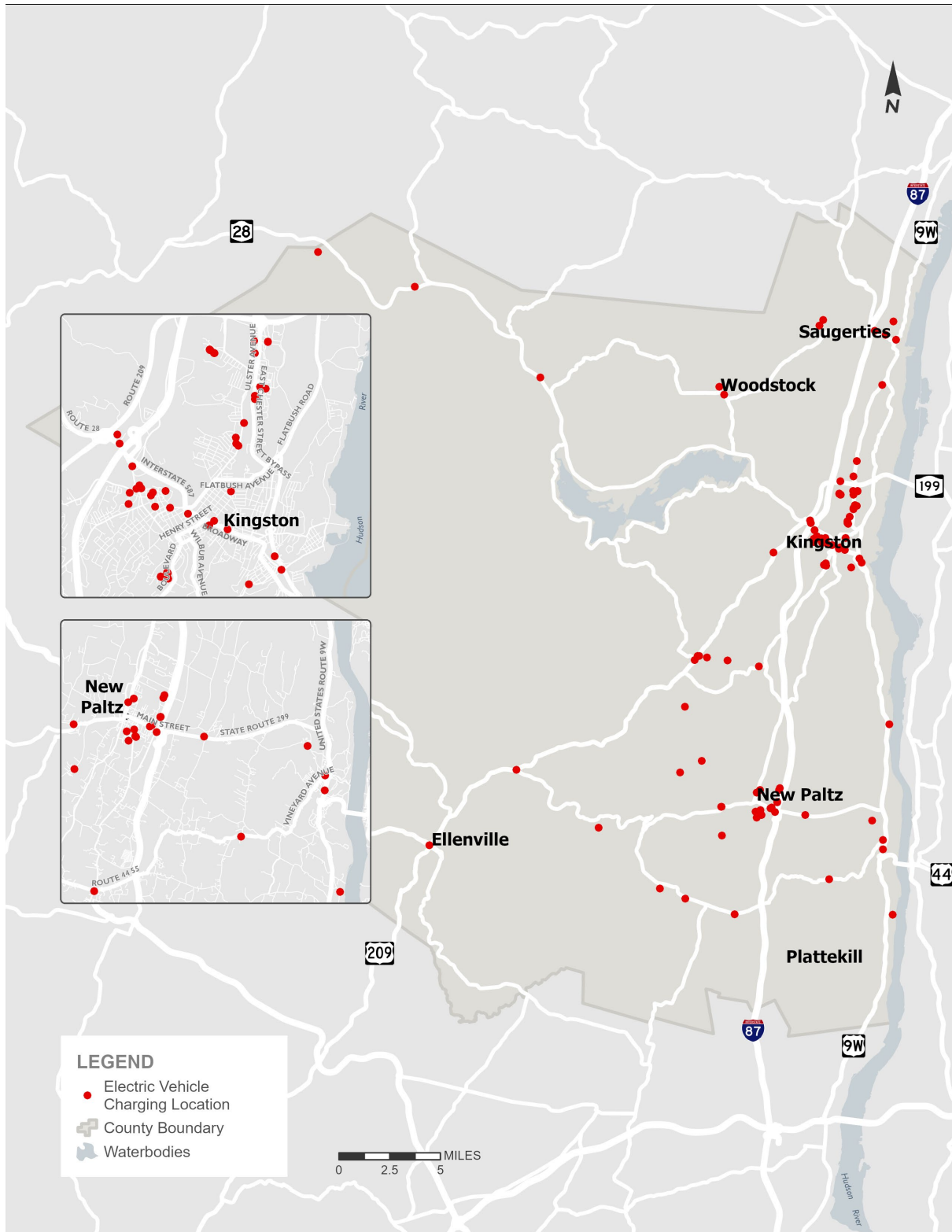


Figure 6.5: EV Charging Stations, Ulster County

TRANSPORTATION RESILIENCE

What is Transportation Resilience? The ability to prepare for changing conditions and withstand, respond to, and recover rapidly from disruptions.

In addition to impacting the environment, the transportation sector is **impacted by** the environment, and one very important mechanism for this is through the destructive effects of extreme weather events. To address this challenge, UCTC takes an approach to addressing extreme weather events and transportation resilience that is based on multi-layered guidance established through local, state, regional, and federal precedent and action.

Extreme weather events influence how transportation systems need to be planned, designed, operated, and maintained. A “new normal” is evolving and State departments of transportation (DOTs) are turning their focus toward building resilience.^{vii} Guidance from FHWA outlines methods to incorporate resilience considerations into how agencies plan and execute their transportation system management and operations (TSMO) and maintenance programs to help the agency become more resilient to unanticipated shocks to the system.

Adaptation seeks to address anticipated potential future changes resulting from extreme weather, notably in Ulster County in the form of intense flooding and heat waves. Within Ulster County, there are over 40 miles of tidal coastline in the Hudson River Valley that is subject to impacts from inundation from the Hudson River. There are also numerous rivers and streams aside from the Hudson River that are also prone to flooding. Severe flooding and storm surge damage from Hurricane Irene in August of 2011 and Tropical Storm Sandy in October 2012 illustrate the seriousness of extreme weather events, along with routine flooding at the Kingston waterfront during high tide and storm surge events. To that end, the City of Kingston established the Weaving the Waterfront initiative to increase resiliency and sustainability on the shoreline, implement an economic development strategy, and develop better access to the river, parks, and open space for people on foot, on bicycle, and in boats. In June 2023, the City of Kingston was selected to receive \$21.7 million in RAISE grants to fund the City’s Weaving the Waterfront Transportation Project which will develop vital shoreline connections and elevate the roadway in several sections that experience regular flooding.

Given the long life span of transportation assets, planning for system preservation and safe operation under current and future conditions constitutes responsible risk management, a concept addressed through transportation resiliency planning. Resiliency requires a system-wide approach to providing transportation services before, during, and after an event. It is critical to ensure that evacuation, emergency response, and short and long-term recovery are not impeded by loss of facilities. This is done through assessing vulnerability and applying adaptation strategies to selected infrastructure.

A key component of creating livable communities is having transportation choices available to everyone. A multimodal system that integrates walking, bicycling, transit, and automobile access is one that provides residents with more choices of where to live, work, and play. Integrating land use planning with transportation improves livability by fostering a balance of more compact mixed-use neighborhoods that recognizes the importance of proximity, layout, and design to help keep

people close to home, work, services, and recreation. Recognition of the importance of neighborhood character and community in the planning and execution of transportation investments has therefore been integrated into the process itself when it is done well.

Sustainable transportation in practice can also be a mechanism by which federal, state and local agencies can conserve limited fiscal resources. By focusing on the right investments, in the right place at the right time, these agencies can accomplish the goal of establishing a sustainable transportation system that reduces unnecessary growth and new facilities, lowers the costs associated with maintenance, and avoids repeated risks to investments.

This notion forms the basis of the NYS Department of Transportation's "Forward Four" Principles, developed in 2012 in an effort to guide transportation investment decisions in an era of limited financial resources.^{viii} The Principles place a priority on transportation investment decisions that preserve the existing system through a focus on preventive, corrective and demand work. Its system perspective elevates the discussion from the project level to a consideration of the most effective methods for managing financial and operational risk. It emphasizes return on investment and investing in a transportation system that "considers the relative and cumulative value of transportation assets as they benefit the public, economy and environment."



NYSOT's "Forward Four" Guiding Principles of Sustainable

Based on the above data and discussion, the following mitigation measures should be considered when developing UCTC transportation policy.

Electrification (Buses & Freight)	Electrification (Personal Vehicles)	Sustainability Planning	Regulatory Incentives	Affordability	Driver Pricing Reforms/Cost Incentives	Infrastructure Improvements	Public/Alt. Transportation Options
Port Equipment Electrification	Rebates & Tax Incentives	Transit-Oriented Development and In-fill Development	Real Estate Level of Service Review	Income-Based Transit Fares; Discounts for kids, seniors	Dynamic Parking Prices	State-of-Good-Repair Improvements for Roads	Expansion of Transit Service to Underserved Areas
Electrify Local Delivery Vehicles	EV Charging Infrastructure Incentives	Non-road Equipment (Farms, Construction, etc.)	Transit Oriented Zoning	Direct Rebates/ Dividend	Congestion Parking	State-of-Good-Repair Improvements for Transit	Rural Public Transportation
Electrify Transit Bus Fleets	Electrifying Carshares/ Rideshares	Adjusting Routes to Avoid Traffic	Transportation Demand Management	Financing Programs for EVs	Weight Distance Fees	Complete Streets	Carsharing and Bikeskaring
Electrify School Buses (V2G Potential)	Carpool Lane Access for ZEV's	Resilient Transportation Infrastructure	Road Safety Liability	Telework	Parking Pricing and Parking Cash Out	Bond Measures	Rideshare and Vanpools
Zero-Emission Fleet Commitment	Public Awareness Programs	Active Transportation; Community Planning		Tax Credits	Occupancy and High Traffic Pricing	Bike Facilities/ Amenities	Employer-sponsored Transportation
Heavy-duty EV Utility Rate Design Reform	Vehicle Retirement Incentive Programs				Pay as You Drive	Traffic Calming	Bus Rapid Transit & Express Bus Routes

Measures shaded in green indicate those that have been advanced within Ulster County

Figure 6.6: Possible Measures to Reduce Impacts of the Transportation Sector and Improve the Transportation System for All Users^{ix}

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- ⁱ NYSDOT Environmental Procedures Manual. Available online at <https://www.dot.ny.gov/divisions/engineering/environmental-analysis/manuals-and-guidance/epm>
- ⁱⁱ NYSDOT PFLAP Application. Available online at <https://www.dot.ny.gov/divisions/operating/opdm/local-programs-bureau/locally-administered-federal-aid-projects>
- ⁱⁱⁱ World Commission on Environment and Development (1987). Our Common Future. Oxford: Oxford University Press. p. 27.
- ^{iv} <https://www.governor.ny.gov/news/governor-hochul-announces-new-yorks-first-national-electric-vehicle-infrastructure-funded-fast>
- ^v <https://www.eia.gov/todayinenergy/detail.php?id=64566>
- ^{vi} <https://nysdotwalkbikeplan.com/>
- ^{vii} <https://ops.fhwa.dot.gov/publications/fhwahop15025/fhwahop15025.pdf>
- ^{viii} NYSDOT. <http://www.cdtcmpo.org/policy/jun12/forward.pdf>
- ^{ix} https://www.dec.ny.gov/docs/administration_pdf/climtranslides081519.pdf

7. MONITORING OUR PERFORMANCE

Ulster County has prepared a System Performance Report (SPR), which tracks current status and recent patterns in key federally designated areas of condition of assets, safety, and system reliability/congestion. The SPR addresses Ulster County's status and progress as it relates to NYS-defined performance measures and targets, which UCTC has also adopted (as have NYS's other MPOs). The intent of the SPR is to serve as an additional tool for linking system performance with planned investment and contributes to the transportation projects and strategies outlined in Section 9. The SPR can be found in Appendix D.

Beyond the NYS-defined performance measures and targets, UCTC tracks additional aspects of overall system performance related to regional goals and objectives. This helps UCTC understand how and where previous projects, initiatives and efforts have been successful and where additional focus should be placed going forward. Below, the key goals and objectives of this LRTP are reiterated along with key performance indicators.

SYSTEM PRESERVATION

Goal: Invest in transportation system infrastructure to bring and maintain all facilities and modes into a state of good repair.

Objectives:

- **Develop** and implement a county-wide bridge system maintenance plan
- **Maintain** or **increase** the share of transportation assets (such as roadways, bridges, and active transportation facilities) in good condition
- **Maintain** the UCAT fleet to meet the FTA guidelines for service life

Roadways

Over the last 5 years, the share of roadways with a “poor” pavement condition rating has increased from 17 percent to 23 percent. At the same time, the share of roadways with a “good” rating has increased significantly from 32 percent to 49 percent. Therefore, while the share of roadways in poor condition has increased, projects have been implemented in the region to improve roadway conditions overall. This may indicate an increased focus on the “Preservation First” approach which prioritizes cost-effective pavement treatments that can help move ratings to “good” and more importantly extend the overall life of the roadway in a way that optimizes life-cycle costs. That said, more extensive roadway-maintenance projects will be needed in coming years to address the county's roadways that are now in, and that will deteriorate to poor condition.

Table 7.1: Status of Roadway Condition Performance

Roadway Condition	2045 LRTP	2050 LRTP
Good	32%	49%
Acceptable	51%	29%
Poor	17%	23%

Bridges

Similar to the pattern of road-pavement conditions in Ulster County, the share of bridges that are in structurally deficient condition has increased from 22 percent to 24 percent. However, the number of bridges with a “good” rating has increased from 17 percent to 21 percent. As with the roadway conditions analysis described above, this may also indicate a higher emphasis on “Preservation First” projects that aim to extend the life of bridges in “fair” condition to optimize the overall life-cycle impacts from maintenance expenditure.

Table 7.2: Status of Bridge Condition Performance

Bridge Condition	2045 LRTP	2050 LRTP
Good	17%	21%
Fair	61%	55%
Structurally Deficient	22%	24%

Active Transportation Facilities

In 2020, UCTC initiated a sidewalk inventory that currently spans 24 communities throughout the county. This inventory, completed in 2021, tracks where sidewalks and curb ramps are located, how accessible these facilities are, and what sidewalk material is in place. This inventory was not complete at the time of publication of the 2020 LRTP, thus preventing an evaluation of how sidewalk conditions have trended. In the future, the sidewalk inventory will continue to be updated, tracking the condition and accessibility of sidewalk facilities throughout the county.

Table 7.3: Status of Available Sidewalk Facilities

Sidewalk Condition Distribution	2045 LRTP	2050 LRTP
Not Accessible	N/A	12.0%
Less Accessible	N/A	30.7%
More Accessible	N/A	33.8%
Fully Accessible	N/A	12.0%
No Rating	N/A	11.5%

Transit Fleet

Ulster County’s public bus operator UCAT is in a continual process of modernizing its fleet of transit buses and supporting vehicles, including the long-term process of fleet electrification. As possible, UCAT has been replacing diesel vehicles with electric vehicles as part of its vehicle replacement program. UCAT’s ability to modernize its fleet was impacted by the Covid-19 pandemic and associated supply chain disruptions that impacted public transit agencies across the country. As such, UCAT’s share of vehicles beyond their Useful Life Benchmark, while above the state’s targets, is in alignment with statewide trends. However, UCAT is in the process of purchasing several new buses within the next year.

Table 7.4: Status of Transit Fleet Condition Performance

Useful Life Benchmark (ULB)	2045 LRTP	2050 LRTP
% Beyond ULB ⁱ	N/A	46%

SAFETY

Goal: Continually improve the safety of all users of the transportation system by responding to identified safety deficiencies and proactively addressing future safety needs.

Objectives:

- **Reduce** the number of fatal and serious injury motor vehicle crashes
- **Reduce** the number of crashes resulting in fatality and serious injury to pedestrian and bicyclists
- **Reduce** the number of crashes involving transit vehicles that result in fatality or serious injury to zero
- **Reduce** the number of crashes involving vulnerable user groups as defined in the NYS Strategic Highway Safety Plan
- **Reduce** the number of safety-related incidents at bus stops and on transit vehicles operated by UCAT, including protecting transit workers from assault

Fatal and Serious Injury Crashes

A key focus of UCTC is to implement projects and strategies that reduce fatal and serious injury collisions, both for motorists and vulnerable roadway users such as pedestrians and bicyclists. However, the 5-year average number of fatal and serious injury crashes has increased since the 2045 LRTP update. With respect to pedestrian and bicycle collisions, the 5-year total of fatal crashes has also increased while the total number of serious injury crashes has decreased.

Overall, while these trends are not currently in line with UCTC's goals and objectives, they need to be considered in light of the national post-covid trend of worsened road safety performance. Additionally, the most recent data from 2022 and 2023 in Ulster County indicates a downward trajectory in fatal and serious injury collisions, with the 5-year moving average of fatalities having peaked in 2022 and the 5-year moving average of serious injuries having peaked in 2021. Time will tell whether this represents a sustained trend, and UCTC and stakeholders will adapt accordingly.

While there are aspects of road safety that are outside of UCTC's control, UCTC is committed to enhancing road safety. An example of a major project that impacted safety in a positive way (as outlined in detail in Section 5) is the Broadway Streetscape Project, which resulted in significant decreases in fatal and serious injury collisions along the corridor. UCTC will continue to monitor the impact of projects such as this one and ensure that safety enhancements are prioritized as part of future projects in the region.

Table 7.5: Status of Crash History

Crash Data	2045 LRTP	2050 LRTP
<i>All Crashes: 5-Year Average</i>	<i>2014-2018 Crash Data</i>	<i>2019-2023 Crash Data</i>
Fatal Crashes	14.0/year	14.8/year
Serious Injury Crashes	149.4/year	164.6/year
<i>Ped/Bike Crashes: 5-Year Total</i>	<i>2014-2018 Crash Data</i>	<i>2019-2023 Crash Data</i>
Fatal Crashes	13	15
Serious Injury Crashes	83	71

Transit Vehicle Crashes

UCAT has observed a considerable increase in crashes since the last LRTP update. While the exact causes of this increase are not known, UCTC and UCAT are aware of this increase in crash incidents involving UCAT vehicles and will work to understand the causes and appropriate avoidance and mitigation measures. While none of these crashes resulted in fatalities or serious injuries, the increase in crashes indicates that transit vehicle safety is a growing issue in the region.

Table 7.6: Status of Transit Vehicle Crash History

Transit Crash Data	2045 LRTP	2050 LRTP
5-Year Average	2015-2019	2020-2024
Total Crashes	N/A	14.6/year
Crashes Resulting in Serious Injury	N/A	1.2/year
Crashes Resulting in Fatalities	N/A	0.0/year

RESILIENCY

Goal: Ensure that transportation system users have a sustainable and secure environment, that the transportation system is capable of providing adequate service during severe weather events, and that the natural and built environment is protected and enhanced.

Objectives:

- **Complete** a Resilience Improvement Plan (RIP) for the top 50 locations identified in UCTC's Phase 1 Resiliency Plan, which enhances the opportunity for discretionary federal funding.
- **Integrate** ranking criteria from RIP results into the TIP project selection criteria for new federal aid bridge awards evaluated by UCTC.
- **Reduce** all forms of pollution from on-road vehicles and maintenance/construction of the transportation system through support of travel demand management, alternative fueled vehicles, stormwater management practices, and other appropriate techniques.

Mode Share

Shifts in mode share help reduce the overall impacts of pollution from on-road vehicles. As shown below, the journey to work modal distribution has shifted considerably over the last 5 years. The share of "drive alone" trips has decreased from 77 percent to 71 percent, with much of that shift being attributed to more flexible work from home policies that resulted from the COVID-19 pandemic. While the journey to work modal distribution is representative of travel behaviors during peak commuting times, it's possible that more vehicle trips have shifted to non-peak times with the introduction of more flexible work schedules. While that may be the case, it is still encouraging to see a reduction in work-related drive alone trips that typically occur during the highest congestion, and therefore higher pollution-generating time periods.

Table 7.7: Status of Journey to Work Mode Share

Mode of Transportation	2045 LRTP	2050 LRTP
Drive Alone	77.2%	70.9%
Carpool	7.5%	6.7%
Work From Home	7.0%	15.4%
Public Transportation	2.5%	2.1%
Walk	4.3%	3.0%
Bike	0.3%	0.4%
Other	1.1%	1.4%

Electric Vehicle (EV) Adoption

In addition to policies that encourage drivers to leave their cars at home and seek alternatives to single-occupancy motor vehicle travel, EVs are one solution that makes vehicles cleaner to use. Overall, the share of EVs of total vehicle registrations in Ulster County remain relatively small, but that share has nearly doubled since the last LRTP update. As can be seen in the table below, there has been more rapid growth in the number of battery electric registrations as compared to plug in hybrid electric registrations.

Table 7.8: Status of Electric Vehicle Adoption

	2045 LRTP	2050 LRTP
EV Registrations (Total)		
Battery Electric	371	2,456
Plug In Hybrid Electric	504	1,807
Share of EVs Among All Standard Vehicle Registrations	0.8%	1.5%

MOBILITY

Goal: Provide for efficient and reliable travel by all modes by investing in strategies that mitigate congestion and create and maintain a well-connected transportation system.

Objectives:

- **Reduce** vehicle-hours of delay that occur as a result of recurring congestion on principal arterials and arterial streets
- **Integrate** intelligent transportation systems (ITS) into infrastructure projects
- **Develop** a program of infrastructure projects to address truck bottlenecks
- **Increase** transit access (geographic and temporal) in Kingston, New Paltz and Ellenville, and major intra-county corridors
- **Increase** the number of people within a 10-minute walk/bike ride of trails, parks, and other key destinations
- **Increase** the miles of bicycle and pedestrian facilities

Vehicle Hours of Delay

As part of this LRTP update, UCTC has begun tracking Person Hours of Excessive Delay (PHED) by centerline mile of roadway. This evaluation indicates congestion hotspots in Kingston, New Paltz, and the approach to the Mid-Hudson Bridge, which align with anecdotal observations. While this analysis was not completed as part of the previous LRTP update, moving forward UCTC will continue to monitor systemwide PHED as part of future LRTP updates and use this evaluation to understand where congestion management can help to enhance transportation system performance.

Vehicle Miles Travelled (VMT)

Daily VMT in Ulster County has decreased since the 2018 (i.e. pre-covid) data reported in the 2045 LRTP update, by nearly 175,000 miles. Consistent with statewide and national trends, VMT decreased precipitously in 2020 but has since rebounded. That said, VMT has not yet reached the peak levels observed in 2018.

Table 7.9: Status of Vehicle Miles Travelled

	2045 LRTP	2050 LRTP
Daily Vehicle Miles Travelled	5,677,000 (2018)	5,505,000 (2022)

ITS Integration

ITS has consistently been integrated into recent UCTC-supported projects wherever appropriate, and as technology continues to develop UCTC is committed to pursuing opportunities to leverage the opportunities that become available. For instance, as part of the Broadway Streetscape Project, traffic signals were optimized and coordinated to improve transit and **vehicular** traffic flow from St James Street to Foxhall Avenue. Additionally, NYSDOT has a statewide Signals Laboratory which evaluates emerging signals technology and is available to support NYSDOT regions in rolling out advanced signals technologies as part of statewide deployment.

Transit Access

Transit access has been evolving within Ulster County for the last several years, with UCAT expanding service into the City of Kingston and replacing the Kingston Citibus service. Additionally, UCAT transitioned to a fare-free system resulting in increased access to transit by reducing the financial barrier to accessing the transit network in 2022. Finally, UCTC and UCAT are currently undergoing a Route Optimization Plan that will evaluate fixed route improvements, with a goal of more frequent service and/or service that covers new geographic areas.

Miles of Bicycle and Pedestrian Facilities

As referenced previously, UCTC recently initiated a sidewalk inventory. While not yet fully complete, this inventory will become an increasingly important tool in tracking the progress of new sidewalks and sidewalk repair projects. At the writing of this LRTP update, UCTC has inventoried approximately 115 miles of sidewalk in the County.

In addition, UCTC tracks the progress of its trail network. Since the last LRTP update, UCTC has completed projects that help expand the trail network and close gaps. In total, the trail network has expanded by over 12 miles between 2020 and 2025.

Table 7.10: Status of Pedestrian and Bicycle Facilities

	2045 LRTP	2050 LRTP
Miles of Sidewalks	N/A	115 miles
Miles of Trails		
Complete	64.5 miles	76.7 miles
Under Development*	16.3 miles	7.2 miles

*Under Development refers to trails that are currently under construction or have funds allocated towards their design/implementation

ⁱ Based on the criteria outlined in the NYS Group Transit Asset Management Plan; https://www.dot.ny.gov/divisions/policy-and-strategy/public-trans-respository/NYSDOT%20Group%20TAM%20Plan%202024_Final.pdf

8. THE FINANCIAL PLAN

The Financial Plan is a critical element of the UCTC Long Range Transportation Plan. Federal law has required since 1991 that an LRTP must include a Financial Plan whose purpose is to ensure that there are adequate resources for implementation. This ensures that the projects included in the LRTP have a reasonable chance of being funded and prevents the LRTP from becoming a wish list of projects beyond likely available funding. Federal law requires that the Financial Plan meet the following criteria:

- Be developed cooperatively by the MPO, the State, and the transit operator(s);
- Demonstrates how the adopted LRTP can be implemented;
- Enumerates the resources that are reasonably expected to be made available over the life of the LRTP, including both public and private sources;
- May recommend additional financing strategies to fill identified funding gaps;
- May include “illustrative projects” that would be included in the LRTP if additional resources became available; and
- Demonstrates the financial capacity to maintain and operate the transportation facilities included in the LRTP.

Further, all project and program cost estimates must be adjusted to year of expenditure dollars, using agreed upon cost inflation factors. This adjustment further contributes to the LRTP being realistic.

All of these steps lead to the creation of a fiscally constrained Plan that does not count on resources that are not reasonably expected to be available.

MOBILITY 2050 UPDATE

The Financial Plan for the Mobility 2050 Update continues to build off the revised methodology developed in 2023, which utilizes the following approach:

Revenue Forecasts (Table 8.1)

Forecasts are provided by fund source for the most current data of the following programs and sources: the FHWA and FTA; New York State highway, bridge, and transit programs; major local capital improvement programs; and several categories of “other” funding presumed to have a high probability of availability for use on the transportation system during the plan horizon.

The initial forecasts for FHWA, FTA and New York State DOT funds are based on known allocation histories as well as the adopted 2026-2030 UCTC Transportation Improvement Program. General criteria and assumptions regarding revenue projections are shown below:

- Program funding is based on **actual** apportionments, allocations, and budgeted distributions when available.
- All figures are projected annually through the 25 year planning horizon at a **flat rate**; no increases to existing sources of revenue are assumed; figures are then aggregated into 5 year ‘blocks’
- New sources of funding with no clear appropriation or regional distribution formula are kept to a minimum; other new sources of funding will be added to subsequent LRTP Financial Plans when baseline allocation amounts are known;
- To address the likelihood of new sources of funding in future state and federal surface transportation programs, conservative estimates were made to provide for 5 year ‘blocks’ of funding that could be drawn from.
- Other discrete fund sources – those made available ‘one time’ or which may potentially be available through competitive bases during outlying years – were similarly listed in 5 year blocks of funding.

Results of the Revenue Forecast under Table 8.1 shows that UCTC estimates a total of \$1.9 billion in funding to be available through the plan horizon; this represents an increase from \$1.5 billion estimated in 2023. This increase is primarily due to the large influx of federal aid brought by the 2021 Bipartisan Infrastructure Bill. Detailed criteria and methodology developed for each source of revenue is provided in Appendix E. A brief summary of revenue categories includes the following fund sources:

- Federal Highway Administration Funds
 - Includes all FHWA program/formula funds made available to the UCTC as documented in the 2026-2030 UCTC Transportation Improvement Program Fiscal Constraint Table (Table 8).
- Federal Transit Administration Funds
 - Includes all FHWA program/formula funds made available to the UCTC; baseline data gathered from the most recent Federal fiscal year FTA apportionment to designated recipients in Ulster County
- New York State Funds
 - State highway funds, including NYS dedicated highway & bridge trust fund dollars plus all state highway aid made available to municipalities
 - State transit funds, incl. State Transit Operating Assistance plus other formula funds
- Local Funds
 - Includes figures derived from municipal annual highway department budgets
- Other Funds
 - Addresses a variety of competitive, supplemental, or otherwise discretionary funds that can be reasonably expected during the plan’s 25 year horizon

Table 8.1: Ulster County Federal, State, and Local Revenue Forecasts

All Figures in Millions of \$							
FHWA (Millions of \$)	BASELINE	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	
National Highway Performance Program (NHPP)	\$ 12.917	\$ 64.586	\$ 64.586	\$ 64.586	\$ 64.586	\$ 64.586	\$ 322.930
NYSDOT STBG Flex Ulster Share (UCTC TIP)	\$ 1.060	\$ 5.300	\$ 5.300	\$ 5.300	\$ 5.300	\$ 5.300	\$ 26.500
NYSDOT Multicounty STBG Flex Where & When Ulster Share	\$ 2.921	\$ 14.604	\$ 5.000	\$ 5.000	\$ 5.000	\$ 5.000	\$ 34.604
NYSDOT Multicounty Surface Transportation Block Grant Program (STBGP FLEX) - Ulster Share	\$ 2.000	\$ 10.000	\$ 10.000	\$ 10.000	\$ 10.000	\$ 10.000	\$ 50.000
STBGP Off-System Bridge (STBGP-OFF)	\$ 3.088	\$ 15.441	\$ 15.441	\$ 15.441	\$ 15.441	\$ 15.441	\$ 77.205
BridgeNY Local Bridge & Culvert Formula Program	\$ 2.767	\$ 13.835	\$ 13.835	\$ 13.835	\$ 13.835	\$ 13.835	\$ 69.175
Highway Safety Improvement Program (HSIP)	\$ 1.481	\$ 7.405	\$ 7.405	\$ 7.405	\$ 7.405	\$ 7.405	\$ 37.025
HSIP RAIL	\$ 0.141	\$ 0.704	\$ 0.704	\$ 0.704	\$ 0.704	\$ 0.704	\$ 3.520
Carbon Reduction	\$ 0.259	\$ 1.296	\$ 1.296	\$ 1.296	\$ 1.296	\$ 1.296	\$ 6.480
PROTECT	\$ 2.000	\$ 10.000	\$ 10.000	\$ 10.000	\$ 10.000	\$ 10.000	\$ 50.000
							\$ 677.439
FTA Programs (Millions of \$)							
Sec 5307/5340 Small Urban	\$ 2.100	\$ 10.500	\$ 10.500	\$ 10.500	\$ 10.500	\$ 10.500	\$ 52.500
Sec 5307 Urban/Mid-Hudson TMA	\$ 0.666	\$ 3.330	\$ 3.330	\$ 3.330	\$ 3.330	\$ 3.330	\$ 16.650
Section 5310	\$ 0.164	\$ 0.820	\$ 0.820	\$ 0.820	\$ 0.820	\$ 0.820	\$ 4.100
Section 5339 Kingston UA	\$ 0.300	\$ 1.500	\$ 1.500	\$ 1.500	\$ 1.500	\$ 1.500	\$ 7.500
Sec 5339 Mid-Hudson TMA	\$ 0.296	\$ 1.480	\$ 1.480	\$ 1.480	\$ 1.480	\$ 1.480	\$ 7.400
Sec 5311 Rural	\$ 0.195	\$ 0.975	\$ 0.975	\$ 0.975	\$ 0.975	\$ 0.975	\$ 4.875
Transit CCC	\$ 3.016	\$ 15.080	\$ 15.080	\$ 15.080	\$ 15.080	\$ 15.080	\$ 75.400
							\$ 168.425
State Funds (Millions of \$)							
NYS Dedicated HW and Bridge Trust Fund	\$ 5.962	\$ 29.808	\$ 29.808	\$ 29.808	\$ 29.808	\$ 29.808	\$ 149.039
State HW Aid to Ulster County (CHIPS, POP, Harsh Winter, etc) (27% expended on FA road)	\$ 1.714	\$ 8.571	\$ 8.571	\$ 8.571	\$ 8.571	\$ 8.571	\$ 42.854
State HW Aid to Municipalities (CHIPS, POP, Harsh Winter, etc) (5.210/2)	\$ 2.784	\$ 13.920	\$ 13.920	\$ 13.920	\$ 13.920	\$ 13.920	\$ 69.600
							\$ 261.492
Transit State Operating Assistance	\$ 1.851	\$ 9.253	\$ 9.253	\$ 9.253	\$ 9.253	\$ 9.253	\$ 46.266
Modernization and Enhancement Program	\$ 0.982	\$ 4.911	\$ 4.911	\$ 4.911	\$ 4.911	\$ 4.911	\$ 24.554
Accelerated Capital Transit Program	\$ 0.181	\$ 0.903	\$ 0.903	\$ 0.903	\$ 0.903	\$ 0.903	\$ 4.516
							\$ 75.336
Local Funds							
Local Bridge&HW Maintenance Estimate	\$ 7.878	\$ 39.392	\$ 39.392	\$ 39.392	\$ 39.392	\$ 39.392	\$ 196.958
County Highway and Bridge Funds (contractual and other)	\$ 8.423	\$ 42.116	\$ 42.116	\$ 42.116	\$ 42.116	\$ 42.116	\$ 210.581
							\$ 407.539
Annual County Transit Payments	\$ 3.000	\$ 15.000	\$ 15.000	\$ 15.000	\$ 15.000	\$ 15.000	\$ 75.000
Bed Tax	\$ 2.000	\$ 10.000	\$ 10.000	\$ 10.000	\$ 10.000	\$ 10.000	\$ 50.000
							\$ 125.000
Other Supplemental or Competitive Funds							
New FA HW Funding	\$ 1.080	\$ 5.400	\$ 5.400	\$ 5.400	\$ 5.400	\$ 5.400	\$ 27.000
NYSDEC Climate Smart	\$ 0.600	\$ 3.000	\$ 3.000	\$ 3.000	\$ 3.000	\$ 3.000	\$ 15.000
Private Funds	\$ 0.100	\$ 0.500	\$ 0.500	\$ 0.500	\$ 0.500	\$ 0.500	\$ 2.500
Other local Bridge	\$ 4.220	\$ 4.220	\$ 4.220	\$ 4.220	\$ 4.220	\$ 4.220	\$ 21.116
TAP/Recreational Trails	\$ 2.750	\$ 13.750	\$ 13.750	\$ 13.750	\$ 13.750	\$ 13.750	\$ 68.750
							\$ 134.366
New FA Transit Funding	\$ 1.000	\$ 5.000	\$ 5.000	\$ 5.000	\$ 5.000	\$ 5.000	\$ 25.000
TMA Unallocated	\$ 1.170	\$ 5.850	\$ 5.850	\$ 5.850	\$ 5.850	\$ 5.850	\$ 29.250
NYSERDA - Transit Capital and Electrification	\$ 0.600	\$ 3.000	\$ 3.000	\$ 3.000	\$ 3.000	\$ 3.000	\$ 15.000
UCAT Capital Reserve	\$ 10.000	\$ 10.000		\$ -	\$ -	\$ -	\$ 10.000
							\$ 79.250
							\$ 1,928.848

Development of System-Level Cost Estimates

System level estimates of costs are considered “target costs” and represent a specific investment strategy that a portion of the revenue will target, i.e., roads, bridges, transit rolling stock, transit operations, trails, etc. System level estimates of costs were divided into two main categories: cost-driven and revenue-driven.

Cost-driven estimates utilize an objective calculation to develop an estimate of future asset needs and their associated construction costs; each individual cost-driven estimate methodology is provided in Appendix E.

Cost-driven estimates are used whenever a reliable methodology for developing cost estimates could be calculated. Year over year inflation will be added to costs through the plan horizon. In several instances where cost-driven estimates of asset needs are unable to be calculated with significant accuracy, 100% of available revenue is assumed to be used to fund the program(s) or project(s) eligible under FHWA and FTA rules.

Sankey Diagram

Target investments are shown in detail under tables arranged by major investment category. In order to better illustrate the complex distribution of fund sources and how they are combined to support various target investments, a Sankey diagram was developed (Figure 8.1). Target investments are organized into the following major categories:

- Federal Aid (FA) Highway Resurfacing
 - State FA Pavements
 - County FA Pavements
 - Local FA Pavements
- Safety
 - Safety Emphasis Areas
 - Rail Safety
- Bridge Replacement
 - National Highway System bridges
 - Non-State-Owned FA bridges
 - Off-system bridges
 - Culverts
- Public Transit
 - Transit Operations
 - Transit Capital
 - Transit Facilities
 - Transit Enhanced Mobility
 - Transit Commuter Carrier
- Active Transportation
 - Trails
 - Sidewalks
 - Complete Streets
- Other Investment Areas
 - Freight Mobility
 - Transportation Resiliency
 - System Management & Operation

Further explanations regarding how the individual investment target is supported, including cost calculation methodology and revenue sources, are provided in the tables that follow.

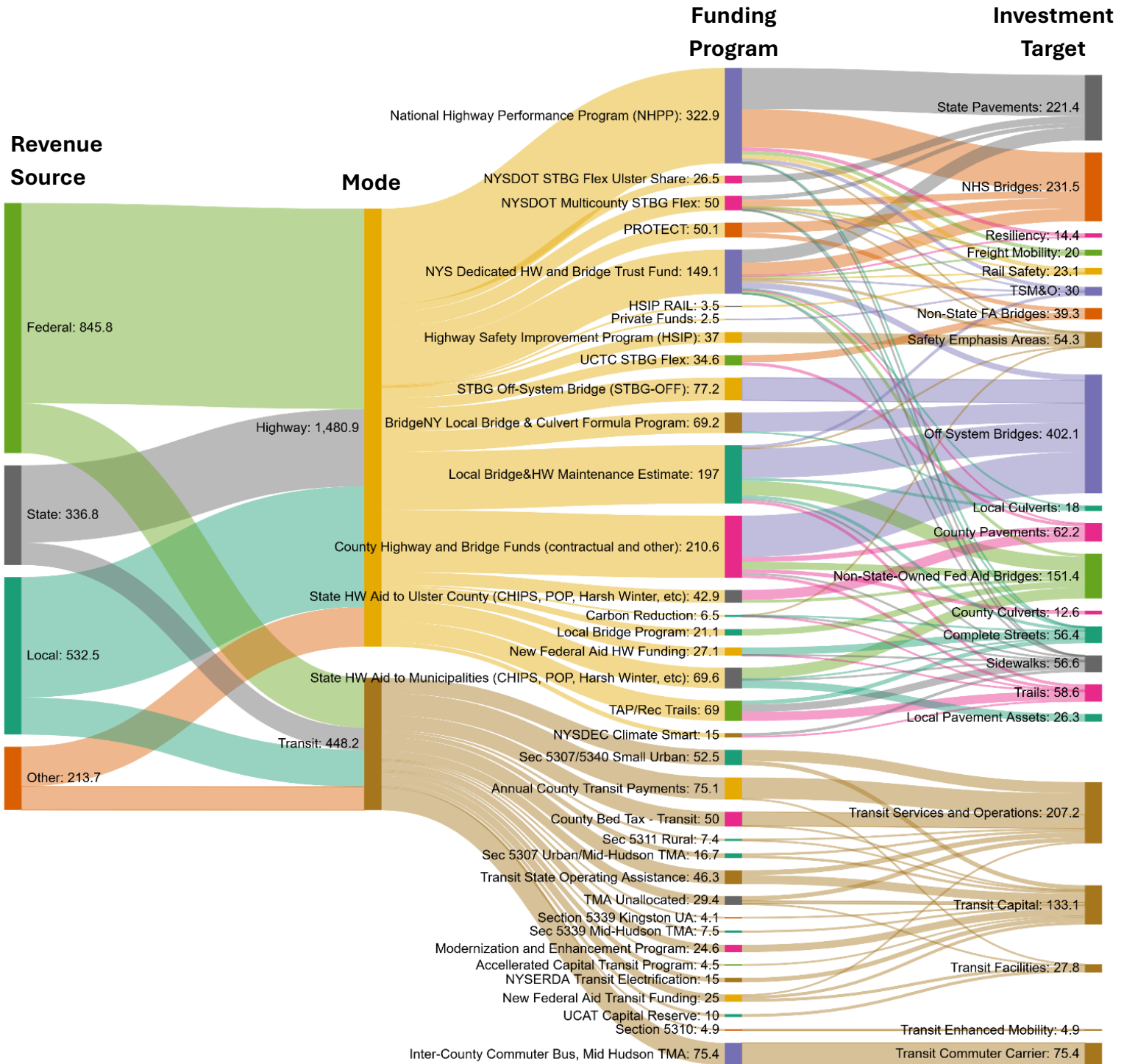


Figure 8.1: UCTC Year 2026-2050 Revenue Sources and Investment Targets (millions of \$)



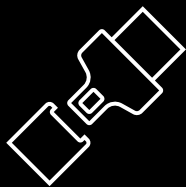
Investment Target: Federal Aid Highway Resurfacing

Cost Calculation Method: Assumes all federal aid pavements with a rating of “poor” or “fair” will require resurfacing. Cost estimate for 2 inch mill and pave provided by sponsors based on recent Hudson Valley projects as follows:

NYSDOT in 2025 at \$300,000 per linear mi.; Ulster County DPW \$250,000 per lane mile; \$200,000 per lane mi for local contracts. A year-over-year annual inflation factor of 1.029% is added to cost calculation through the 25 year horizon.

Total Investment Cost: \$310 million

Investment Target	Revenue Sources	Cost Share
State System Pavements	National Highway Performance Program	\$138.6m
512 lane miles	NYSDOT STBG Flex Where & When (Ulster County Share)	\$38.5m
Cost estimate: \$221.3 million	NYS Dedicated Funds	\$ 44.2m
County System Pavements	UCTC STBG Flex	\$10m
172.6 lane miles	NYS Dedicated Funds	\$ 2.1m
Cost estimate: \$62.1 million	Ulster County Bridge and Highway Funds	\$17m
	State Highway Aid to Municipalities (CHIPS, Harsh Winter, POP, etc.)	\$33.0m
Local Pavement Assets		
91 lane miles	State Highway Aid to Municipalities (CHIPS, Harsh Winter, POP, etc.)	\$26.2m
Cost estimate: \$26.2 million		



Investment Target: Safety

Cost Calculation Method: revenue based investments. 100% of available safety funds are allocated to the system across the two categories below

Total Investment Cost: \$74 million

Investment Target	Revenue Sources	Cost Share
	National Highway Performance Program	\$2m
Safety Emphasis Areas	Carbon Reduction Program	\$2m
Cost estimate: \$53.7 million	Highway Safety Improvement Program	\$37m
	NYS Dedicated Funds	\$10m
	Local Funds	\$1m
	Highway Safety Improvement Program Sec 130 Rail	\$3.2m
Rail Road Crossing Safety	National Highway Performance Program	\$12m
Cost estimate: \$20 million	NYSDOT STBG Flex	\$2m
	NYS Dedicated Funds	\$2.8m



Investment Target: Bridge Replacement

Cost Calculation Method: "All bridges rated as 'poor' and 25% of bridges rated as "fair" in the baseline year (2025) will need to be replaced by the horizon year." Bridges assessed for ownership based on three categories: National Highway System (NHS), Other On-System, and Off System. Deck area for any bridge meeting the replacement assumption calculated and applied to a fixed replacement cost. Replacement cost based on average 2025 NYSDOT letting cost/square foot (\$1,000/square foot).

Total Investment Cost: \$568.6 million

Investment Target	Revenue Sources	Cost Share
NHS Bridges	National Highway Performance Program funds	\$130m
Total #: 43		
Poor Rating: 26	NYSDOT Multicounty STBG Flex	\$23m
Deck Area w/Poor+ 25% Fair Rating: 160,889 ft ²	PROTECT Funds	\$35m
Cost estimate: \$231.5 million	NYS Dedicated Funds	\$43m
Non-NHS Federal Aid HW Bridges	UCTC Surface Transportation Block Grant Program (STBG Flex, Rural & Small Urban Shares)	\$24.7m
Total #: 64	PROTECT Funds	\$14.6m
Poor Rating: 27	NYS Dedicated Funds	\$10.3m
Deck Area w/Poor+ 25% Fair Rating: 132,489 ft ²	State Aid to Municipalities	\$37m
	State Aid to Ulster County	\$9.85M
	Local Funds	\$73m
Cost estimate: \$190.7 million	Other Necessary Local Bridge Funds	\$21m
Off-System Bridges	STBG Off-System Bridge	\$77.2m
Total #: 188	BridgeNY Local Bridge & Culvert Program	\$64.9
Poor Rating: 35	NYS Dedicated Funds	\$20m
Deck Area w/Poor Rating: 279,381 ft ²	Local Bridge and Highway General Funds	\$100m
Cost estimate: \$402.1 million	County Bridge Funds (contractual and other)	\$140m
Culverts	BridgeNY Culvert Formula Program	\$4.2m
A mix of state and local funds is allocated to the replacement of culverts on the county and local system	NYS Dedicated Funds	\$4.3m
	Local Highway Funds	\$9.2m
	County Highway Funds	\$12.5m
Cost estimate: \$30.5m		

Investment Target: Public Transit



Cost Calculation Method: Annual costs to maintain the transit system were derived from the Approved 2023 Ulster County Budget and projected retroactively from 2020 through the horizon year. Federal and state aid covers roughly 60% of those costs with the remaining 40% covered by county taxpayers.

This ratio is held constant through the 25 year planning horizon with a year-over-year annual inflation factor of 1.029% to estimate a total cost of maintaining the system through 2045. Facility costs are included as one-time expansion costs to build a new storage facility based on the 2020 UCTC study plus additional facility maintenance costs. Costs to support the commuter carrier and transit enhanced mobility are also included.

Total Investment Cost: \$398.764 million

Investment Target	Revenue Sources	Cost Share
Transit Services and Operations The 2025 adopted Ulster County budget allocates \$9.4 million to operate the system; assumes annual cost of \$5.758m budgeted toward annual operations and projected through the plan horizon with year over year inflation of 1.029% Total Cost Estimate: \$207.2 million	FTA Section 5307 Small Urban Formula Funds attributable to the Kingston Urbanized Area	\$38m
	FTA Section 5307 Large Urban Formula Funds attributable to the Poughkeepsie-Newburgh Urbanized Area	\$8m
	FTA Section 5311 Rural Formula Funds	\$4.875
	State Transit Operating Assistance (STOA)	\$17m
	County Funds	\$75m
	New Bed Tax Funding	\$47m
	New Federal Transit Funding	\$5m
	Mid Hudson Valley TMA Unallocated Funds	\$12.350m
Transit Capital The 2025 budget allocates \$9.4 million to operate the system; assumes annual cost of \$3.6m toward rolling stock plus year-over-year annual inflation of 1.029% Total Cost Estimate: \$133 million	FTA Section 5307 Small Urban Formula Funds attributable to the Kingston Urbanized Area	\$14.5m
	FTA Section 5307 Large Urban Formula Funds attributable to the Poughkeepsie-Newburgh Urbanized Area	\$8.650m
	FTA Section 5339 Bus and Bus Facility Prgm attributable to the Kingston Urbanized Area	\$4.1m
	FTA Section 5339 Bus and Bus Facility Prgm attributable to the Poughkeepsie-Newburgh Urbanized Area	\$7.5m
	FTA Sec 5311 Rural funds	\$2.5m
	State Transit Operating Assistance	\$29.265
	NYS DOT Modernization and Enhancement Prgm	\$24.5m
	NYS DOT Accelerated Capital Transit Prgm	\$4.5m
	County Bed Tax	\$3m
	New Federal Aid Transit Funding	\$10m
	Mid Hudson Valley TMA Unallocated Funds	\$9.4m
	NYSDA Transit Capital and Electrification	\$15m

Transit Facility Costs		
Assumes several one-time fixed transit facility upgrades plus a new \$25m facility required to house the growing BEB fleet.	Federal Aid Reserve Funds	\$10m
	New Federal Aid Transit Funding	\$10m
	Mid Hudson Valley TMA Unallocated Funds	\$7.5m
Total Cost Estimate: \$27.5 million	County Funds	\$2.750
Transit Enhanced Mobility		
Assist private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs.	FTA Section 5310 - Enhanced Mobility of Seniors and Individuals with Disabilities	\$4.875m
Total Cost Estimate: \$4.875 million		
Transit Commuter Carrier		
Formula funds are made available to the commuter carriers through transfers under agreement with the Mid-Hudson Valley TMA members. Local operators reserve the right to request adjustments based on local transit needs	Mid-Hudson Valley Transportation Management Area Commuter Carrier Funds	\$75.4m
Total Cost Estimate: \$75.4m		

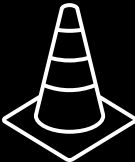


Investment Target: Nonmotorized Transportation

Assumes full build-out of the existing network of rail trails and connecting nonmotorized paths shown on page 92 plus ongoing maintenance costs. Also assumes local investments in sidewalk systems and complete streets improvements.

Total Cost: \$126.127 million

Investment Target	Revenue Sources	Cost Share
Trail System	Carbon Reduction Program	\$2.5m
Maintenance of the existing system was estimated at \$2,000 per mi. For new construction, the average construction cost per linear mi of five recently completed rail trail projects were determined for an average cost per mi of \$1.3m; figures were applied as shown below.	Local and County Bridge and Highway General Funds	\$20
	Transportation Alternatives Program/Recreational Trails Program	\$30.0m
	New Federal Aid Highway Funds	\$1.1m
Trail Mileage:	NYSDEC Climate Smart Program	\$5.5m
Future Development: 41.2mi		
In Development: 14.7mi		
Existing: 64.6mi		
Total Cost Estimate: \$58.5m		
Sidewalks	National Highway Performance Program	\$1.2m
City of Kingston 25 year sidewalk replacement cost estimated at \$42m. \$11m added for additional sidewalk districts throughout the county	Carbon Reduction Funding	\$2m
	NYS Dedicated Funds	\$0.5m
	State Aid to Municipalities	\$2.75
	Local and County HW Funds	\$14m
	Transportation Alternatives Program/Recreational Trails Program	\$25m
	New Federal Aid Highway Funds	\$1m
Total Cost Estimate: \$56.5m	NYSDEC Climate Smart Program	\$9.5m
Complete Streets	National Highway Performance Prgr	\$1.05m
	NYS DOT Multicounty Funds	\$2m
	Carbon Reduction	\$0.5
	NYS Dedicated Funds	\$0.3m
	State Highway Aid to Municipalities (CHIPS, Harsh Winter, POP, etc.)	\$2.75m
	Local Bridge/Highway General Funds	\$10.704m
	Transportation Alternatives Program/Rec.Trails Program	\$14m
	New Federal Aid Highway Funds	\$25m
Total Cost Estimate: \$56.2m		

Other Investment Targets		
  	Total Cost: \$65 million	
Freight Mobility	National Highway Performance Program	\$12m
Providing enhancements to the transportation network that facilitate the efficient movement of freight from points of origin to local delivery.	NYSDOT Multicounty Funds	\$2m
	NYS Dedicated Funds	\$6m
	Total Cost Estimate: \$20m	
Transportation Resiliency	National Highway Performance Program	\$12.6m
Development of a transportation system that is able to function in the face of one or more major obstacles including extreme weather events, major accidents, and equipment or infrastructure failures. These investments are in addition to other PROTECT funds directed specifically to resilient bridge projects.		
	NYS Dedicated Funds	\$2.4
Total Cost Estimate: \$15m		
Transportation System Management and Operations (TSM&O)	National Highway Performance Program	\$12m
	NYSDOT Multicounty STBG Flex	\$2.7m
	NYS Dedicated Funds	\$2.8m
	Local Bridge and Highway General Funds	\$10m
	Private Funds	\$2.5m
Total Cost Estimate: \$30m		

ⁱ Sankey diagram developed using Sankeymatic.com

9. RECOMMENDED PLAN OF PROJECTS

The Recommended Plan of Projects identified in the following pages is directly linked to the UCTC's FFY 2026-2030 Transportation Improvement Program (TIP), to take effect on October 1, 2025. The TIP includes a priority list of proposed federal and state supported projects to be implemented after the initial adoption of the TIP. A detailed financial summary is provided in each iteration of the TIP. As shown in Figure 9.1, the UCTC 2026 TIP included over \$170 million in federal aid to the Ulster County Metropolitan Planning Area over the five-year TIP period. Over \$85m in federal FHWA funds will be programmed by the NYSDOT; over \$46m in FHWA funds will be programmed by local municipalities; and over \$38m in FTA will be programmed by various designated recipients (primarily Ulster County Government through UCAT). These figures exclude the NYSDOT Multicounty program, which accounts for an additional \$773 million in combined state and federal aid over the five-year TIP period that will be dispersed throughout the 7 county NYSDOT Region 8 system and, presumably, the Ulster County Metropolitan Planning Area. New York State Bridge Authority and New York State Thruway Authority projects will utilize 100% state funds and are therefore not required to be posted on the 2026-2030 TIP.

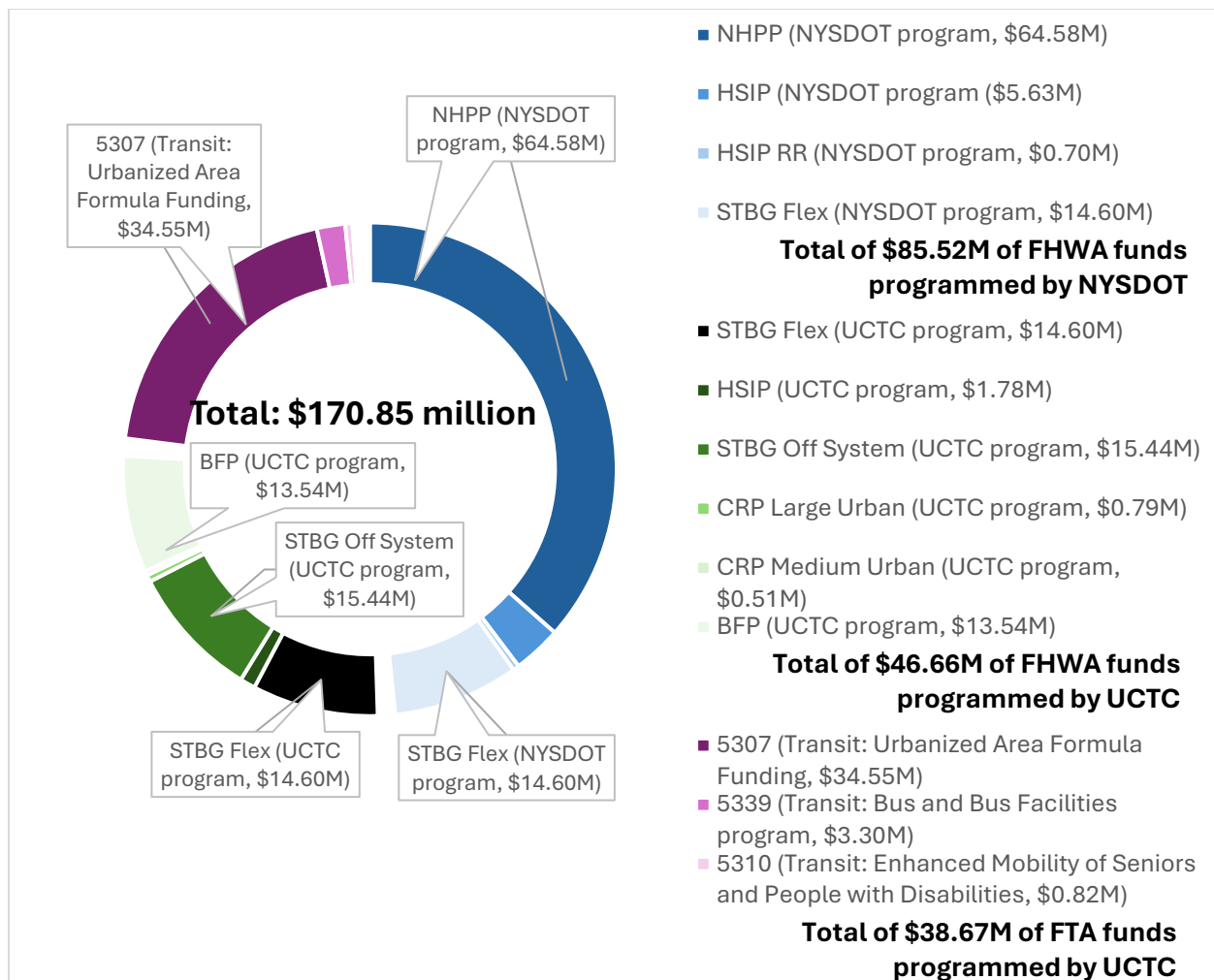


Figure 9.1: Breakdown of Programmed TIP 2026-2030 Funding

The 2026 – 2030 TIP/STIP was developed by MPOs statewide in 2024/25. At that time, NYSDOT provided MPOs with anticipated allocations for federal aid-eligible projects. Based on projects programmed during previous TIP years and the amount of federal aid made available to the UCTC planning area for the 2026 – 2030 period, the UCTC once again focused on ensuring that projects with phases already obligated would receive funding priority. UCTC was able to add a small number of bridge projects to the TIP utilizing UCTC’s share of STBG Off System Bridge funds.

As explained in the Financial Plan, federal aid revenues are not necessarily guaranteed; as such, the Recommended Plan of Projects has been prioritized based on need and the level of funding reasonably expected to be available into the future. Projects currently programmed on the TIP with phases underway/obligated are included as “Short Range” projects. Short Range projects are those where construction phases are expected to be initiated or substantially completed during the 2026 – 2030 TIP cycle; these have a high likelihood of execution and completion.

Projects that are currently programmed on the TIP but have not yet commenced or made significant progress toward design approval are typically included in the “Mid Range” project listing. While the previous 2045 iteration of the UCTC LRTP omitted a mid-range plan of projects, the 2050 iteration has several Mid Range projects which were programmed in the new 2026 TIP. Projects included in this listing will very likely commence engineering and design within the next 5 years, but the construction phase is not scheduled until 2030 or beyond. Projects of this type may have trouble getting to the final construction phase in 5 years. Challenges such as the likelihood of project delays, final design review and selection, right of way acquisition, and escalating costs of construction during the design process can all play significant roles increasing costs and extending the schedule of a federal aid project by several years.

Long Range projects are those that have not yet been included on an approved TIP but may be eligible for federal aid as resources allow in outlying years (2030 – 2050). Long Range projects are directly referenced or supported by UCTC and NYSDOT planning products. They have been organized to conform to the goals and objectives of the UCTC Year 2050 Long Range Transportation Plan but have no specific funding source or sponsor identified at this time. These are sometimes referred to as “conceptual” or “illustrative” projects and have been arranged according to the LRTP goals.

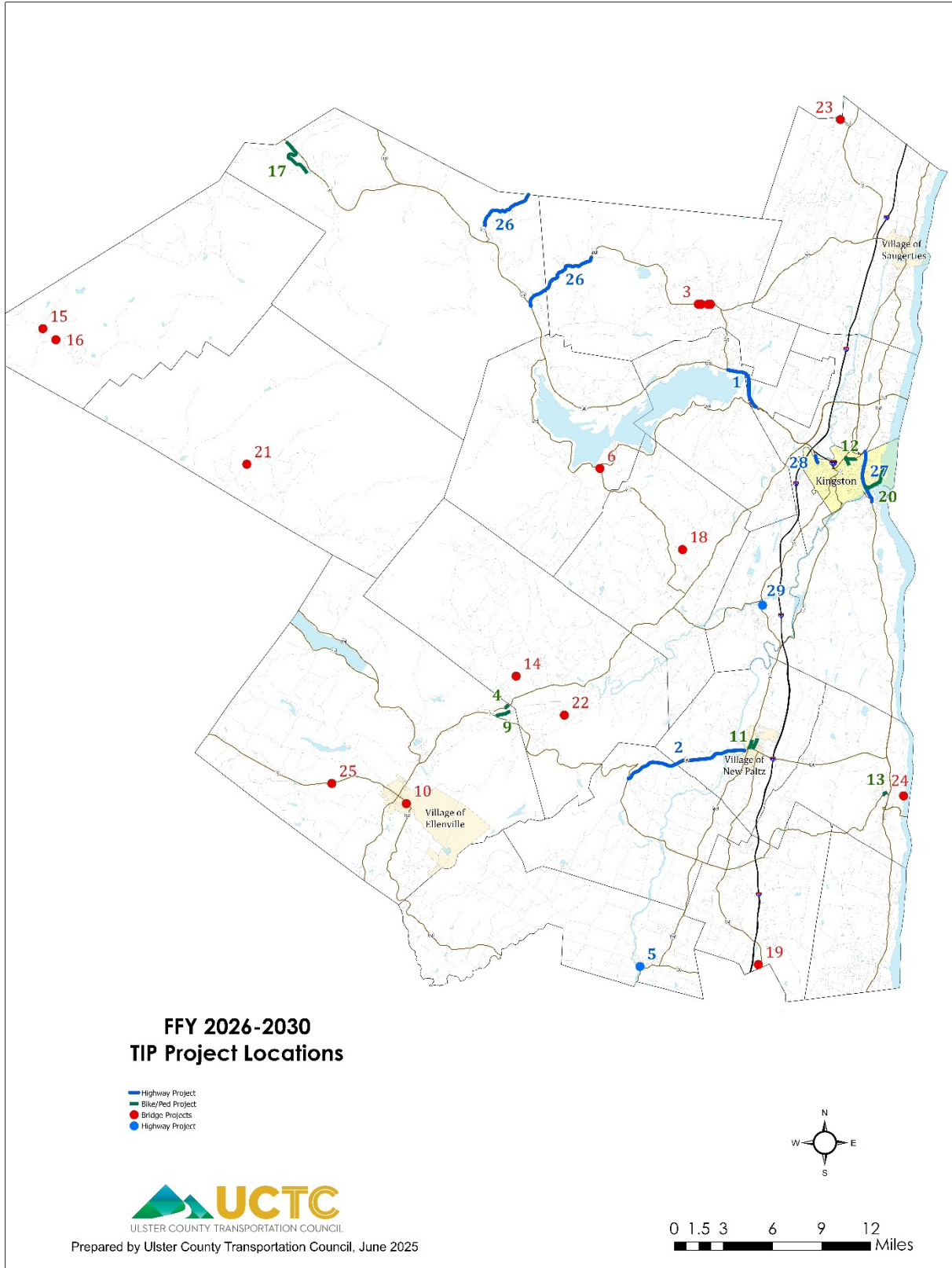


Figure 9.2: 2026-2030 Transportation Improvement Program, State and Local Highway, Bridge and Trail Projects

SHORT AND MEDIUM RANGE RECOMMENDED PLAN OF PROJECTS

Table 9.1: List of 2026-2030 Transportation Improvement Program, State and Local Highway, Bridge and Trail Projects (referenced on Figure 9.2)

Short-Range UCTC Projects (Construction Obligation Anticipated <2030)			
Map Reference	PIN	Project Name	Location
1	801850	Resurfacing Rte 28 From Waughkonk Rd to Rte 375	T/Ulster, Kingston, Hurley, Woodstock
2	805111	County Route 7&8-Route299 Roadway Repaving	T/New Paltz Gardiner
3	812220	Route 212 Woodstock Bridge Replacements	T/Woodstock
4	817747	Route 209 Sidewalk Improvement	T/Wawarsing
6	875713	Route 213 Extension (CR4) Tongore Bridge Rep Bin#30	T/Olive
9	875925	D&H Canal/O&W RR Trail	T/Wawarsing
10	875927	Clinton Ave/North Gully Bridge Rehab. Bin#2262980	V/Ellenville
11	876122	Construct New Sidewalks and Curbing Prospect and Church Streets; Replace Deteriorated Bluestone Sidewalk Huguenot St	V/New Paltz
12	876254	Flatbush and Foxhall Ave Accessibility Improvements	C/Kingston
13	876255	Highland Streetscape Improvements	T/Lloyd
14	876264	Boice Mill Road Bridge Replacement BIN 2224460	T/Rochester
15	876268	Turnwood Bridge Replacement CR54 BIN 3347160	T/Hardenburgh
16	876280	Beaver Kill Rd/Scudder Brook Bridge Replacement	T/Hardenburgh
17	876289	U&D Phase 1 2.5 mi Multi-use Path Highmount to Belleayre Beach	T/Shandaken
18	876312	Hurley Mntn Rd Over Esopus Creek Bridge Replacement BIN 3347260	T/Marbletown
19	876313	Old Mill Rd Over Quassaic Creek Culvert Conversion to Bridge	T/Plattekill
21	876357	Denning Rd Bridge Over Neversink River Bridge Replacement BIN 3347470	T/Denning
22	876358	Project 32 Road Over Stoney Kill Bridge Rehab BIN 2224520	T/Rochester
26	881620	Slope Repair Rte 212 and 214	T/Shandaken, Woodstock
27	881651	Resurface Segments 9W Between Canal St and Rte 32 Skid Reduction	C/Kingston T/Esopus
29	882408	Lease of T/Rosendale Park & Ride Lot on Route 32	T/Rosendale
Medium Range UCTC Projects (Construction Obligation Anticipated >2030)			
5	848757	Intersection Improvements Route 208 and Wallkill Avenue	Town of Shawangunk
8	875849	D&H/O&W Heritage Trail Rehabilitation	V/Ellenville
20	876330	Weaving the Waterfront Transportation Project Multi-Modal Connection	C/Kingston
23	876359	Drummond Falls Rd Over Kaaterskill Creek Bridge Rehab BIN 2224	T/Saugerties
24	876390	Willow Dock Rd Over Twaalfskill Creek Bridge Replacement	T/Lloyd
25	876391	Barbara Rd Over West Branch Beer Kill Bridge Replacement BIN 22	T/Wawarsing
28	881759	Operational and Ped Connectivity Improvements Washington Ave a	C/Kingston T/Ulster

SHORT AND MEDIUM RANGE TRANSIT PROJECTS

Table 9.2: UCAT 5-Year Program; Derived from the UCTC 2026-2030 TIP (projects in total dollars)

	2026	2027	2028	2029	2030	Total
Capital - Facilities	\$1,250,000	-	-	\$12,500,000	-	\$13,750,000
Capital - Rolling Stock/Elec. Vehicle Support	\$1,052,000	-	\$876,000	\$2,200,000	-	\$4,128,000
Preventative Maint.	\$626,000	\$626,000	\$626,000	\$626,000	\$626,000	3,130,000
Project Admin.	\$438,000	\$438,000	\$438,000	\$438,000	\$438,000	2,190,000
Operating Assistance	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Total	\$4,366,000	\$3,064,000	\$2,940,000	\$16,764,000	\$2,064,000	\$28,198,000

UCAT provides the UCTC with its 5 year capital program at a minimum during each TIP update cycle or when any relevant updates are made which would require similar updates to the UCTC TIP. As shown above, the current 2026-2030 UCAT 5 year program includes costs for buses and facilities as well as the necessary costs associated with operating the transit system, including Preventative Maintenance, Project Administration, and Operating Assistance.



Four ABB Terra 184 DC fast charging power cabinets installed in 2025, each delivering 150kW of power. These high-efficiency cabinets collectively power 12 ceiling-mounted charging dispensers, designed to streamline overhead bus charging and reduce ground-level congestion in the depot. In a forward-thinking move toward energy resilience and sustainability, UCAT has also installed 480 solar panels onsite. This solar array is engineered to supply power to three of the four ABB cabinets, enabling uninterrupted charging for three electric buses during power outages. This added redundancy ensures service reliability and underscores UCAT's commitment to clean energy and operational resilience.



The UCAT facility at Golden Hill in Kingston includes space for administrative staff and the maintenance and bus storage garage. A 2020 plan conducted by UCTC indicated a need for UCAT to double its current storage and maintenance capacity, in part due to UCAT's ambitious fleet electrification goals. The plan also identifies potential sites for UCAT to explore further.

The anticipated 5 year costs of the system are within the anticipated dollars available as estimated within the TIP and through the Financial Plan in the previous section. The program illustrates significant capital investments in facility upgraded anticipated in FFY2029; these costs will likely be amended after the design process has been initiated. It is also likely that additional investments in rolling stock will be added during this timeframe through TIP amendments as the need for and availability of new battery electric buses for the fleet becomes clearer to UCAT administrative staff as they begin implementation of the Route Optimization Plan completed by UCTC in 2025.

LONG RANGE RECOMMENDED PLAN OF PROJECTS

Long Range projects are organized to conform to the Goals and Objectives of the UCTC Year 2050 Long Range Transportation Plan (Chapter 2) but have no specific funding source or sponsor identified at this point in time. In some cases Long Range projects are generalized. More specific projects are identified where supporting plans and projects exist. Projects and transportation issues of concern identified by the public through the Mobility 2050 Survey during the first half of 2025 also constitute a basis and justification for Long Range projects. UCTC will use these comments to inform future planning and investigation efforts and program discrete projects that will determine their feasibility and provide greater insight as to their need and justification. (A comprehensive listing of all UCTC plans is included in Table 9.3 with a detailed analysis of goal conformity and overlap. The supporting planning projects listed below are illustrative and should not be considered exhaustive). In the event that UCTC should issue a call for new projects in advance of 2030, those new projects should also conform to the following goals.

Goals

- **System Preservation:** Invest in transportation system infrastructure to bring all facilities and modes into a state of good repair.
- **Safety:** Improve the safety of all users of the transportation system by responding to identified safety deficiencies and proactively addressing future safety needs.
- **Resiliency:** Ensure that the transportation system is able to maintain its functionally and recover quickly after disruptions, such as extreme weather, crashes and accidents, or infrastructure failure.
- **Mobility:** Provide for efficient and reliable travel by all modes and support mode choice flexibility among all users.

GOAL 1: SYSTEM PRESERVATION

System Preservation: Invest in transportation system infrastructure to bring all facilities and modes into a state of good repair.

Recommended Long-Term System Preservation Projects

- Extending the useful life of existing highway, bridge, and transit facilities through asset management and improved design principles, seeking to maximize longevity of existing facilities.
- Reconstruction and rehabilitation of existing highway, bridge, and transit facilities in a manner that supports extension of their useful life. New facilities will be designed to be resilient to climate change and multi-modal.
- Extend the useful life of public transportation facilities – capital rolling stock, terminals, and shelters –to ensure service reliability. New capital rolling stock will be fuel efficient and support multi-modal accessibility; facilities will be resilient to weather-related emergencies.

- The Kingston-Rhinecliff and Mid-Hudson Bridges are maintained at a high standard of condition and traffic functionality
- New facilities (roads and bridges) will receive priority based on the UCTC Critical Transportation Infrastructure Vulnerability Assessment and subsequent updates.

Supporting Plans and Projects

- Ulster County Transportation Infrastructure Vulnerability Assessment (2022)
- City of Kingston Traffic Signal Warrant Evaluation (2020)
- UCAT Storage Facility Site Selection (2020)
- Ulster County Area Transit Route Optimization Plan (2025/ongoing)
- UCAT Transit Maintenance and Storage Facility Site Selection Plan (2020)
- NYSDOT Preservation First/Forward Four Principles

GOAL 2: SAFETY

Improve the safety of all users of the transportation system by responding to identified safety deficiencies and proactively addressing future safety needs.

Recommended Safety Projects

- Recommended projects identified in the Ulster County Road Safety Plan (2020) are implemented; the plan itself is updated every 5 years
- Improve the function of intersections through improved design that increased safety, reduce delay, and improves mobility.
- Implement complete streets policies and programs that improve and modernize central corridors to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.
- Implement engineering recommendations identified in complete Safe Routes to School Action Plans and similar studies.
- Implement public safety awareness programs that improve driver, bicyclist and pedestrian safety.
- Route 9W improvements, Towns of Ulster, Marlboro and Lloyd
- Ensuring a safe, secure and accident-free freight system.
- Ensuring that all transit facilities are visible, signed, well-lit, accessible and maintained adequately
- All at-grade rail crossings are designed in a manner that will protect motorists, pedestrians,

bicyclists, and area residents and prevent collisions.

- Development of local and regional policy recommendations that support the Safe Systems Approach and Vision Zero goals.

Supporting Plans and Projects

- Town of Ulster Route 9W Mobility Plan (2025)
- Kingston Rail Crossing Study (2025)
- Ulster County Road Safety Action Plan (2023)
- City of Kingston Traffic Signal Warrant Evaluation (2020)
- Rail Trail/Roadway Intersection Inventory and Analysis (2020)
- Walkkill Valley Rail Trail Community Opportunity Plan (2020)
- Ulster County Road Safety Audits (2019)
- Ulster County Safe Routes to School Program (2015)
- Building a Better Broadway – Corridor Conceptual Design Plan (2015)
- Town of Ulster – Boices Lane Rail Crossing Study (2013)
- City of Kingston Uptown Stockade Area Transportation Plan (2009)
- Marlboro Hamlet Area Transportation Plan (2008)
- Ulster County Integrated Advance Train Detection and Arrival Prediction Implementation Plan (2008)
- Saugerties Area Mobility Analysis (2007)
- City of Kingston Route 32 at Fair Street Intersection Study (2006)
- City of Kingston/Town of Ulster - Quiet Zone and City of Kingston Pedestrian Safety and Mobility Analysis (2006)
- Washington Avenue Corridor Study (2005)
- NYS Strategic Highway Safety Plan, Pedestrian Safety Action Plan and Roadway Departure Plan
- 2009 NYS Rail Plan and subsequent updates

GOAL 3: RESILIENCY

Ensure that the transportation system is able to maintain its functionality and recover quickly after disruptions, such as extreme weather, crashes and accidents, or infrastructure failure.

Recommended Long-Term Resiliency Projects

- Reconstruction and rehabilitation of existing highway, bridge, and transit facilities will be in a manner that supports extension of their useful life. New facilities will be designed to be resilient to climate change and multi-modal. Design and construct transportation facilities that reduce if not avoid altogether impacts to the natural environment.
- Support the design and construction of transportation facilities that lessen impacts on water quality and decrease species mortality and habitat loss.

- Invest in infrastructure necessary to expand the use of alternative fuel vehicles among citizens and public and private sector organizations.
- Support Ulster County Department of the Environment's efforts toward county fleet vehicle electrification
- Support Ulster County Area Transit's efforts toward transit fleet electrification and facility resiliency
- Improve access to EV charging stations for Ulster County residents and visitors

Supporting Plans and Projects

- City of Kingston Railroad Crossing Study (2025)
- Ulster County Transportation Vulnerability Assessment (2024)
- Wallkill Valley Rail Trail Community Opportunity Plan (2020)
- Mid Hudson Valley Congestion Management Plan Update (2020)
- Connect Mid Hudson Regional Transit Plan (2020)
- UCAT Transit System Electrification (2020)
- UCAT Storage Facility Site Selection (2020)
- Building a Better Broadway – Corridor Conceptual Design Plan (2015)
- Ulster County Non-Motorized Transportation Plan (2008)
- City of Kingston/Town of Ulster - Quiet Zone and City of Kingston Pedestrian Safety and Mobility Analysis (2006)

GOAL 4: MOBILITY

Provide for efficient and reliable travel by all modes and support mode choice flexibility among all users.

Recommended Long-Term Mobility Projects

- Improve transit and service frequency and reliability along critical corridors, including NYS RT32, 9W, Broadway Kingston, US 209,
- Improve transit service and frequency between critical nodes, such as schools, hospitals, essential services, regional transit centers and regional activity centers
- Ensure appropriate transit support facilities are available to handle increase transit ridership and service needed capital investments
- Integrate technology that will improve transit service efficiency and increase ridership, including Computer Aided Dispatch (CAD), Automatic Vehicle Location (AVL) and other driver, dispatch and passenger information and on-board systems.

- Invest in facilities that encourage alternative modes of transportation, such as transit, pedestrian and bicycle facilities, including sidewalks, trails and bike facilities integrated into transit capital improvements.
- Implement or upgrade regional Intelligent Transportation Systems (ITS) technology along regional corridors of significance, including integrated and coordinated signal technology, emergency signal preemption, advanced signal detection along rail lines, automatic toll collection, and traffic monitoring.
 - E.g. transit signal prioritization to permit signal preemption for transit buses along Route 299 at the Chestnut Street, Manheim Boulevard, Cherry Hill Road, and Putt Corners Road intersections
- Establish a mobility management program to coordinate existing and future services of public, not-for-profit and private transportation throughout the Mid-Hudson region
- Rehabilitation of existing and/or construction of new intermodal facilities in Kingston and New Paltz.
- Explore options for encouraging micromobility as a means of providing first mile/last mile connectivity between transit and destinations
- Explore options for implementing mobility as a service (MAAS) technologies and route planning as a means of improving access to and enhancing existing transportation services
- Ensure that UCAT facilities are in a state of good repair, functional, modern and accessible
- Implement regional ITS infrastructure on Ulster County congested and critical corridors, including traffic signal coordination projects and systems that support safe autonomous vehicle operations
- Improve local and regional bicycle and pedestrian access and connectivity to activity centers, services, and employment opportunities through safe and – where feasible – separated facilities, with an emphasis on intersection safety.
- Continue to fill gaps in the existing non-motorized transportation system to create a seamless regional non-motorized system of transportation that provides safe interconnectivity between trails and activities centers
- Invest in filling gaps in the existing sidewalk network throughout Ulster County’s activity centers through sidewalk and shoulder construction, reconstruction and rehabilitation projects.
- Invest in complete streets projects within all activity centers with a specific focus on key corridors. Focus on facilities such as improved crosswalks, bike lanes and other amenities that facilitate alternative forms of transportation among a population of varying physical abilities and means of transportation.

- Evaluate the need for facilities that meet Americans with Disabilities Act standards and program the necessary measures to ensure compliance within applicable federal-aid eligible facilities.
- Establish or improve wayfinding facilities to foster a coordinated approach to mobility and access of business, cultural and other critical facilities throughout the county and region.
- I-87 Exit 18 and Rte 299 congestion mitigation and alternative improvements, Town of New Paltz
- Conversion of I-587 from an Interstate highway to a state road, allowing access to adjacent land uses.
- Frank Sottile Boulevard/Route 199 Town of Ulster: “Alternative Number 4, Construct East Bound Ramps Only” to alleviate congestion and improve access to adjacent land uses and businesses.
- Identify innovative strategies to secure adequate financial support for such projects, such as leveraging of discretionary federal aid, including the Better Utilizing Investments to Leverage Development (BUILD) program, Transportation Alternatives Program, Planning Environmental Linkages (PELs), FTA unallocated 5307 funds available to Ulster County, and innovative public-private partnerships.
- Reduce or eliminate risks at all at-grade railroad crossings in an effort to mitigate the effects of train horn noise and establishing new quiet zones, particularly in densely-populated areas.

Supporting Plans and Projects

- UCAT Route Optimization Plan (Ongoing – 2025)
- Kingston Railroad Crossing Study (2025)
- Town of Ulster Rte 9W Mobility Study (2025)
- Ulster County Area Transit Maintenance and Storage Facility Site Selection Plan (2021)
- City of Kingston Traffic Signal Warrant Evaluation (2020)
- Mid Hudson Valley Congestion Management Plan Update (2020)
- Connect Mid Hudson Regional Transit Plan (2020)
- Marlboro/Lloyd Route 9W Corridor Management Plan (2019)
- Ulster County Transit Integration Plan (2018)
- Ulster County Coordinated Human Services Transportation and Public Transit Plan (2017)
- Building a Better Broadway – Corridor Conceptual Design Plan (2015)
- Finding Rosendale Circulation and Access Plan (2015)
- New Paltz Intermodal Facility Plan (2015)
- Kingston Intermodal Facility Site Location and Conceptual Design Analysis (2009)
- Ulster County Non-Motorized Transportation Plan (2008)
- Marlboro Hamlet Area Transportation Plan (2008)

- Ulster County Integrated Advance Train Detection and Arrival Prediction Implementation Plan (2008)
- Saugerties Area Mobility Analysis (2007)
- City of Kingston/Town of Ulster - Quiet Zone and City of Kingston Pedestrian Safety and Mobility Analysis (2006)

DOCUMENTATION OF FISCAL CONSTRAINT

As explained in the Financial Plan, this plan is required to demonstrate that recommended expenditures, adjusted by agreed-upon inflation rates, do not exceed reasonably expected revenues that were developed through the cooperative process involving UCTC, NYSDOT, and Ulster County as the primary transit operator. It is also incumbent upon UCTC to demonstrate the fiscal capability to maintain and operate the regional transportation facilities included in the LRTP. Given that all near and mid-term projects and fund sources are tied directly to the UCTC 2026-2030 TIP, all known project costs are accounted for and certified to be fiscally constrained.

Long Term project recommendations are laid out in a goal-driven, conceptual manner based on the recognition that each five year update of the LRTP will recognize additional project actions in the out-years of this plan and develop new fiscal revenues and targets as part of the Financial Plan.

The goal-driven approach to recommended projects, actions, and programs when combined with the fiscal analysis demonstrates UCTC's commitment and capability to maintain and operate the regional multimodal transportation system. Any new facilities of significant stature and complexity would need to be financed through discretionary funds (such as the Federal Better Utilizing Investments to Leverage Development (BUILD) program); new, public/private sources; or the multicounty asset management preservation program that NYSDOT Region 8 used to direct funding to pavement, bridge, and ancillary asset needs.

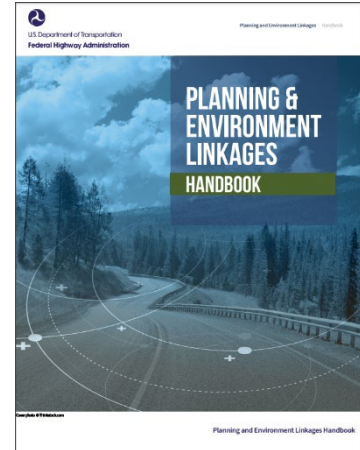
UCTC does acknowledge the concern about the fiscal capability of local governments to address transportation system needs of facilities under their jurisdiction. As noted previously, federal aid for local projects is severely limited and focused primarily on the National Highway System. The CHIPS and other supplemental or emergency pavement programs offered by the NYS Legislature provides the only direct source of state resources for local road and bridge construction. Funding major asset needs from local general budgets remains a challenge, especially for bicycle and pedestrian infrastructure and safety projects. UCTC is committed to directing its resources to the most critical local system needs when they are available.

INNOVATIVE FINANCING OF TRANSPORTATION PROJECTS

Continued inability of the US Congress of pass meaningful and timely transportation funding legislation, combined with the uncomfortable regularity of global economic disruptions has made it clear that states, MPOs and regions must develop new, innovative methods of funding transportation projects outside of the traditional federal reimbursement framework that states have relied upon for nearly 7 decades.

Planning and Environmental Linkages

Planning and Environment Linkages (PEL) is a valuable tool for creating efficiencies in the transportation project development process that supports agencies' efforts to accelerate project delivery. PEL represents a collaborative and integrated approach to transportation decision-making that considers benefits and impacts of proposed transportation system improvements to the environment, community, and economy during the transportation planning process to inform the environmental review process. PEL supports early agency coordination and efficient decision-making, aligning multiple Federal approvals to advance at the same time, rather than sequentially, thereby accelerating project delivery and providing significant cost savings. Within the Hudson Valley, an example of a recent successful PEL study is the *Route 17 Transportation Planning and Environment Linkage (PEL) Study* (in Orange and Sullivan counties), published in 2021. In late 2025, NYSDOT will also initiate a new PEL study of east-west corridors in northern Westchester County.



The Infrastructure Investment and Jobs Act (IIJA) - Innovative Finance Programs.

New federal aid programs created previously under the FAST Act and expanded significantly under the IIJA present MPOs and regions with new opportunities for funding transportation projects, including:

- Leveraging Federal Dollars.** The Transportation Infrastructure Finance and Innovation Act (TIFIA) program leverages federal dollars by facilitating private participation in transportation projects and encouraging innovative financing mechanisms that help advance projects more quickly. While the FAST Act cuts funding to the TIFIA program, it reduces the minimum project size for TIFIA, provides funding to cover the loan evaluation costs typically borne by the borrower, and provides flexibility to States to use Federal formula dollars to cover credit subsidy costs.
- Increases Eligible Projects Under RRIF.** The Railroad Rehabilitation and Improvement Financing (RRIF) program lends funds to entities that are building rail infrastructure. The FAST Act makes transit-oriented-development elements of passenger rail station projects eligible for RRIF.

The Build America (Bureau) is to provide assistance and communicate best practices to project sponsors looking to take advantage of DOT credit programs. The Bureau will help:

- Streamline the application process for DOT credit programs.** The FAST Act directs the Bureau to improve the application processes for Departmental credit programs through streamlined review and transparent approval processes.
- Promote innovative financing best practices for Public Private Partnerships (PPP) across all modes.** The FAST Act ensures DOT credit assistance provided to PPP projects is transparent to the public.

Coordinate the progress of environmental review and permitting process. Consistent with the Department’s goals to improve project timelines, the Act requires the Bureau to coordinate efforts to improve efficiency and effectiveness of the environmental review and permitting process.

Other approaches may include:

- **State and regional bonds.** State legislatures should propose ballot initiatives that provide significant bonding to repair, replace and, where necessary, expand transportation facilities. The favorability of such initiatives could be improved by encouraging regional economic development councils to focus bond efforts toward regional needs, thereby emphasizing the benefits to the local system.
- **New revenue streams.** Expanded tolling, increases in state and federal gas taxes, sales taxes, EV user fees, mileage-based user fees and other potential revenue sources.
- **Alternative fund source identification.**
 - Greater private participation in infrastructure development by transferring risk and responsibility from public project sponsors to private sector engineers, contractors and investors.
 - The City of Kingston has effectively been utilizing state funds, such as the NYSEDA “Cleaner Greener” and NYSDEC Smart Growth programs as part of the local share or as a means of supplementing the federal share of project costs for sidewalks and traffic signals.

Ulster County’s Hotel, Motel, and Short-Term Rental Occupancy Tax

In 2024, Ulster County’s tax on overnight lodging in the County was doubled, from 2% to 4%, estimated to generate \$1.5 million annually in revenue. The intended use of this revenue is to support the UCAT transit system as well as the County’s Housing Action Fund.

Table 9.3: Long Range Plans and Project Conformity with LRTP Goals

Plans and Projects ⁱ	Goal 1 – System Preservation	Goal 2 – Safety	Goal 3 – Mobility	Goal 4 – Resiliency
Plans and Projects (listed in the order by which they were completed)				
Town of Ulster Route 9W Mobility Plan (2025)	◆	◆	◆	
City of Kingston Railroad Intersection Study (2025)		◆	◆	
Ulster County Critical Transportation Infrastructure Vulnerability Assessment (2023)	◆			◆
UCTC Community Sidewalk Digitization and ADA Assessment (ongoing 2022)	◆	◆	◆	◆
Ulster and Delaware Shandaken Feasibility Report (2021)	◆	◆	◆	◆
Wallkill Valley Rail Trail Community Opportunity Plan (2020)	◆	◆	◆	◆
Ellenville/Wawarsing Signage and Wayfinding Plan (2020)			◆	
Ulster County Road Safety Action Plan (2020/2023)		◆	◆	
City of Kingston Traffic Signal Warrant Evaluation (2020)	◆	◆	◆	
Connecting Kingston Signage and Wayfinding Plan (2020)		◆		
Marlboro/Lloyd Route 9W Corridor Management Plan (2019)	◆	◆	◆	
Ulster County Road Safety Audits (2019)		◆	◆	
Ulster County Safe Routes to School Program (2015)		◆	◆	
Building a Better Broadway – Corridor Conceptual Design Plan (2015)	◆	◆	◆	◆
Finding Rosendale Circulation and Access Plan (2015)		◆		
Town of Ulster – Boices Lane Rail Crossing Study (2013)	◆	◆	◆	
City of Kingston Uptown Stockade Area Transportation Plan (2009)		◆	◆	
Marlboro Hamlet Area Transportation Plan (2008)	◆	◆	◆	
Ulster County Non-Motorized Transportation Plan (2008)		◆	◆	◆
Saugerties Area Mobility Analysis (2007)	◆	◆	◆	◆
City of Kingston/Town of Ulster - Quiet Zone and City of Kingston Pedestrian Safety and Mobility Analysis (2006)		◆		◆
City of Kingston Route 32 at Fair Street Intersection Study (2006)	◆	◆	◆	◆
Washington Avenue Corridor Study (2005)	◆	◆	◆	◆
Frank Sottile Boulevard/Route 199: Alternative Number 4			◆	
Conversion of I-587 from an Interstate highway to a state road, allowing access.		◆	◆	
Regional and State Plans				
NYSDOT Roadway Departure Safety Action Plan (2024)		◆		
NYS Strategic Highway Safety Plan (2023)		◆		◆
NYS Highway Safety Improvement Program (annual report – 2024)		◆		
Mid-Hudson Congestion Management Process (2020)			◆	
Mid-Hudson Transit Plan (Connect Mid Hudson) (2020)			◆	
NYS Transportation Asset Management Plan for the NHS (2019)	◆		◆	
NYS Freight Transportation Plan (2019)			◆	
NYS Pedestrian Safety Action Plan (2016)		◆	◆	◆
Transit Plans and Projects				

Plans and Projects ⁱ	Goal 1 – System Preservation	Goal 2 – Safety	Goal 3 – Mobility	Goal 4 – Resiliency
UCAT Route Optimization (2025 – ongoing)			◆	◆
Ulster County Coordinated Human Services Transportation and Public Transit Plan (2024)			◆	◆
UCAT Transit System Electrification (2020)			◆	◆
UCAT Storage Facility Site Selection (2020)			◆	◆
Connect Mid Hudson Regional Transit Plan (2020)			◆	◆
Ulster County Transit Integration Plan (2018)			◆	◆
New Paltz Intermodal Facility Plan (2015)			◆	◆
Ulster County Transit System Coordination and Development Plan (2012)			◆	◆
City of Kingston - Intermodal Facility Site Location and Conceptual Design Analysis (2009)		◆	◆	◆
Improve transit and service frequency and reliability along critical corridors and within urban centers			◆	

ⁱ List does not include all UCTC studies. For a comprehensive list of all UCTC studies, visit <https://uctc.ulstercountyny.gov/projects/#categoryListings>.

APPENDIX A: FEDERAL REQUIREMENTS CHECKLIST

APPENDIX A: FEDERAL REQUIREMENTS CHECKLIST

This Appendix presents the federal requirements relevant to this LRTP, alongside a description of how and where the requirements have been addressed. At the time of adoption of the LRTP the federal regulations applicable to the metropolitan planning process have not yet been updated pursuant to the Bipartisan Infrastructure Law (BIL; signed into law on 11/15/2021). Despite this, Mobility 2050 has taken these federal regulations into consideration and this LRTP is aligned with the spirit of the BIL.

Requirement	Relevant UCTC LRTP Chapter or Page reference
The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date. [23 CFR § 450.324 (a)]	Mobility 2050 addresses a 25 year planning horizon in coordination with the Mid Hudson TMA MPOs of Dutchess and Orange County
In formulating the transportation plan, the MPO shall consider factors described in § 450.306 (“1) Support the economic vitality... through 10) Enhance travel and tourism”) as the factors relate to a minimum 20-year forecast period. [23 CFR § 450.324 (a)]	Refer to Chapters 2, 4, and 5
The transportation plan shall include both long-range and short-range strategies/actions that provide for the development of an integrated multi-modal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. [23 CFR § 450.324 (b)]	Refer to Chapter 5
The MPO shall review and update the transportation plan at least every 5 years. [23 CFR § 450.324 (c)]	Plan 2045 was initially adopted on 9/22/2020, with an updated Financial Plan adopted on 4/25/23
The MPO, the State(s), and the public transportation operator(s) shall validate data used in preparing other existing modal plans for providing input to the transportation plan. In updating the transportation plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update. [23 CFR § 450.324 (e)]	Mobility 2050 consistently uses latest available source of socio-economic and demographic information available and has supplemented previous data where available. Other data sources such as LEHD, NPMRDS and NYSDOT data sources similarly supplement previous versions.

The metropolitan transportation plan shall, at a minimum, include: [23 CFR § 450.324 (f)] ...		
	(1) The current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;	Refer to Chapters 4 and 5
	(2) Existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multi-modal and inter-modal facilities, non-motorized transportation facilities (e.g., pedestrian walkways and bicycle facilities), and inter-modal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan.	Refer to Chapters 4 and 5 for existing facilities; Refer to Chapter 9 for proposed facilities
	(3) A description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with § 450.306(d).	Refer to Chapter 7
	(4) A system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in § 450.306(d), including—	Refer to Chapter 7
	(i) Progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data; and	Refer to Chapter 7
	(ii) For metropolitan planning organizations that voluntarily elect to develop multiple scenarios, an analysis of how the preferred scenario has improved the conditions and performance of the transportation	Does not apply

	system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets.	
	(5) Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;	Refer to Chapters 5 and 9
	6) Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, <i>including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide (italics added)</i> .	Refer to Chapters 4 and 5; italics text at left does not apply
	(7) Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multi-modal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area's transportation system.	Refer to Chapters 4, 5, and 9
	(8) Transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a), as appropriate;	Refer to Chapters 4, 5, and 9

	(9) Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in nonattainment and maintenance areas for conformity determinations under the EPA's transportation conformity regulations (40 CFR part 93, subpart A). In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates;	UCTC meets air quality attainment; Refer to Chapter 9 for Plan of Projects and reference materials
	(10) A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The MPO shall develop the discussion in consultation with applicable Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation;	Refer to Chapter 6
	(11) A financial plan that demonstrates how the adopted transportation plan can be implemented.	Refer to Chapter 8
	(i) For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain the Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).	Refer to methodology detailed in Chapter 8
	(ii) For the purpose of developing the metropolitan transportation plan, the MPO(s), public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support	Refer to methodology detailed in Chapter 8

	metropolitan transportation plan implementation, as required under § 450.314(a) . All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.	
	(iii) The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified. The financial plan may include an assessment of the appropriateness of innovative finance techniques (for example, tolling, pricing, bonding, public private partnerships, or other strategies) as revenue sources for projects in the plan.	Refer to methodology detailed in Chapter 8 and discussion in Chapter 9 regarding Innovative Finance
	(iv) In developing the financial plan, the MPO shall take into account all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Revenue and cost estimates that support the metropolitan transportation plan must use an inflation rate(s) to reflect “year of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).	Refer to methodology detailed in Chapter 8
	(v) For the outer years of the metropolitan transportation plan (<i>i.e.</i> , beyond the first 10 years), the financial plan may reflect aggregate cost ranges/cost bands, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.	This is the case in UCTC’s Long Range Plan; refer to methodology detailed in Chapters 8 and 9
	(vi) For nonattainment and maintenance areas, the financial plan shall address the specific financial	Does not apply to UCTC

	strategies required to ensure the implementation of TCMs in the applicable SIP.	
	(vii) For illustrative purposes, the financial plan may include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.	Refer to Chapters 8 and 9
	(viii) In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (<i>i.e.</i> , by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan transportation plan that does not reflect the changed revenue situation.	Does not apply
	(12) Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g).	Refer to Chapter 5
	The metropolitan transportation plan should integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the HSIP, including the SHSP required under 23 U.S.C. 148, the Public Transportation Agency Safety Plan required under 49 U.S.C. 5329(d), or an Interim Agency Safety Plan in accordance with 49 CFR part 659, as in effect until completion of the Public Transportation Agency Safety Plan, and may incorporate or reference applicable emergency relief and disaster preparedness plans and strategies and policies that support homeland security, as appropriate, to safeguard the personal security of all motorized and nonmotorized users. [23 CFR § 450.324 (h)]	Refer to Chapters 5, 7, and 9

APPENDIX B: ULSTER COUNTY TRANSIT FLEET INVENTORY

Current Fleet	Bus #	Mileage	Fuel Type	DOT Expires	VIN	Year	Date For Replacement	Funding Source	Length
Gillig	60	402539	Diesel	7/15/2025	15GGE2713C1092092	2012	2022	5307	30'
Gillig	61	175166	Diesel	6/9/2025	15GGE2715C1092093	2012	2022	5307	30'
El Dorado	62	287241	Diesel	8/7/2025	5WEASSKN8EH487120	2014	2020	5307	30'
El Dorado	67	358221	Diesel	4/30/2025	5WEASAA1FH667049	2014	2022	5307	30'
El Dorado	70	387210	Diesel	6/9/2025	5WEASAA8GH216671	2015	2022	5307	30'
Arboc	72	213873	Gas	9/19/2025	1GB6G5BGXF1248924	2015	2021	5307	26'
El Dorado	73	270368	Diesel	8/7/2025	5WEASC8N0HH502291	2017	2024	5307	30'
El Dorado	74	333963	Diesel	8/7/2025	5WEASC8N2HH502292	2017	2024	5339	30'
El Dorado	75	393522	Diesel	4/30/2025	5WEASC8N4HH502293	2017	2024	5339	30'
El Dorado	76	358748	Diesel	9/19/2025	5WEASC8N6HH502294	2017	2024	5339	30'
Ford	77	183669	Gas	7/15/2025	1FDEE3FS5HDC13754	2017	2021	5310	20
Gillig	78	245511	Diesel	7/15/2025	15GGE2718J3093353	2018	2028	5307	30'
Gillig	79	279106	Diesel	9/19/2025	15GGE271XJ3093354	2018	2028	5307	30'
Gillig	83	219826	Diesel	6/9/2025	15GGD2712K3191833	2019	2031	5307/5339	40'
Arboc	84	129721	Gas	8/7/2025	1HA6GUBB1KN010176	2019	2025	5339	26'
Arboc	85	142858	Gas	4/30/2025	1HA6GUBB8KN010319	2019	2025	5339	26'
Ford	86	152823	Gas	6/9/2025	1FDFF4FSXKDC59565	2019	2025	5339	23
Ford	87	152462	Gas	7/15/2025	1FDFF4FS3KDC59567	2019	2025	5339	23
Gillig	88	198634	Diesel	9/19/2025	15GGB2712L3195470	2020	2032	5339	35'
Gillig	89	216453	Diesel	1/29/2025	15GGB2714L3195471	2020	2032	5339	35'
Gillig	90	221076	Diesel	7/15/2025	15GGB2716L3195472	2020	2032	5307	35'
New Flyer	91	54161	Electric	7/15/2025	5FYB8KJ13NF103809	2021	2033	NYSDOTMEP	35'
New Flyer	92	47920	Electric	7/15/2025	5FYB8KJ1XNF103810	2021	2033	NYSDOTMEP	35'
New Flyer	93	53860	Electric	4/30/2025	5FYB8KJ11NF103811	2021	2033	NYSDOTMEP	35'
Ford	94	84849	Gas	8/7/2025	1FDFF4FN6NDC17568	2022	2027	5339/5307	23
Ford	95	101886	Gas	8/7/2025	1FDFF4FN8NDC17572	2022	2027	5339/5307	23
Ford	96	16657	Electric	6/9/2025	1FTBW9CKXNKA57777	2022	2027	5339	16' to 28'
Ford	97	16076	Electric	6/9/2025	1FTBW9CK0NKA57805	2022	2027	5339	16' to 28'
Ford	98	15609	Electric	6/9/2025	1FTBW9CK2NKA57806	2022	2027	5339	16' to 28'
Ford	99	3885	Gas	6/9/2025	1FDFF4FN5SDD25580	2025	2030	5997	23'
Ford	100	4665	Gas	6/9/2025	1FDFF4FN5SDD25739	2025	2030	5997	23'
Ford	101	6161	Gas	6/9/2025	1FDFF4FN4SDD25893	2025	2030	5997	23'
Ford	102	2570	Gas	6/9/2025	1FDFF4FN9SDD25873	2025	2030	5997	23'
Gillig	103	1003	Electric		15GGB2819S3200175	2025	2037	5307	35
Gillig	104	1022	Electric		15GGB2819S3200176	2025	2037	5307	35
Gillig	9111	62322	Diesel	9/19/2025	15GGB2712B1178405	2011	2023	CITIBUS	35'
Gillig	9112	374384	Diesel	4/30/2025	15GGB2714B1178406	2011	2023	CITIBUS	35'
Ford	9161	204695	Gas	9/19/2025	1FDFF4FS1GDC50258	2016	2021	CITIBUS	23'
Ford	9162	251535	Gas	4/30/2025	1FDFF4FS3GDC50259	2016	2021	CITIBUS	23'

APPENDIX C: CONSULTATION WITH RESOURCE AGENCIES

From: Ulster County Transportation Council <uctc@co.ulster.ny.us>

Sent: Monday, June 30, 2025 11:57 AM

To: Brian Slack <bsla@co.ulster.ny.us>

Subject: Consultation with Regulatory Agencies in the Development of UCTC's Long Range Transportation Plan

[View this email in your browser](#)



June 30, 2025

RE: Consultation with Regulatory Agencies in the Development of UCTC's Long Range Transportation Plan

The Ulster County Transportation Council (UCTC) has recently begun the development of its latest 5-year update to its Long Range Transportation Plan as described under 23 CFR 450.324 – Metropolitan Transportation Planning (“Development of Transportation Plan”).

The UCTC has been designated by the Governor of the State of New York as the Metropolitan Planning Organization (MPO) responsible, together with the State, for the comprehensive, continuing, and cooperative transportation planning processes for the Kingston Urbanized Area and, together with Orange and Dutchess Counties, a portion of the Mid-Hudson Valley Transportation Management Area.

The Infrastructure Investment and Jobs Act (IIJA, also known as the “Bipartisan Infrastructure Law,” or BIL), requires Metropolitan Long Range Transportation Plans (LRTPs) to be developed, as appropriate, in consultation with State and local agencies regarding land use management, natural resources, environmental protection, conservation, and historic preservation. The consultation shall involve, as appropriate, comparing available plans, maps or inventories (23 CFR 450.324(g)).

The IIJA Act also requires LRTPs to include a generalized discussion of potential environmental mitigation activities and potential mitigation areas, including activities that may have greatest potential. The mitigation discussion shall be developed in consultation with Federal, State and Tribal wildlife, land management, and regulatory agencies (23 CFR 450.324(f)(10)).

I would therefore like to take this opportunity to encourage your organization to participate in our Long Range Plan update process. A detailed description of the update, including schedules, drafts and opportunities for public engagement, can be found online at:

<https://uctc.ulstercountyny.gov/mobility-2050/>

An approved Long Range Transportation Plan must be completed no later than September 30, 2025.

Sincerely,

Brian C. Slack
Principal Transportation Planner
Ulster County Transportation Council
bsla@co.ulster.ny.us u (845) 334-5590

CC: D. Doyle, Director

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Our mailing address is:

Ulster County Transportation Council
244 Fair Street, Kingston, NY, United States
PO Box 1800
Kingston, NY 12402-1800

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APPENDIX D: SYSTEM PERFORMANCE REPORT

VII. System Performance Report

On May 27, 2016, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued the Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning Final Rule, referred to as the Planning Rule. This rule details how state DOTs and Metropolitan Planning Organizations (MPOs) must implement the new MAP-21 and FAST Act planning requirements, including the new Transportation Performance Management (TPM) provisions, in the statewide and metropolitan planning process. FHWA defines TPM as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals as outlined below.

In accordance with the Planning Rule, UCTC must include as an element of its Long-Range Transportation Plan (LRTP) a description of the near-term performance measures and targets that apply to the UCTC planning area and a System Performance Report. The System Performance Report evaluates the condition and performance of the transportation system in meeting set targets. MPOs can choose to set their own targets or support NYSDOT's statewide targets and plan and program accordingly. MPOs must additionally integrate transit asset management performance measures and targets into their planning process to advance the general policy and purposes of the public transportation program as included in 49USC §5301(a) and (b).

UCTC's 2050 LRTP details the implementation of performance-based planning, including the following system performance report describing the condition and performance of the transportation system.

NATIONAL TRANSPORTATION PERFORMANCE MANAGEMENT GOALS:

It is in the interest of the United States to focus the Federal-aid highway program on the following national goals:

1. **Safety** – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
2. **Infrastructure condition** – To maintain the highway infrastructure asset system in a state of good repair
3. **Congestion reduction** – To achieve a significant reduction in congestion on the National Highway System
4. **System reliability** – To improve the efficiency of the surface transportation system
5. **Freight movement and economic vitality** – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
6. **Environmental sustainability** – To enhance the performance of the transportation system while protecting and enhancing the natural environment
7. **Reduced project delivery delays** – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices



Investment Decisions

Using goals, measures, and data to make better informed decisions about how to invest transportation funding.



Aimed at a Better Performing Transportation System

Setting targets, developing plans, reporting results, and being accountable for performance.



For Connected and Productive Communities

Focusing on the effective delivery of goods and safe, reliable journeys to work, to school, to shopping, to community activities.

A DYNAMIC PLANNING ENVIRONMENT

1. Highway Safety Improvement Program and Highway Safety

NYSDOT measures the total number of fatalities and serious injuries, the rate of fatalities and serious injuries per 100 million VMT, and the total number of fatalities and serious injuries involving non-motorized transportation users on all public roads. Per federal requirements, all safety measures are calculated using a five-year rolling average of the most recent years of performance data.

NYSDOT develops targets annually for each safety performance measure. The 2021, 2022, 2023, 2024, and 2025 targets are shown below. MPOs can choose to support these targets or develop their own. The UCTC agreed to support the NYSDOT statewide 2025 targets for the following Safety PM measures based on five-year rolling averages per Title 23 Part 490.207 of the Code of Federal Regulations on February 28, 2025, via Resolution 2025-02. In addition, the UCTC conducted a detailed safety analysis of its transportation system.

Figure 7.1: NYSDOT 2021-2025 Safety Performance Targets

Performance Measure	2021 Target	2022 Target	2023 Target	2024 Target	2025 Target
Traffic Fatalities	1,012.7	1,005.4	988.2	1,016.1	1,011.0
Fatalities per 100 million VMT*	0.824	0.818	0.836	0.886	0.881
Series Injuries	10,896.8	11,173.9	11,086.2	11,089.9	11,034.1
Serious Injuries per 100 million VMT**	8.865	9.084	9.337	9.606	9.557
Number of Non-Motorized Fatalities and Non-Motorized Series Injuries***	2,583.5	2,644.1	2,633.4	2,628.4	2,615.2

*Fatality Rate computed using VMT from FHWA Highway Statistics Series, Table VM-2

**Series Injury Rate computed using VMT from FHWA Highway Statistics Series, Table VM-2

***Based on combined total of Pedestrian Fatalities and Bicyclist and Other Cyclist Fatalities from National Highway Traffic Safety Administration (NHTSA) Fatality Analysis Reporting System (FARS)

Figure 7.2: NYSDOT Safety Performance Target Progress

Performance Measure	5-Year Average (2018-2022)	NYSDOT 2025 Target
Traffic Fatalities	1,072.40	1,011.0
Fatalities per 100 million VMT*	0.968	0.881
Series Injuries	11,056.6	11,034.1
Serious Injuries per 100 million VMT**	9.706	9.557

Number of Non-Motorized Fatalities and Non-Motorized Series Injuries***	2,664.8	2,615.2
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2. Transit Asset Management

On July 26, 2016, the Federal Transit Administration (FTA) published the final Transit Asset Management rule. This rule applies to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term “state of good repair” (SGR), requires that public transportation providers develop and implement transit asset management (TAM) plans, and establishes performance measures for four transit asset categories: rolling stock, equipment, transit infrastructure, and facilities. The rule became effective on October 1, 2016.

Public transportation providers must establish TAM targets annually for the following fiscal year and report them to FTA. Each provider shares its targets with the MPO in which the provider’s projects and services are programmed in the MPO’s TIP. The MPO is required to establish its first set of TAM targets within 180 days of the date that public transportation provider established its first targets. After this, MPOs are not required to establish TAM targets each year after the transit 2026 Transportation Improvement Program provider establishes targets. Instead, MPOs must set updated TAM targets when the MPO updates its LRTP.

When establishing transit asset management targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate transit asset management targets for the MPO planning area.

FTA defines two tiers of public transportation providers based on size parameters. Tier I providers are those that operate rail service or more than 100 vehicles in all fixed route modes, or more than 100 vehicles in one non-fixed route mode. Tier II providers are those that are a subrecipient of FTA 5311 funds, or a State or Indian Tribe, or have 100 or less vehicles across all fixed route modes or have 100 vehicles or less in one non-fixed route mode. Tier I providers must establish their own transit asset management targets, while Tier II providers have the option to establish their own targets or to participate in a group plan with other Tier II providers whereby targets are established by a plan sponsor for the entire group. A state DOT is typically the group TAM plan sponsor.

The UCTC has the following transit providers operating in the planning area: Ulster County Area Transit, which is part of NYSDOT’s Group TAM Plan.

Figure 7.4 presents the performance targets for transit assets in the UCTC planning area. The UCTC agreed to support the NYSDOT transit asset targets on April 23, 2019 via UCTC Resolution 2019-04.

Figure 7.4: Transit Asset Management Measures and Performance Targets

Asset Category – Performance Measure	Asset Class	2025 Target	2026 Target	2027 Target	2028 Target	2029 Target
Revenue Vehicles						

Mileage - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)						
	Bus- Heavy Duty Large / Trolley	65%	60%	50%	40%	30%
	Bus- Heavy Duty Small	30%	30%	20%	20%	10%
	Bus- Medium Duty	55%	40%	30%	20%	20%
	Small Passenger Vehicle	65%	50%	35%	20%	20%
Equipment						
Age = % of equipment that has met or exceeded its Useful Life Benchmark (ULB)	All Equipment (Section 5311)	40%	40%	20%	0%	0%
	All Equipment (Section 5307)	15%	15%	0%	0%	0%
Facilities						
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale						
	General Purpose	0%	0%	0%	0%	0%
	Admin & Maint	10%	10%	0%	0%	0%
	Maintenance	20%	20%	10%	0%	0%
	Passenger Facilities	0%	0%	0%	0%	0%

Figure 7.5: Transit Asset Management Measures and Performance Targets

Asset Category— Performance Measure	Asset Class <i>Performance Measure</i>	Useful Life Benchmark (years)	2025 Target
Rolling Stock			
Mileage - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Bus-Heavy Duty Large	12	18%
	Bus-Medium Duty	7	18%
	Bus-Heavy Duty Small	13	30%
	Cutaway Bus	4	0%
Equipment			
Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	All Equipment	-	35%

Facilities			
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administrative & Maintenance	n/a	0%
	General Purpose	n/a	0%

3. Pavement and Bridge Condition (PM2)

FHWA published the Pavement and Bridge Condition Performance Measures Final Rule in January 2017. This rule, which is also referred to as the PM2 rule, establishes six performance measures for pavement and bridge condition on Interstate and non-Interstate National Highway System (NHS) roads. **The PM2 measures are:**

- Percent of Interstate pavements in good condition;
- Percent of Interstate pavements in poor condition;
- Percent of non-Interstate NHS pavements in good condition;
- Percent of non-Interstate NHS pavements in poor condition;
- Percent of NHS bridges (by deck area) classified as in good condition; and
- Percent of NHS bridges (by deck area) classified as in poor condition.

Pavement Condition Measures

The four pavement condition measures represent the percentage of lane-miles on the Interstate and non- Interstate NHS that are in good condition or poor condition. The PM2 rule defines NHS pavement types as either asphalt, jointed concrete, or continuously reinforced concrete pavement (CRCP), and defines five pavement condition metrics that states are to use to assess pavement condition:

- **International Roughness Index (IRI)** – an indicator of roughness; applicable to all three pavement types.
- **Cracking percent** – percentage of the pavement surface exhibiting cracking; applicable to all three pavement types.
- **Rutting** – extent of surface depressions; applicable to asphalt pavements only.
- **Faulting** – vertical misalignment of pavement joints; applicable to jointed concrete pavements only.
- **Present Serviceability Rating (PSR)** – a quality rating that is applicable only to NHS roads with posted speed limits of less than 40 miles per hour, for example toll plazas and border crossings. A state may choose to collect and report PSR for applicable segments as an alternative to the other four metrics.

Bridge Condition Measures

The two bridge condition performance measures refer to the percentage of bridges by deck area on the NHS that are in good or poor condition. Bridge owners are required to inspect bridges on a regular basis and report condition data to FHWA. The measures assess the condition of four bridge components: deck, superstructure, substructure, and culvert.

Figure 7.5: Performance Rating Thresholds

Metric Rating	Good	Fair	Poor
Deck	≥ 7	5 or 6	≤ 4
Superstructure	≥ 7	5 or 6	≤ 4
Substructure	≥ 7	5 or 6	≤ 4
Culvert	≥ 7	5 or 6	≤ 4

The bridge condition measures are expressed as the percent of NHS bridges in good or poor condition. The percent is determined by summing the total deck area of good or poor NHS bridges and dividing by the total deck area of the bridges carrying the NHS. Deck area is computed using structure length and either deck width or approach roadway width.

Bridges in good condition suggests that no major investment is needed. Bridges in poor condition are safe to drive on; however, they are nearing a point where substantial reconstruction or replacement is needed.

Pavement and Bridge Condition Performance Target Requirements

Performance for the PM2 measures is assessed over a series of four-year performance periods. NYSDOT must report baseline performance and targets at the beginning of each period and update performance at the midpoint and end of each performance period.

The PM2 rule requires state DOTs and MPOs to establish performance targets for all six measures and monitor progress towards achieving the targets. **States must establish:**

- Four-year statewide targets for the percent of Interstate pavements in good and poor condition;
- Two-year and four-year statewide targets for the percent of non-Interstate NHS pavements in good and poor condition; and
- Two-year and four-year targets for the percent of NHS bridges (by deck area) in good and poor condition.

MPOs must establish four-year targets for all six measures by either agreeing to program projects that will support the statewide targets or setting quantifiable targets for the MPO's planning area. The two-

year and four-year targets represent expected pavement and bridge condition at the end of calendar years 2023 and 2025, respectively.

NYSDOT Pavement and Bridge Condition Baseline Performance and Established Targets

This system performance section discusses performance for each applicable target as well as the progress achieved by the MPO in meeting targets in comparison with system performance recorded in previous reports. NYSDOT will continue to monitor pavement and bridge condition performance and report to FHWA on a biennial basis.

NYSDOT established statewide pavement and bridge condition performance targets for 2023 and 2025 on December 1, 2022. In September 2024, NYSDOT adjusted its 2025 pavement targets. The UCTC agreed to support the NYSDOT statewide targets on insert dates for initial targets and adjusted targets via Resolutions 2024-06 and 2025-02. By adopting NYSDOT's targets, UCTC agrees to plan and program projects that help NYSDOT achieve these targets.

Figure 7.6 presents baseline performance for each PM2 measure for New York and for the UCTC planning area as well as the two-year and four-year statewide targets established by NYSDOT.

Details regarding the NHS and bridge conditions in Ulster County are provided in Section 5 of this report.

Figure 7.6: Pavement and Bridge Condition (PM2) Performance and Targets

Performance Measures	2022 Performance	2023 Performance	2025 Target
Percent of Interstate pavements in good condition	36.9%	50.7%	48.2%
Percent of Interstate pavements in poor condition	1.8%	1.0%	1.6%
Percent of non-Interstate NHS pavements in good condition	16.3%	20.3%	18.6%
Percent of non-Interstate NHS pavements in poor condition	7.5%	7.1%	8.4%
Percent of NHS bridges (by deck area) in good condition	24.7%	24.1%	21.1%
Percent of NHS bridges (by deck area) in poor condition	11.2%	13.0%	12.8%

4. System Performance, Freight, and Congestion, Mitigation & Air Quality Improvement Program Measures (PM3)

On January 18, 2017, FHWA published the system performance, freight, and Congestion, Mitigation and Air Quality Improvement Program (CMAQ) Performance Measures Final Rule in the Federal Register. This third FHWA performance measure rule (PM3), which has an effective date of May 20, 2017, established six performance measures to assess the performance of the NHS, freight movement on the Interstate System, and traffic congestion and on-road mobile source emissions for the CMAQ Program.

The performance measures are:

For the National Highway Performance Program (NHPP)

- Percent of person-miles on the Interstate system that are reliable, also referred to as Level of Travel Time Reliability (LOTTR);
- Percent of person-miles on the non-Interstate NHS that are reliable (LOTTR);
- Truck Travel Time Reliability Index (TTTR);

For the National Highway Freight Program (NHFP)

- Annual hours of peak hour excessive delay per capita (PHED);
- Percent of non-single occupant vehicle travel (Non-SOV); and
- Cumulative two-year and four-year reduction of on-road mobile source emissions for CMAQ funded projects (CMAQ Emission Reduction).

The three CMAQ performance measures listed above are applicable only to designated nonattainment areas or maintenance areas for National Ambient Air Quality Standards by the Environmental Protection Agency. The UCTC meets all current air quality standards and is not subject to establishing targets for these performance measures. The remaining performance measures are described below.

For the National Highway Freight Program (NHFP)

Travel time reliability refers to the consistency or dependability of travel times on a roadway from day to day or across different times of the day. For example, if driving a certain route always takes about the same amount of time, that segment is reliable. It may be congested most of the time, not congested most of the time, or somewhere in between, but the conditions do not differ very much from time period to time period. On the other hand, if driving that route takes 20 minutes on some occasions but 45 minutes on other occasions, the route is not reliable.

The LOTTR is defined as the ratio of the longer travel times (80th percentile) to a normal travel time (50th percentile) over applicable roads during four time periods that cover the hours of 6 a.m. to 8 p.m. each day (AM peak, Mid-day, PM peak, and weekends). The LOTTR ratio is calculated for each roadway segment. The segment is reliable if its LOTTR is less than 1.5 during all four time periods. If one or more time periods has a LOTTR of 1.5 or above, that segment is unreliable.

The two LOTTR measures are expressed as the percent of person-miles traveled on the Interstate or non-Interstate NHS system that are reliable. By using person-miles, the measures take into account the

total number of people traveling in buses, cars, and trucks over these roadway segments. To obtain total person-miles traveled, the length of each segment is multiplied by an average vehicle occupancy for each type of vehicle on the roadway. The sum of person-miles on reliable segments is divided by the sum of person-miles on all segments to determine the percent of person-miles traveled that are reliable.

TTTR Measure

The TTTR measure assesses travel time reliability for trucks traveling on the Interstate. A TTTR ratio is generated by dividing the 95th percentile truck travel time by a normal travel time (50th percentile) for each segment of the Interstate system over five time periods throughout weekdays and weekends (AM peak, Mid-day, PM peak, weekend, and overnight). The time periods cover all hours of the day.

For each Interstate segment, the highest TTTR value among the five time periods is multiplied by the length of the segment. The sum of these length-weighted segments is then divided by the total length of Interstate to generate the TTTR Index.

Travel Time Data

The travel time data used to calculate the LOTTR and TTTR measures is provided by FHWA via the National Performance Management Research Data Set (NPMRDS). This dataset contains historical travel times, segment lengths, and Annual Average Daily Traffic (AADT) for Interstate and non-Interstate NHS roads.

PM3 Performance Target Requirements

Performance for the PM3 measures is assessed over a series of four-year performance periods. States must report baseline performance and targets during the first part of the performance period and update performance at the midpoint and end of each performance period.

The PM3 rule requires state DOTs and MPOs to establish performance targets for each measure and monitor progress towards achieving the targets. NYSDOT must establish two-year and four-year state targets for the Interstate LOTTR, TTTR, Non-SOV Travel, and CMAQ Emission Reduction measures. For the non-Interstate NHS LOTTR and PHED measures, NYSDOT must establish four-year targets.

Within 180 days of NYSDOT establishing targets, MPOs must establish four-year performance targets for both LOTTR measures, the TTTR measure, and, if applicable, the CMAQ Emission Reduction measure. MPOs establish targets by either agreeing to program projects that will support the State's targets or setting quantifiable targets for the MPO's planning area.

The two-year and four-year targets represent expected performance at the end of calendar years 2023 and 2025, respectively.

NYSDOT PM3 Baseline Performance and Established Targets

This system performance report discusses performance for each applicable target as well as the progress achieved by the MPO in meeting targets in comparison with system performance recorded in previous reports. NYSDOT will continue to monitor performance and report to FHWA on a biennial basis.

Future system performance reports will discuss progress towards meeting the targets since this initial baseline report.

NYSDOT established the statewide system performance targets for 2023 and 2025 on December 1, 2022. The UCTC agreed to support the NYSDOT statewide targets on April 25, 2023, via Resolution 2023-02. The UCTC meets all current air quality standards and is not required to establish targets for the CMAQ performance measures. Figure 7.7 presents baseline performance for the LOTTR and TTTR measures for New York and for the UCTC planning area as well as the two-year and four-year targets established by NYSDOT.

Figure 7.7: System Performance and Freight (PM3) Performance and Targets

Performance Measures	2022 Performance	2023 Performance	2023 Target	2025 Target
Percent of person-miles on the Interstate system that are reliable (Interstate LOTTR)	80.1%	79.0%	75.0%	75.0%
Percent of person-miles on the non-Interstate NHS that are reliable (Non-Interstate NHS LOTTR)	85.4%	84.0%	70.0%	70.0%
Truck travel time reliability index (TTTR)	1.41	1.40	2.00	2.00

The UCTC 2050 LRTP addresses system performance and freight reliability, identifies infrastructure needs within the UCTC region, and provides funding for targeted improvements. Detailed Goals related to congestion are provided in Section 2 of this document under Goal 4: Mobility.

5. Transit Safety

The Public Transportation Agency Safety Plan (PTASP) final rule (49 C.F.R. Part 673) requires certain operators of public transportation systems that are recipients or subrecipients of FTA grant funds to develop safety plans that include the processes and procedures necessary for implementing Safety Management Systems (SMS). The final rule becomes effective on July 19, 2019.

Each safety plan must include, at a minimum:

- An approval by the agency's Executive and Board of Directors (or an equivalent authority); The designation of a Chief Safety Officer;

- The documented processes of the agency's SMS, including the agency's Safety Management Policy and processes for Safety Risk Management, Safety Assurance, and Safety Promotion;
- An employee reporting program;
- Performance targets based on the safety performance measures established in FTA's National Public Transportation Safety Plan (NSP);
- Criteria to address all applicable requirements and standards set forth in FTA's Public Transportation Safety Program and the NSP; and
- A process and timeline for conducting an annual review and update of the safety plan.

The Federal Transit Administration (FTA) published a final Public Transportation Agency Safety Plan (PTASP) rule on July 19, 2018. Under this rulemaking, providers of public transportation systems that are a recipient or sub-recipient of FTA Urbanized Area Formula Grant Program funds under 49 U.S.C. Section 5307, or that operate a rail transit system that is subject to FTA's State Safety Oversight Program, must develop and implement a PTASP based on a Safety Management Systems (SMS) approach. As it relates to this documentation, each PTASP must include performance targets based on the safety performance measures established in FTA's National Public Transportation Safety Plan (NSP). Other elements of a PTASP include but are not limited to approval by the agency's Accountable Executive and Board of Directors, designation of a Chief Safety Officer, documented processes of the agency's SMS, an employee reporting program, and process and timeline for annual reviews and updates of the PTASP.

Providers subject to the rule must annually certify a PTASP, including targets for transit safety measures that cover fatalities, injuries, safety events, and system reliability. The date by which providers must first certify a PTASP and targets was initially July 20, 2020. However, FTA extended the deadline to July 20, 2021, to provide regulatory flexibility due to the operational challenges presented by the COVID-19 public health emergency.

Upon establishing transit safety targets, a public transportation provider must make the targets available to the MPO in which the provider's projects and services are programmed in the MPO's TIP. The MPO is required to establish its first set of transit safety targets within 180 days of the date that provider established its first targets. After this, MPOs are not required to establish transit safety targets each year after the transit provider establishes targets. Instead, MPOs must set updated targets when the MPO updates its LRTP.

An MPO must reflect the transit safety targets in any LRTP and TIP updated on or after July 20, 2021. When establishing transit safety targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate targets for the MPO planning area.

The following transit providers subject to the PTASP rule operate in the UCTC planning area: Ulster County Area Transit. UCAT is responsible for developing a PTASP and establishing transit safety targets annually.

The UCTC agreed to support UCAT's safety targets on December 18, 2019 via Resolution 2019- 20, thus agreeing to plan and program projects that are anticipated to make progress toward achieving the targets. The most recent safety targets developed by UCAT are shown in Table 7.8 below:

Figure 7.8: Ulster County Area Transit Public Transportation Agency Safety Plan Safety Performance Targets

Year	Fatalities	Injuries	Safety Events	System Reliability	Preventable Accidents	Non- Preventable Accidents
2024	0	0	0	<10% per vehicle mile	17	16

APPENDIX E: CALCULATION METHODOLOGY FOR PROJECTED SOURCES OF REVENUE

Appendix A: Calculation Methodology for Projected Sources of Revenue

Revenue Source	Methodology
FHWA (Millions of \$)	
National Highway Performance Program (NHPP)	UCTC 2026 – 2030 Transportation Improvement Program, Table 8 Fiscal Constraint Table. \$64.586m programmed.
NYSDOT STBG Flex Ulster Share	UCTC 2026 – 2030 Transportation Improvement Program, Table 8 Fiscal Constraint Table
UCTC STBG Flex Ulster Share	UCTC 2026 – 2030 Transportation Improvement Program, Table 8 Fiscal Constraint Table. Calculation assumes \$14m ‘roll-in’ during the first 5 year TIP period, with \$5m for each consecutive 5 year block during years 2030-2050.
NYSDOT Multicounty STBG Block Grant	Assumes \$2m in unassigned Region 8 “where and when” funds to be spent in Ulster County each FFY.
STBG Off System Bridge Program	UCTC 2026 – 2030 Transportation Improvement Program, Table 8 Fiscal Constraint Table. \$15.4m per 5 year block
BridgeNY Local Bridge & Culvert Formula Program	UCTC 2026 – 2030 Transportation Improvement Program, Table 8 Fiscal Constraint Table. \$13.8m per 5 year block; see “Bridge Formula Main (BF Main)”
Highway Safety Improvement Program (HSIP)	UCTC 2026 – 2030 Transportation Improvement Program, Table 8 Fiscal Constraint Table. Assumes \$7.4m every 5 years, which includes UCTC allocation plus share of NYSDOT funds
HSIP RAIL	UCTC 2026 – 2030 Transportation Improvement Program, Table 8 Fiscal Constraint Table. \$0.704m per 5 year block.
Carbon Reduction	UCTC 2026 – 2030 Transportation Improvement Program, Table 8 Fiscal Constraint Table. \$10m per 5 year block.
PROTECT	UCTC 2026 – 2030 Transportation Improvement Program, Table 8 Fiscal Constraint Table. \$10m per 5 year block.
FTA Programs (Millions of \$)	
Sec 5307/5340 Small Urban	FFY 2024 FTA Apportionments and associated MPO/TMA/NYSDOT agreements as approved by resolution or provided in most recent correspondence.
Sec 5307 Urban/Mid-Hudson TMA	
Section 5310	
Section 5339 Kingston UA	
Sec 5339 Mid-Hudson TMA	
Sec 5311 Rural	
Inter-County Commuter Carrier, Mid Hudson TMA (Transit CCC)	
State Funds (Millions of \$)	
NYS Dedicated Highway and Bridge Trust Fund	Calculation generally assumes state dedicated funds will meet the 20% match required when federal funds are assigned to state asset needs and 10% match when qualifying federal funds are assigned to local or county asset needs

Transit State Operating Assistance Modernization and Enhancement Program Accelerated Capital Transit Program	State Transit Operating Assistance generally assumes state dedicated funds will meet the % match required when federal funds are assigned to asset needs. MEP and ACT funds utilized most recent correspondence from NYSDOT to Ulster County (SFY 24 award letters)
Local Matching Funds	
State HW Aid to Municipalities (CHIPS, POP, Harsh Winter, etc)	Baseline utilizes the approved NYS SFY24 Budget figures; sums actual state aid to all 24 municipalities + Ulster County in each eligible funding category and projects outward through the plan's horizon year. Since CHIPS funds can be used on any local road, calculation assumes only between 20-30% of fund source to be available for local and county federal aid highways/facilities
Local Bridge & HW Maintenance Funds	Baseline estimate was calculated based on a sample of municipal highway budgets to determine annual expenditures on highway capital and maintenance; a sliding scale of between 5-25% of those annual amounts are then summed to create the final expenditure of \$7.878m annually.
County Bridge and Highway Funds	2025 adopted Ulster County Budget; \$11.231 available through contracts and expenditures for the capital bridge and highway program.
Annual County Transit Payments	2025 adopted Ulster County Budget shows \$9.440m of county funds used in addition to state and local assistance. Calculation assumes \$5.758m annually for Operations and \$3.680 annually for capital
Other Supplemental or Competitive Funds	
TAP/Rec Trails	Over the course of the past decade, Ulster County communities have been very successful at accessing competitive Recreational Trails and Transportation Alternative Program (TAP) funds for local nonmotorized projects. A high level of confidence is therefore assumed in this calculation that funds will continue to be captured for local nonmotorized projects. Dollar amount calculated using the total TAP/Rec Trails funds included in the 2020-2024 TIP (snapshot Jan 10, 2020) divided by 5 for an annual average ('BASELINE'), then the average is projected outward through the plan's horizon year.
New Federal Aid HW Funding	It can be assumed with high confidence that new federal aid programs will be developed to address at least a limited number of funding gaps. The Bipartisan Infrastructure Law has included a number of new, competitive programs such as Safe Streets for All, Reconnecting Communities, Resiliency, Electric Vehicle Infrastructure, and other programs. Rather than assume annual revenue in specific program areas, however, the 2025 planning environment is maintained but a conservative estimate of new revenue sources is provided in 5-year blocks for use across multiple programmatic areas. \$5.4m assumed annually

NYSDEC Climate Smart	New York State Department of Environmental Conservation has provided competitive funding for local complete streets and carbon reduction initiatives, including several significant sidewalk reconstruction and stormwater reduction permeable pavement resurfacing projects in the City of Kingston. Conservative revenue estimates are provided in 5-year blocks.
NYSERDA	New York State Energy Research and Development Authority has provided competitive funds for use in local and regional emission reduction efforts. Focus areas have included battery electric transit bus purchases, micromobility operational support, intelligent transportation systems for coordinated traffic signals, and efforts to promote walkable communities. Conservative revenue estimates are provided in 5-year blocks.
Private Funds	In limited instances, LLC or cooperative funds have been used to provide transportation improvements in specific areas, such as the Hudson Valley Mall access roads, lines and signs, and traffic signals (Frank Sottile Blvd). Private funds may be assigned in limited circumstances.
Other Local Bridge Funds	It is assumed that local funds in addition to those outlined and projected above will continue to be required to address funding gaps and maintain the transportation system, primarily for fixed capital investments such as bridge replacements.
New Federal Aid Transit Funding	It can be assumed with high confidence that new federal aid programs will be developed to address at least a limited number of funding gaps. The Bipartisan Infrastructure Law has included a number of new, competitive programs such as Low/No Emission Vehicle, CDL License Program, Buses and Bus Facility competitive program, charging/fueling programs, and other programs. Rather than assume annual revenue in specific program areas, however, the 2020 planning environment is maintained but a conservative estimate of new revenue sources is provided in 5-year blocks for use across multiple programmatic areas.
MHVTMA Section 5307 Unallocated Fund Balances	The Mid Hudson Valley Transportation Management Area maintains an annual unallocated balance of 5307 formula funds which are made available to designated recipients on an either as-needed or competitive basis. Assumes revenues will be made available to support UCAT financial needs as in the past; estimates are provided in 5-year blocks through the planning horizon year.
UCAT Capital Reserve	Ulster County Area Transit as of 2025 maintained \$10m in unspent federal aid allocations across several programs; this is a one-time revenue source

APPENDIX F: SUMMARY OF STAKEHOLDER AND POP-UP MEETINGS

APPENDIX F: Summary of Stakeholder and Pop-Up Meetings

Stakeholder Meetings Summary

As part of the ongoing development of the Ulster County Transportation Council's (UCTC) Long Range Transportation Plan (LRTP), four (4) total virtual stakeholder meetings were scheduled on June 11th and June 12th. These sessions convened a diverse group of regional stakeholders, including representatives from local municipalities, transit providers, advocacy groups, and other transportation partners. The meetings aimed to gather input on current transportation needs, long-term priorities, and opportunities for improvement throughout Ulster County. Feedback from these discussions is helping to shape the goals, strategies, and recommendations of the LRTP. Below is a summary of the key themes and insights that emerged from the four virtual meetings.

Meeting Notes

This section includes meeting notes for the following sessions held in conjunction with the UCTC LRTP development effort:

- Stakeholder Session #1 – June 11th, 2025 @ 10 AM
- Stakeholder Session #2 – June 11th, 2025 @ 1 PM (Session was cancelled due to low attendance)
- Stakeholder Session #3 – June 12th, 2025 @ 10 AM
- Stakeholder Session #4 – June 12th, 2025 @ 1 PM

Stakeholder Session #1, June 11th, 2025 at 10 AM on Zoom

Project Team Attendees:

- Brian Slack, UCTC
- Christopher Seeger, UCTC
- Raul Irizarry, FHI Studio – IMEG
- Cassandra Valcourt, FHI Studio - IMEG

General Infrastructure

What parts of our current transportation infrastructure are most in need of repair or upgrade?

- City of Kingston large projects, we have to consider what's underneath. Ex. Aging sewer structure. Sanitary and sewer costs as much as streetscape. Large array of combined sewers, working on separating them.
- Inadequate sight distance, ADA concerns at facilities, inappropriate signage, street network that predates vehicles.
- Driver behavior racing from stop sign to stop sign
- In an urban setting you need to look at everything including what's in the ground
- Railroads need to be looked at
 - Not servicing the city but have a huge freight element in Kingston.
- Sidewalks need repair to meet ADA standards
- Maintenance responsibility is on the adjacent property owner
- Seasonal challenges of snow and ice on the sidewalks
- Trees cause damage to sidewalks

Are there specific corridors or facilities currently over capacity or frequently congested?

- Road diet on Route 9W where road was overbuilt
- Dealing with Urban renewal that cuts through the city
- Looking to add density in urban centers
- Provide free service where appropriate
- North Front Street (Kingston) issues with double parking can cause delivery issues
- Trains will delay traffic

Non-Motorized Transportation

My vision for non-motorized transportation in Ulster County is?

- Realistic with where people are commuting from
- Reestablishing the ferry connection
- Mode share in Kingston 90% private vehicle – huge win to get it down to 70%
- Bike rentals in the City of Kingston, especially for tourists to use as they ride in on regional buses and cruise ships

What is the one thing that could be done to be sure that bike/ped becomes a more seamless part of the county transportation network?

- Kingston has the foundation for a bike/ped system
- We don't have a lot of wide streets so sharing the system is a challenge
- Kingston greenline is heavily used for folks going to school, work, daily commutes.
- Midtown Rising* project
- Connections outside of the city – Route 28 into Town of Ulster
- Scooters and motorized bikes are a huge challenge
 - When talking to police there have been lots of accidents

Public Transportation/Human Service Transportation

How well do existing public and human service transportation services meet the need of residents in Ulster County?

- Coming along but has a long way to go
- Good that it's free but need more frequent service to more locations like the mall, medical facilities, essential services

If there is one transit-related change you would like to see in the 2050 plan what would it be?

- A transit center that's not in Hannaford
 - A way to use underutilized parking? Can you do it at the plaza?
 - Biggest problem is security

Business

What would be the one transportation investment that would best help the Ulster County economy?

- Workforce and supporting folks getting to and from work

How well does the transportation network in Ulster County meet the needs of local businesses?

- "Gold Parking" – on-street parking
 - City is doing a parking study

Transportation Safety

What safety improvements are most needed in Ulster County?

- City has lowered speed limits to 25 MPH
- Safety improvements on highway
- Traffic calming will be happening in Kingston
 - Education for safety – public campaigns, governors traffic safety board
- Kingston PD is upped enforcement this year. Traffic enforcement unit has been working.

How do you usually stay safe when walking, biking, or driving?

- A lot comes down to the user
- You have to be assertive as ped/bike user
 - Plan your route
- Visibility ... lights on bikes, safety vests
 - YMCA has a bicycle educator
- Start safety education at a young age

Environmental Conservation

How does our transportation system contribute or detract from the natural environment?

- In attainment: meeting air quality standards
- Streets trees in an urban environment, there's a small traffic calming effect, cooling effect, encourages people to walk if they have shade along route.
- Mayor had a goal to add 1000 trees in the City of Kingston, almost half way there
 - Anytime we do a project in the city and can separate sewers it's a benefit
 - Kingston doing GI in the form of tree pit or bioswale. Broadway – Flatbush

Stakeholder Session #3, June 12th, 2025 at 10 AM on Zoom

Project Team Attendees:

- Brian Slack, UCTC
- Christopher Seeger, UCTC
- Raul Irizarry, FHI Studio – IMEG
- Cassandra Valcourt, FHI Studio - IMEG

General Infrastructure

What parts of our current transportation infrastructure are most in need of repair or upgrade?

- Tilson, south of Rosendale in Rosendale, ½ a mile from Comm center but walks 1.5 mile to avoid 32
- More electric buses – goal of 100% by 2035 (battery electric)
 - Free bus service if possible
- Loose network of rail trails that center around Kingston, low hanging fruit
- County implement more complete streets strategies
 - Running out of rail trail
- Municipalities to coordinate on bike network
- Large populations not served by rail trail walkkill area
- Expanding roads to make it safer for pedestrians
 - Kingston – Rhinecliff Bridge

Are there specific corridors or facilities currently over capacity or frequently congested?

- People should be able to walk to community centers
- No connection from Kingston north to Saugerties and south of New Plants to Marlborough

Non-Motorized Transportation

My vision for non-motorized transportation in Ulster County is?

- Expand roads to make it safer for pedestrians
- Problem with non-motorized transpo is taking things with you
- Get to places that are close without using a car
- E-bikes have the potential to transform transportation to allow more users who can't ride a traditional bike – have a secondary network of transit corridors for folks going 20-25 mph (E-bike). Lane for cars separate lane for E-bikes
- People that are riding, to follow rules of the road or at least make it more clear (signage)

What is the one thing that could be done to be sure that bike/ped becomes a more seamless part of the county transportation network?

- Pretty good right now with bike racks but has a limited user base
 - Increasing UCAT's service
- Having very good access to train stations
- Paying attention to areas that don't need a 55 MPH speed limit

Public Transportation/Human Service Transportation

How well do existing public and human service transportation services meet the need of residents in Ulster County?

- Four times as many buses
- People gets off at random places or on
- Some users like that you can wave down the bus or get off at places
- I should know where the bus stop is
 - Service frequency
- Current UCAT dispatch is very helpful

If there is one transit-related change you would like to see in the 2050 plan what would it be?

- Make bus stops more clear to users outside of urban areas
- Make bus schedules more clear or visible
- Have county coordinate on bus routes there are

Business

What would be the one transportation investment that would best help the Ulster County economy?

- If west shore rail road had passenger rail

How well does the transportation network in Ulster County meet the needs of local businesses?

- Parking issue: will there be less of a need if bus service was more frequent
- Connect buses to the business areas and points of interests
- Some people leave because they can't find a place to park
 - Access to employment

Transportation Safety

What safety improvements are most needed in Ulster County?

- County roads, complete streets or vision zero approach to designing the roads

How do you usually stay safe when walking, biking, or driving?

- Stay safe by using the crosswalks
- Following the rules of the road
- Stopped riding bike on Spring Town Road

Environmental Conservation

How does our transportation system contribute or detract from the natural environment?

- Roads are wide cars drive fast so they are physical barriers for fauna
 - Salting roads can cause problems
- Non-permeable surfaces contribute to stormwater runoff
 - Make all lanes narrower and shoulders wider

Stakeholder Session #4, June 12th, 2025 at 1 PM on Zoom

Project Team Attendees:

- Brian Slack, UCTC
- Christopher Seeger, UCTC
- Raul Irizarry, FHI Studio – IMEG
- Cassandra Valcourt, FHI Studio - IMEG

General Infrastructure

What parts of our current transportation infrastructure are most in need of repair or upgrade?

- Stormwater management and drainage
 - Pavement surface
- Bridges in Ulster County are the worst in the state
- Need infrastructure for other modalities besides vehicles
 - Bus shelters
- Green infrastructure and renewable energy for buses
- Need a public bus hub to have more oversight and amenities: bathroom, bike storage, daily transport by mass transit make it easier
 - Include social services

Are there specific corridors or facilities currently over capacity or frequently congested?

- All of New Paltz
 - Everywhere in county when school is out
- Might be up to 60 or 70% capacity on main streets. Commercial and construction traffic.
 - Route 32
- Advocating to bring down speed limit on Route 32
 - More concerns around traffic calming less on capacity
- New Paltz 299 is tight and narrow and popular
 - Kingston-Rhinecliff Bridge
- Bloomington 32 – Dewitt Mills Rd sight distance issue
- Kingston at traffic circle by 787 (Washington Ave)

Non-Motorized Transportation

My vision for non-motorized transportation in Ulster County is?

- Motorized (wheelchairs, scooters, E-bike)
- More infrastructure for these modalities with clearly marked signage
- Possible to include shoulders in places wherever possible
 - Walking surfaces need to be maintained
- Preserve public transpo money for public transpo and not in the private sector or tourism
- Storage for non-motorized transpo

What is the one thing that could be done to be sure that bike/ped becomes a more seamless part of the county transportation network?

- Make each roadway more multimodal as best as possible
- More of this along existing roadways that we have
 - Adequate shoulders for non-motorized use
- Higher density area like Kingston, training and enforcing activities done on non-motorized transpo
- Sidewalks need maintenance so folks don't walk on the street

Public Transportation/Human Service Transportation

How well do existing public and human service transportation services meet the need of residents in Ulster County?

- Need ADA compliance
- More frequency and more routes for bus service
- More social services integrated along the transportation route and not come down to Ulster Ave
 - Ride bus and survey
- Public transportation drives population density
- People cannot find homecare workers because workers need more transpo options to get to destination

If there is one transit-related change you would like to see in the 2050 plan what would it be?

- Expand free public transit service

Business

What would be the one transportation investment that would best help the Ulster County economy?

- Expand free public transportation
- New York State Region 8 DOT needs more funding

How well does the transportation network in Ulster County meet the needs of local businesses?

- Depends on where the business are located and routes they're on
 - People need to be able to get to work

Transportation Safety

What safety improvements are most needed in Ulster County?

- Traffic calming: speed bumps, narrowing roadways (road diets), lighting signage
 - Crosswalks and RRFB
- Crosswalks on 32 and Rosendale
 - Improve signage

How do you usually stay safe when walking, biking, or driving?

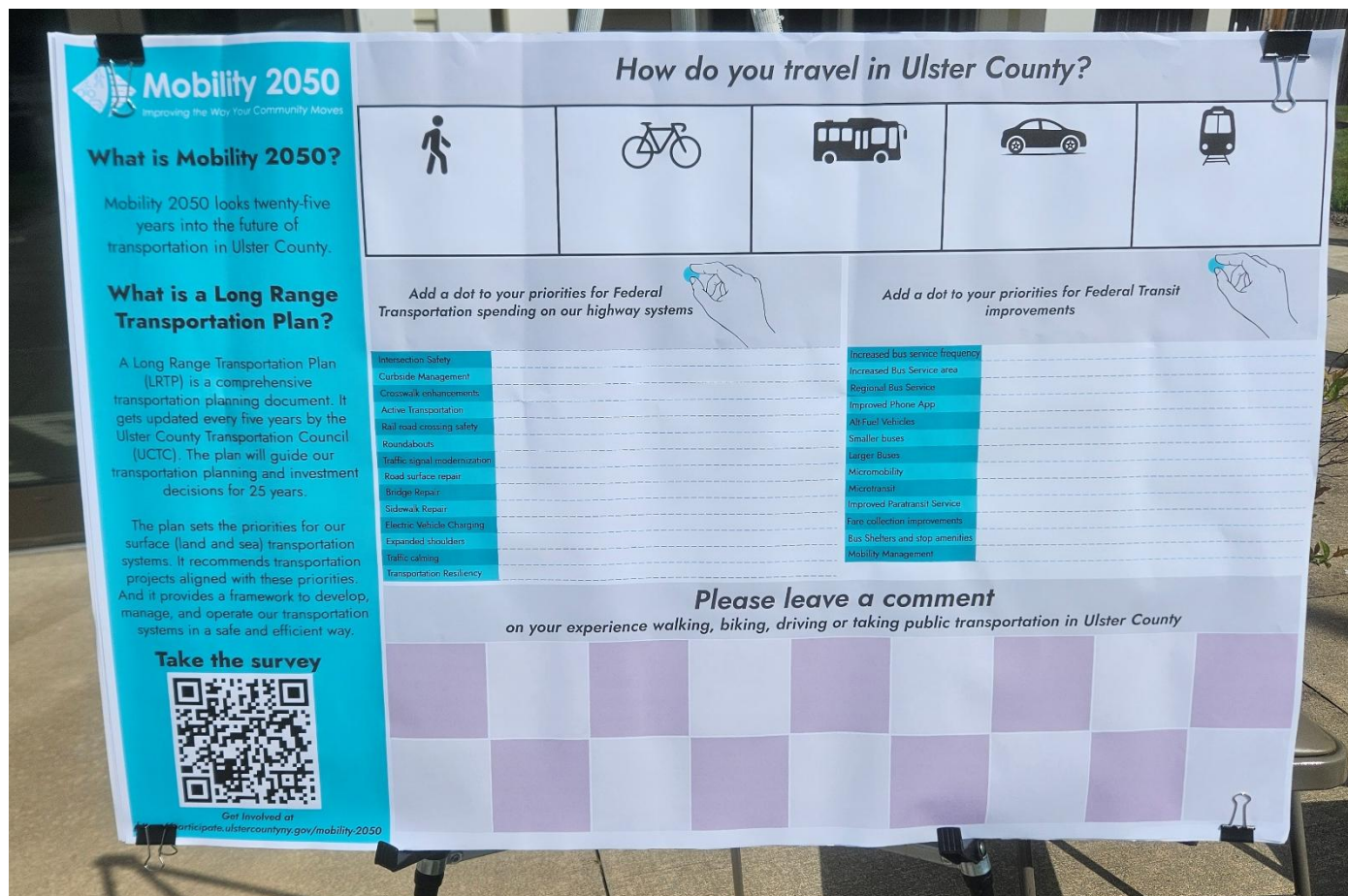
Environmental Conservation

How does our transportation system contribute or detract from the natural environment?

- Detracts from natural environment, but is a modern necessity
 - Wary about what is being sprayed on the road
 - How we care for our road infrastructure

Pop-up Events

The image below is an example of the board that Ulster County Residents interacted with in-person



Mobility 2050
Improving the Way Your Community Moves

What is Mobility 2050?

Mobility 2050 looks twenty-five years into the future of transportation in Ulster County.

What is a Long Range Transportation Plan?

A Long Range Transportation Plan (LRTP) is a comprehensive transportation planning document. It gets updated every five years by the Ulster County Transportation Council (UCTC). The plan will guide our transportation planning and investment decisions for 25 years.

The plan sets the priorities for our surface (land and sea) transportation systems. It recommends transportation projects aligned with these priorities. And it provides a framework to develop, manage, and operate our transportation systems in a safe and efficient way.

Take the survey



Get involved at participate.ulstercountyny.gov/mobility-2050

How do you travel in Ulster County?

				
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Add a dot to your priorities for Federal Transportation spending on our highway systems

- Intersection Safety
- Curbside Management
- Crosswalk enhancements
- Active Transportation
- Rail road crossing safety
- Roundabouts
- Traffic signal modernization
- Road surface repair
- Bridge Repair
- Sidewalk Repair
- Electric Vehicle Charging
- Expanded shoulders
- Traffic calming
- Transportation Resiliency

Add a dot to your priorities for Federal Transit improvements

- Increased bus service frequency
- Increased Bus Service area
- Regional Bus Service
- Improved Phone App
- Alt/Fuel Vehicles
- Smaller buses
- Larger Buses
- Micromobility
- Microtransit
- Improved Paratransit Service
- Fare collection improvements
- Bus Shelters and stop amenities
- Mobility Management

Please leave a comment

on your experience walking, biking, driving or taking public transportation in Ulster County

Catskill Visitor Center

Date: Friday, May 30th, 2025

Time: 10:00 AM – 2:00 PM

Location: 5096 NY-28, Mt Tremper, NY 12457

Overview

On May 30, 2025, Raul Irizarry and Cassandra Valcourt of FHI Studio went to the Catskill Visitor Center in Mount Tremper, NY from 10 AM to 2 PM on behalf of the Ulster County Transportation Council (UCTC) Mobility 2025 Long Range Transportation Plan. The purpose of the event was to engage with residents and community members around Ulster County, raise awareness about the plan, and gather feedback on mobility concerns and potential improvements within the Study Area.

An informational table was set up featuring contact sign-up sheets, business cards, fact sheets, and surveys. Lights and branded safety vests were distributed as giveaways. A board with a summary of the project, survey QR code, and interactive dot activity was displayed alongside the table.

- **Approximately how many people were spoken to?**

20

Modes of Travel

Most participants shared that they get around the area by bike or car.

Budgeting Exercise

Most community members who completed the budgeting activity chose road surface repair as the highest priority for Federal Transportation spending on highways in the area. This was consistent with what people shared about their experiences travelling throughout the area. Many cited potholes as a major issue, with one person even sharing that they would be willing to go out and fix them on their own if that what it takes to solve the problem. Intersection safety, active transportation, sidewalk repair, and expanded shoulders were all tied as the next highest priority.

General Comments

Common themes found from talking with residents of the community were:

- potholes
- bus service improvements
- increased connectivity/access

Potholes were mentioned frequently as a pain point with travel. Potholes are found all along NY-28, as well as on smaller roads around the community. One community member shared that they commute from Poughkeepsie and hit potholes all along the way. The project team even experienced this first-hand on the drive to and from the visitor center. Speeding was also cited as a concern along this corridor. The main road has only a single high-speed lane in both directions with many residential streets and businesses to turn into, many without a turning lane. Because of speeding trucks, one

community member who lives on one of these side streets expressed that they are scared every time they have to turn off NY-28, since the trucks drive so fast that it is unknown if they will stop in time for a vehicle waiting to turn. Several community members also shared a desire for improved bus service. Many want buses in the area to run more frequently and reach more key destinations. This supports the overall need and desire to increase connectivity; many want better access to different parts of the region by modes other than car. Although there are quite a few trails in the area, they are segmented, which makes them good for taking walks or a leisurely bike ride, but not useful for getting from place to place.

Event Photos



UCTC Pop-up Event Summary

Ashokan Rail Trail

Date: Friday, May 30th, 2025

Time: 2:00 PM – 6:00 PM

Location: 1258 NY-28, West Hurley, NY 12491

Overview

On May 30, 2025, Raul Irizarry and Cassandra Valcourt of FHI Studio went to the Ashokan Rail Trail in West Hurley, NY from 2 PM to 6 PM on behalf of the Ulster County Transportation Council (UCTC) Mobility 2025 Long Range Transportation Plan. The purpose of the event was to engage with residents and community members around Ulster County, raise awareness about the plan, and gather feedback on mobility concerns and potential improvements within the Study Area.

An informational table was set up featuring contact sign-up sheets, business cards, fact sheets, and surveys. Lights and branded safety vests were distributed as giveaways. A board with a summary of the project, survey QR code, and interactive dot activity was displayed alongside the table.

- **Approximately how many people were spoken to?**

30

Modes of Travel

Most participants shared that they get around the area by bike, car, or walking.

Budgeting Exercise

Most community members who completed the budgeting activity chose road surface repair as the highest priority for Federal Transportation spending on highways in the area. This was consistent with what people shared about their experiences travelling throughout the area. Just like at the Catskill Visitor Center, many participants cited potholes as a major issue. After speaking with community members at this location, active transportation, expanded shoulders, and traffic calming were all tied as the next highest priority. For Federal Transit improvements, microtransit and improved paratransit services were the top priorities.

General Comments

Common themes found from talking with residents of the community were:

- potholes
- bus service improvements
- increased paratransit
- increased connectivity/access

Potholes were once again commonly mentioned as a pain point with travel. However, people expressed greater frustration with poor connectivity and lack of access in the area. Several community members said that they wished the rail trails were better connected and went to key locations, as well as allowed them to travel to and from Kingston by walking or biking. The rail trail is frequently used and highly valued by the community; many people who stopped by the table said that the trail is "the life and blood of the community". It is a common place where people gather for group activity, such as cycling or running, and because of its reach and popularity, many said it is very common to meet neighbors that you've never interacted with even though you might live near each other. Although it is highly utilized, the lack of connectivity prevents the trail from operating at its full potential. Many residents said that if the rail connected to other locations of interest, they would use it to commute frequently instead of driving. Paratransit was also cited as a key issue. Several residents mentioned that the surrounding population is increasing in age, and need reliable ways to travel other than by car. Having improved paratransit would ensure not only that older residents could get to appointments and access other important services, but also that they are not isolated due to lack of mobility.

Event Photos



UCTC Pop-up Event Summary

Field + Supply Market

Date: Saturday, May 31st, 2025

Time: 10:00 AM – 2:00 PM

Location: 132 Lindsley Ave, Kingston, NY 12401

Overview

On May 31, 2025, Raul Irizarry and Cassandra Valcourt of FHI Studio attended the Field + Supply Market at the Hutton Brickyards Riverfront Hotel + Venue in Kingston, NY from 10 AM to 2 PM on behalf of the Ulster County Transportation Council (UCTC) Mobility 2025 Long Range Transportation Plan. The purpose of the event was to engage with residents and community members around Ulster County, raise awareness about the plan, and gather feedback on mobility concerns and potential improvements within the Study Area.

An informational table was set up featuring contact sign-up sheets, business cards, fact sheets, and

surveys. Lights and branded safety vests were distributed as giveaways. A board with a summary of the project, survey QR code, and interactive dot activity was displayed alongside the table.

- **Approximately how many people were spoken to?**

15

Modes of Travel

Most participants shared that they get around the area by car. Many had travelled from out-of-state for the event.

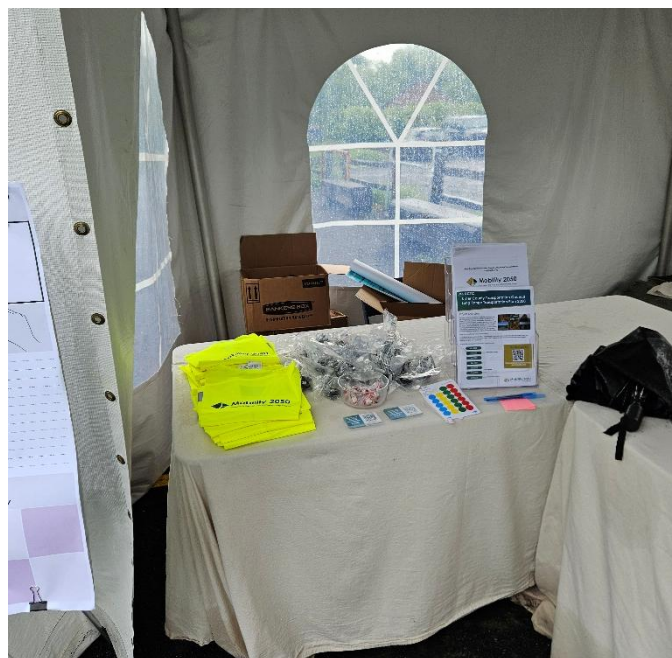
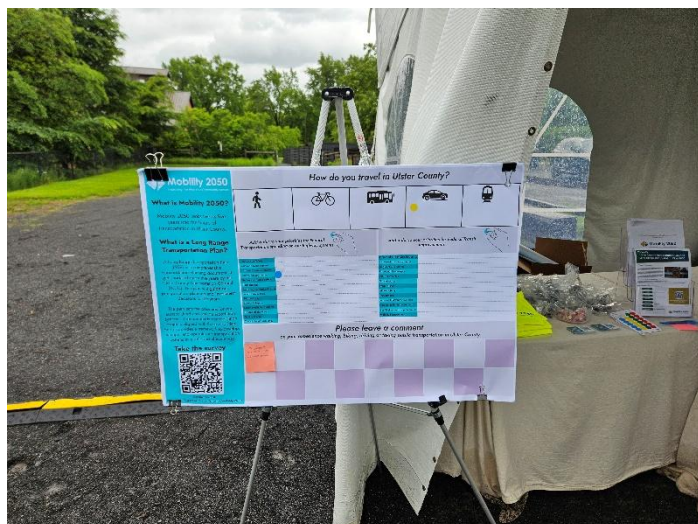
Budgeting Exercise

Active transportation was chosen as the highest priority for Federal Transportation spending on highways in the area.

General Comments

Many people travelled from out-of-state for the market. Several people said that they came from New Jersey or around New York City. One even said that they came from New Hampshire. Some attendees, both local and from outside of the area, commented that it would be nice if there was expanded bus service so that they could easily travel move around instead of having to drive from place to place.

Event Photos



UCTC Pop-up Event Summary

Ashokan Rail Trail

Date: Saturday, May 31st, 2025

Time: 2:00 PM – 6:00 PM

Location: 1258 NY-28, West Hurley, NY 12491

Overview

On May 31, 2025, Raul Irizarry and Cassandra Valcourt of FHI Studio went to the Ashokan Rail Trail in West Hurley, NY from 2 PM to 6 PM on behalf of the Ulster County Transportation Council (UCTC) Mobility 2025 Long Range Transportation Plan. The purpose of the event was to engage with residents and community members around Ulster County, raise awareness about the plan, and gather feedback on mobility concerns and potential improvements within the Study Area.

An informational table was set up featuring contact sign-up sheets, business cards, fact sheets, and surveys. Lights and branded safety vests were distributed as giveaways. A board with a summary of the project, survey QR code, and interactive dot activity was displayed alongside the table.

- **Approximately how many people were spoken to?**

25

Modes of Travel

Most participants shared that they get around the area by bike or walking.

Budgeting Exercise

Most community members who completed the budgeting activity chose bridge repair as the highest priority for Federal Transportation spending on highways in the area. For Federal Transit improvements, regional bus service was the top priority, followed by increased bus service frequency and smaller buses. Like the previous visit, microtransit and improved paratransit were also listed as priorities.

General Comments

A lot of comments were similar to those as the first day. Many people talked about how valuable the trail is to the community, and how it is a main gathering space for residents in an area where there aren't that many places nearby to go. Many shared that they would like to see greater connectivity both with the trail and with transportation in general for those not driving by car. More frequent bus service with expanded times, improved paratransit, and bike lanes on RT-28 along with increased lighting were some of the things people said that they hoped to see in the future. One person even said that they would like to see a local rail developed as another way to get from place to place in the region.

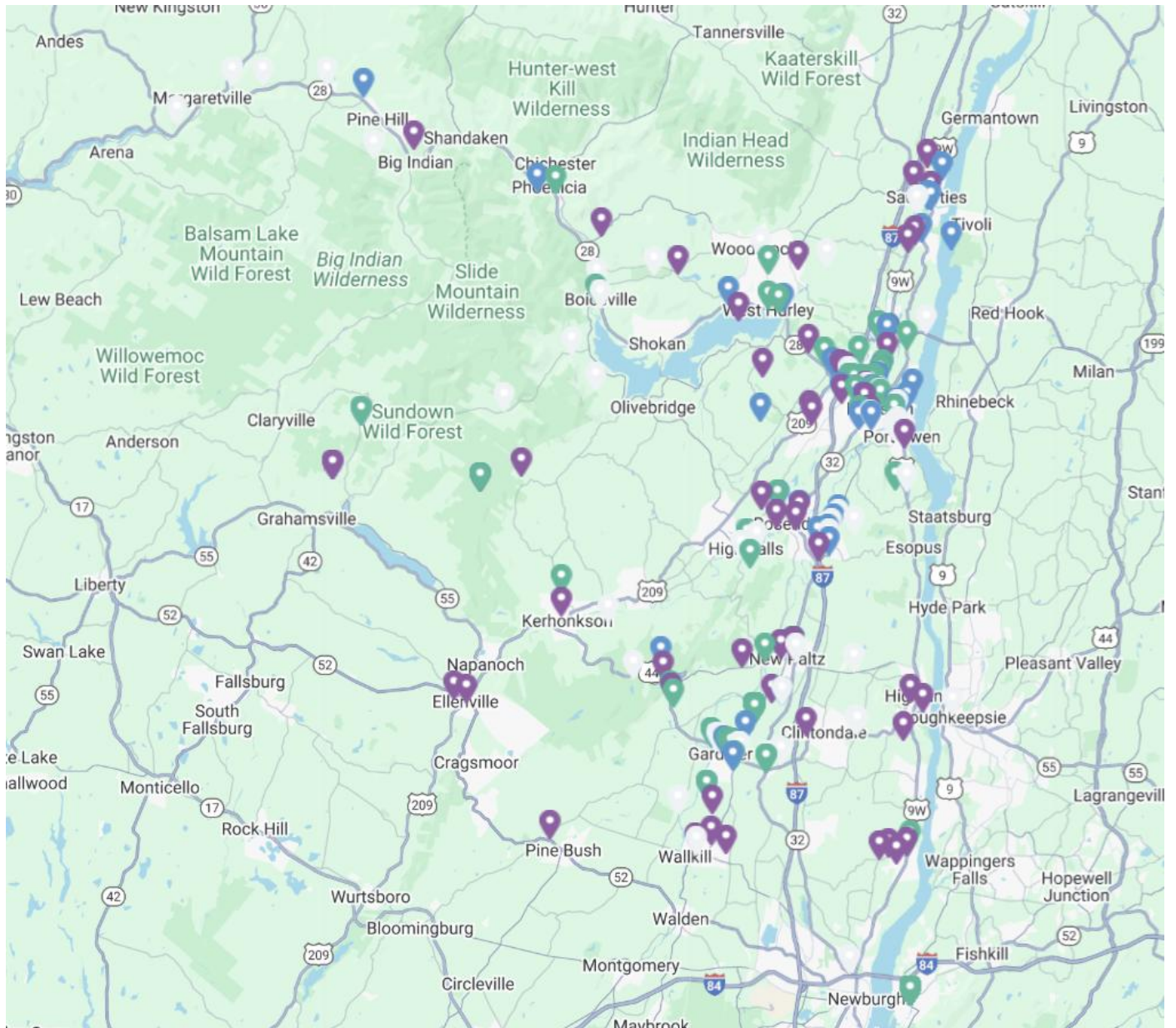
Event Photos



APPENDIX G: ONLINE PUBLIC ENGAGEMENT RESULTS

APPENDIX G: Online Public Engagement Results

Pin Drop Map



Pin Drop Results

Mode of Travel	Comment
Driving	Ellenville lacks available transportation for anyone working in other areas of the county or region due to the limited routes including lack of direct express routes. This also keeps individuals from gaining employment.
Public Transportation	Broadway corridor deserves frequent bus service (every 15 mins) during the day.
Public Transportation	Bus service to Rhinecliff station. Station has very limited parking and frequent train service to points north and south.
Biking	Help establish through-going trail to O&W from Kingston Greenline
Walking	Help establish through-going trail to O&W from Kingston Greenline
Biking	Help establish through-going trail to Walkill Valley Rail Trail from Kingston Greenline
Walking	Help establish through-going trail to Walkill Valley Rail Trail from Kingston Greenline
Biking	Improve bike & pedestrian infrastructure.
Walking	Improve bike & pedestrian infrastructure.
Walking	Work on connection between Walkill Valley Rail Trail and O&W Rail Trail
Biking	Work on connection between Walkill Valley Rail Trail and O&W Rail Trail
Biking	Help Municipalities co-develop bike & Ped infrastructure.
Walking	Help Municipalities co-develop bike & Ped infrastructure.
Public Transportation	Establish ferry to Rhinecliff Station.
Driving	Reduce lanes on 28
Public Transportation	Frequent bus service from New Paltz to Poughkeepsie (1/2 hour to 1 hour frequency).
Biking	Bike connection from Kingston to Esopus
Biking	Improve bike infrastructure along Empire State Trail
Biking	I would like to see better bicycle consideration on Washington Ave. It connects the O&W Connector trail and the Walkill Valley Rail Trail. It is also a route to a school and many other destinations.
Biking	I would like to see a multi-use path on Schwenk Drive to connect the O&W Connector and the Midtown Linear Park.
Public Transportation	I would like to see bus service to the Park and Ride.
Biking	I would like to see 587 downsized to accommodate walking and bicycling and to allow a driveway into the Kingston Plaza.
Biking	I would like to see bollards added to the Broadway bike lane especially near Thomas St. where cars on Broadway are using the parking spots as a lane to use Thomas St.
Biking	I would like to see a bike lane continue down Broadway, especially for students.
Walking	I would like to see the Kingston Point Rail Trail Phase 2 be built to connect the trail to the Rondout Waterfront.
Walking	I would like to see the Hutton Brickyard allow waterfront access to the public and create a trail from the beach to the Brickyard Trail.
Walking	I would like to see all of the sidewalk in Kingston improved especially where there are gaps, like on Foxhall Ave near the Dollar General.
Walking	I would like to see the recommendations in the Uptown Transportation Study implemented, especially the part about switching the direction of Wall and Fair. This would make walking at the five way safer for pedestrians.
Driving	I would like to see the five-way intersection be a small roundabout.
Walking	I would like to see a sidewalk here.
Biking	I would like to see the rumble strip removed in this section to improve bicycle safety.
Driving	I would like to see cars going south from the roundabout NOT be allowed to make left hand turns on to E St. James. It backs up traffic and feels unsafe for pedestrians.

Driving	I think St. James should be a one-way toward Clinton Ave.
Driving	I don't understand this one
Driving	This is the spot I mentioned with the roundabout I believe to be dangerous.
Biking	I really enjoy this cycling trail. A GREAT use of tax dollars IMO! And a real asset to our community.
Public Transportation	We sometimes use the Z bus to head towards Kingston, and hope its service either stays the same or expands.
Public Transportation	Extend UCAT as far west as Margaretville Hospital, Mountainside Residential Care Center, the Recreation Center and the Villages of Fleischmanns, Arkville and Margaretville.
Public Transportation	Provide UCAT service to Maverick Rd west Hurley
Driving	Canoe Hill is used a lot for walking and bike riding. But it is unfortunately also a road where drivers feel free to speed, without repercussions. A walking/cycling path connecting the Cantine Field complex on Washington Avenue to Canoe Hill and then back to the Cantine Field Market Street entrance would be a safety plus for Saugerties, and would (or could) surely involve some traffic calming measures as well.
Driving	The infamous at-grade railroad crossing (Ulster Ave. in Saugerties). Seems to have been semi-fixed a good number of times. And about 3 or 4 fixings ago, they did a great job. But the last few fixes have kind of undone things and the ride still isn't right, over those tracks.
Public Transportation	Please have a bus go through Plattekill more often
Walking	
Walking	We need sidewalks and bus service in this area.
Walking	We need sidewalks and bus service in this area.
Public Transportation	We need bus service in this area and sidewalks
Public Transportation	All the places I have had clients who had difficulty finding aides who work at home with transportation a major issue
Driving	My home is not near any public transportation (despite being on a state route near a busy intersection)
Biking	Phoenicia is my closest town and I bike here often. But using Rt. 28 doesn't feel that safe and Plank Rd. has almost no shoulder and lots of cracks in the road.
Public Transportation	
Public Transportation	I take the bus to Kingston from Woodstock sometimes. I often take the bus from NYC to Kingston. I wish there was an easy way to get to Mt. Tremper from Kingston by public transport
Walking	I often walk along the Ahokan Rail Trail for recreation
Walking	I'll drive to a single point in Kingston and then walk between all of my chores.
Public Transportation	This hospital is several miles past the county line. People in rural Ulster Co. can't access it, its lab, its imaging center, or doctors' offices by public transportation, because UCAT stops at the county boundary. This means people have to go to Kingston on public transport to get to medical services. Because the schedule is limited, going to an appt can take all day. This is exhausting for a senior citizen.
Public Transportation	Our area has a state of the art pool and gym that is inaccessible by public transportation, because the bus stops at the Ulster county line - several miles short. Elders w/o private transportation are unable to utilize this facility to maintain their health.
Public Transportation	Arkville has a state of the art pool and gym that is inaccessible via public transport. The UCAT bus (Route Z) stops at the county line, several miles short. Given the reality of poor health support services in this rural part of the county, this resource is crucial to seniors.
Public Transportation	This library is an important point in the center of Fleischmanns. It has books, activities, a post office and market across the street. People from Fleischmanns conduct most of their business in Ulster County - from Phoenicia Farmers' Mkt, Pine Hill Community Center, and restaurants and businesses through Woodstock and Kingston, so would use a UCAT bus that extended its route the extra mile over the line to this spot as a pick-up spot.

Public Transportation	Freshtown and CVS are major businesses that offer nearby grocery and drug access, EXCEPT there is no public transportation to get there from the Ulster County line. By setting a stop at the market, people from Margaretville could ALSO access services and businesses in Ulster Co via public transport. Most of these Delaware County residents look to Kingston for their medical and business needs..
Biking	unable safely proceed past this location on bike
Walking	pedestrians are unable to safely cross rt 28 to access the ART
Walking	there have been two pedestrian fatalities at this location within the past 10 years
Walking	pedestrians cannot safely cross this bridge
Biking	cyclists cannot safely cross this bridge
Biking	cyclists cannot safely utilize this underpass
Walking	pedestrians cannot safely utilize this underpass
Biking	Rt 28 is unsafe for cyclists, county owned rail corridor should be used to provide safe pedestrian and cycling transportation corridor
Public Transportation	Woodstock Sanctuary - I go there from Poughkeepsie at least once a week using the UCAT as much as possible
Walking	Sidewalks in the Village oof New Paltz are old and not up to ADA standards. And this is a vibrant pedestrian Community
Driving	This 4 way stop is dangerous and should be replaced with a roundabout.
Biking	Pulling out of Libertyville is dangerous. Safety improvement is necessary.
Driving	Speed Limit on approach to the bridge in EB direction should be raised at the old toll plaza location. It is not reasonable or necessary to have the 25MPH speed limit until you approach the mainspan. WB has a 40 MPH limit.
Driving	Rte 9W in this commercial area is dated and has traffic safety issues. Left and right turn lane are inconsistent and Same with the interchange with Route 199. It is not an appropriate interchange for the condition of the day, Cloverleaf interchanges are for more rural location and contribute to the safety issues. A Single Point Urban Interchange would be a good upgrade for the location and provide a safer connection. In additoin Frank Sottile Boulevard has some consistency issues with lane use and alignment.
Public Transportation	We need public transportation to/from this area.
Biking	375 between Woodstock and route 28 is dangerous and needs to have bike/pedestrian paths. There are a ton of people who live in west Hurley and along 375 who would like to bike or walk into Woodstock but it isn't safe. Some people do it anyway and one person died last summer. This connection would also allow Woodstock refiners to access the Ashoka's rail trail without a car.
Walking	I am not sure what I am supposed to be commenting on, but public transportation in Ulster is horrible in general. In kingston alone, it's hit or miss with late busses, but even going to Rosedale or new Paltz can be a nightmare. I have had busses whizz by the bus stop in Rosedale before in the route to kingston while I'm standing right there. Walking in the mall area in ulster is dangerous with the traffic, and lack of pedestrian consideration, they don't always stop at lights, making the crosswalks dangerous, and recently, with the creation of the new bu
Driving	The intersection in Rifton, at Rte 213 and Rte 32, south of the Wallkill River Bridge is perilous for vehicles turning left from Rte 213, due to seriously limited visibility of southbound traffic coming from Tillson at 55 MHP. Each episode of bridge repair or other NYS DOT in which a traffic light has been temporarily installed has been welcomed by the local community, because it offered optimal safety. This is a dangerous intersection, without the benefit of visibility, given the posted speed limit, limited two lane road, without the benefit of a left turn lane from Rte 32 south onto Rte 213 E. Adding a left turn lane might resolve this issue to a meaningful extent.
Public Transportation	It would be great to have a mass transit connection to the rail stations in both Poughkeepsie and Rhinebeck that is connected to long term parking.
Biking	Bike Path Needed

Driving	The only transportation for residents is car or hired cab. The county bus only comes at 7:30am with pickup at Popp Pavillion too early for seniors and too far for them to access on foot.
Walking	Walking on Route 213 is dangerous because of gullies on the side of the road and speeding drivers.
Public Transportation	This part along Route 213 is currently not served by public transportation (as far as I know?). Could use options to Kingston/Rosendale/New Paltz to connect with other buses.
Walking	Walking or biking along 213 is dangerous because of a narrow shoulder and speeding drivers.
Driving	This intersection could maybe use a traffic light? It gets backed up and hard to turn left.
Driving	
Driving	I think the drivers coming down W O'Reilly should also have to stop for cars coming down Wilbur Ave.
Driving	This section is confusing to me. What is the question?
Walking	There is no way for people to cross the roads here to access Walmart, etc.
Walking	The trees have buckled the sidewalks creating hazards where people have been hurt.
Walking	There is no room on the sides of road to walk or bike.
Driving	A light is badly needed here.
Driving	The curve put in at this road access is too shallow, buses and trucks must use part of the opposite lane to maneuver. A light is also needed here.
Walking	
Walking	There is no real walking access from Barclay Heights to the Village. I have seen many close calls with pedestrians here.
Driving	There need to be warning signs at the bottom of washing ton Avenue for the right turn - oit looks like access goes through. A fatal accident has already occurred there.
Public Transportation	I am concerned about the proposed elimination of the UCAT College Link (CL) route which goes through the heart of High Falls (w/ a stop at Rt 213 at Mohonk Rd - by Ollie's Pizza) providing an important connection point between Rosendale and High Falls along Rt 213 (and then on to SUNY Ulster).
Walking	There are no sidewalks on any side of this area of High Falls - there are many small businesses like Fool for Love vintage, Blue Heron Books, Ollie's Pizza, Curious Cat Antiques, and even the Post Office that people need to walk between - Rt 213 at the intersection with Mohonk Rd is very dangerous and could benefit from both sidewalks and a traffic stop sign given many people do not properly observe the speed decrease from 55 MPH to 30 MPH along Rt 213 when you get to High Falls commercial district. There was a recent accident involving a motorcyclist that was very scary for everyone and we shouldn't have to wait for more accidents to make a change. Please work with NYS, Ulster County and the Towns of Marbletown and Rosendale, plus the small businesses owners, to make sidewalks and a stop sign a reality. This is good for car and pedestrian safety, plus will help our small business community thrive.
Driving	Extreme number of potholes along this part of Rt 213. It's unsafe as cars try to avoid hitting them but the roads are small and curve around the mountainous area. Please work with NYS to address asap.
Walking	The site of a very sad fatal pedestrian accident. A traffic study is already now finally underway but pls continue to put focus and energy here so no more people have to die.
Driving	Very dangerous intersection for lots of reasons - study under way; pls continue to prioritize this dangerous intersection for bikes, cars, people alike.
Public Transportation	My home is here, about two miles from a bus stop. That distance makes using the bus difficult, and the frequency and unreliability of the bus makes the bus useless.
Public Transportation	I would love to be able to take a bus to shop or go to New Paltz. I don't mind walking a bit.

Public Transportation	Thank you for doing this. Hopefully, the research will help improve service throughout the county.
Driving	This intersection could use improvements!
Walking	Pedestrian Crossing can be difficult
Walking	This neighborhood needs sidewalks!
Driving	Lucas Avenue should be a complete Street
Driving	Albany Avenue is falling apart!
Walking	Albany Avenue could be improved for pedestrians and bicycles
Walking	Walkill Valley Rail Trail needs an off road way to get into Kingston
Public Transportation	More frequent bus service between Uptown, Midtown and Downtown.. Maybe small, electric vans every 15 minutes
Walking	People use their cars way too much in Kingston for short trips. Encourage walking in this city! more street trees and improve traffic calming measures.
Biking	Need a better Empire State Trail connection from the Rockwell Terrace Lane trailhead into the City of Kingston.
Biking	Make a off road and on road bike route connecting 299 & 44/55 with Benton Corners (44/55 & Bruynswick) and Gardiner Village Center and Ireland Corners
Walking	Route 44/55 between Gardiner and Route 208 has become increasingly dangerous to walk or bike due to aggressive drivers passing at high speeds.
Biking	Same commentary as walking in this area
Public Transportation	Improved public transit to and from the rail trail . New Paltz has a wonderful connector to the ridge, in the absence of trail development, public transit could be a great option
Walking	Would love to see 208 made more conducive to walking and biking. even though there are signs that say bikes can take the lane here; it feels very risky given the high speed limit: traffic has expanded exponentially since the speed limits were set and would be good to reassess and/or provide infrastructure that makes walking and biking safer
Biking	Biking infrastructure should be prioritized going from Gardiner to the ridge using New Paltz's approach as a guide. The stop light by Lombardi's has been an incredible first step in easing traffic and preventing more accidents.
Public Transportation	Public transit via Bus to the Beacon train station would be quite compelling for individuals needing to get into the city whilst reducing their car / parking expenses.
Biking	Route 9W is a literal cycle haven downstate going up to bear mountain. I used to have a blog called cyclehaven9W, it would be such a unique opportunity to reclaim the cycling friendly infrastructure in Orange and Ulster counties
Walking	I know this has been discussed in the past but I know I would love to see the WVRT expand south past the current terminus at Dennison road
Biking	Same as my comment on walking. Would love to see the WVRT connect down to Walden / Walkill
Public Transportation	We need transportation in this area or at least extend the paratransit distance from fixed route more than 1.5 miles
Driving	PLEASE LOWER THE SPEED LIMIT ON ROUT 44/55 FROM MOHONK PRESERVE WEST TRAPPS TRAILHEAD THROUGH THE TOWN OF GARDINER, AND THE ENTIRE LENGTH OF ROUTE 299. THESE ARE CONSIDERED SCENIC BYWAYS AND SHOULD HAVE SPEED LIMITS NO HIGHER THAN 45MPH.
Walking	Washington Ave is a nightmare for pedestrians, especially where it crosses the Esopus Cresk (no sidewalks) and near the O&W Rail Trail entrance (no crosswalks).
Biking	Washington Ave has heavy traffic and no bike lanes.
Biking	I would really like to be able to access this rail trail safely by bicycle from Kingston. More entrances to the path (near Fruition, for example) would be great, too.
Walking	It is so incredibly unsafe to access the communities off the 28 (like the public housing in the motels) by foot (or bike). I would like to be able to walk and bike from the rail trail that goes to Kingston Plaza to that area.

Driving	The speed limit is too high on this section of road. NYS really needs to lower it. There should be a fully separated bike/pedestrian lane.
Biking	Sawkill Road would benefit from a separated bike/pedestrian path. Some kids I know live on Sawkill Rd, but can't go anywhere, whether by foot, bike, skateboard, etc. because it is far too dangerous. They are trapped at their house when grownups cannot drive them places.
Biking	Albany Ave is too dangerous to cycle as it is currently. I know multiple people who have been hit by vehicles on Albany Ave--on foot and on bicycle. A separated bike lane would be amazing and speed up local cycle transportation.
Walking	Crossing Broadway as a pedestrian is very scary, even with the new flashing lights at pedestrian crossing zones. Drivers often do not stop and I am forced to step into the road and hold up my hand to ask them to stop, which is always terrifying. As a bare minimum, the signs that say something like "NYS Law: Vehicles must stop for pedestrians in crosswalk" should be installed. I also recommend retiming the stoplights. They should be triggered quickly by pedestrians pressing the walk button. The light cycles on Broadway are currently way too long, as well.
Biking	The bike lanes on Broadway are scary to use. During the planning stage I was so excited to use the lanes regularly with my children, and to allow them to bike down Broadway alone when they got older, but the lanes are way too dangerous to allow that. I have almost been doored numerous times and my son has almost been T-boned by SE-bound cars turning across traffic into parking lots. The bicycle stoplights are also worthless--they should be green BEFORE the main stoplight turns green, timed with the pedestrian lights. I was also under the impression that there would be bike light activation buttons, but these do not exist. I also thought there would be separate buttons within reach of cyclists on the road that would trigger the light cycle when at an intersection--ex: On O'Neil/Henry to cross Broadway. There are also not enough bike racks and the ones that do exist don't hold enough bikes at once.
Biking	Bicycles are not heavy enough to trigger the light to change when on S Manor/N Manor crossing Albany Ave. I have to either hop off my bike and wheel it over to the sidewalk (very inconvenient, especially with a child on the back of the bike) or wait until a car shows up (and it must not be turning) to trigger the lights. I would like to have buttons on a pole next to the side of the road for cyclists to press to trigger the green light. I have used these in other cities, such as Vancouver, BC. They are very convenient and should be installed here.
Walking	This intersection is very dangerous on foot. We live very close to here, but it can feel very scary to walk to the Stewart's or the gas station from any direction, but especially from Elmendorf.
Biking	This intersection was supposedly "improved," but it feels scarier than before the changes. I used to cycle from the Boice Brothers neighborhood to the YMCA multiple times a week. I have not done it once since the changes because I am too afraid to merge from Grand St (e.g. along the road by For the Many) onto Prince and then cross Broadway. Even driving is nerve-wracking at that intersection. Changing the timing of the lights and separating the bike light timing from the automobile lights are a couple of things that would help improve this intersection. It makes me really sad that so much money was spent on this intersection, but it did not improve. Real question: Has the mayor ever ridden his bike from his house to the YMCA (via N Manor>>S Manor>>Downs/O'Neil>>Bruyn Ave>>Grand>>Prince>>Pine Grove Ave) ? I hope everyone who is a transportation decision maker will ride this route and many others within Ulster County to fully understand people's frustrations and the dangers.
Public Transportation	these are location I travel to by bus

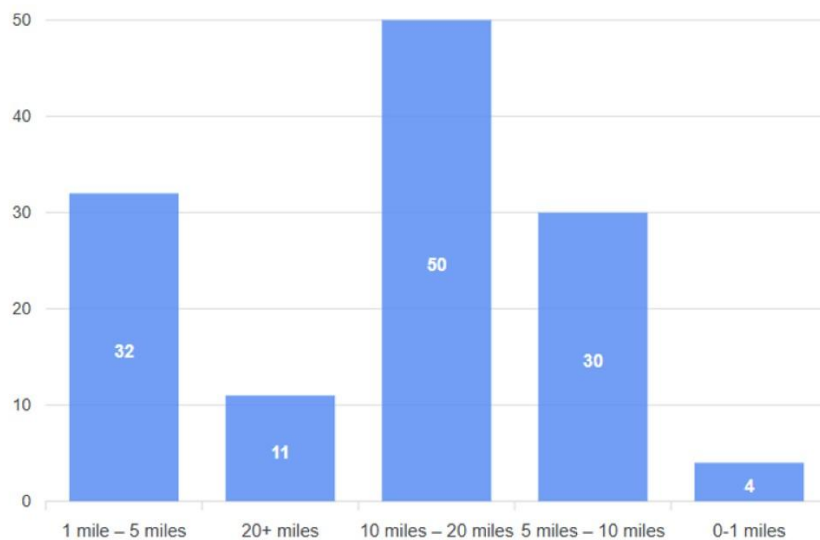
Biking	bike to location
Walking	We need to be able to walk safely on 9w without being killed
Public Transportation	We need more bus informstion
Public Transportation	We need more bus information
Walking	The walkability, bikeability, and connectivity of the Gardiner hamlet to Ireland Corners (rt 44-55) and beyond would be an incredible win in pedestrian/cyclist safety, traffic calming, and allow more residents to forego driving short distances for basic errands.
Driving	Still part of Port Ewen Hamlet. Reduce speed until out of Hamlet.

Survey Results

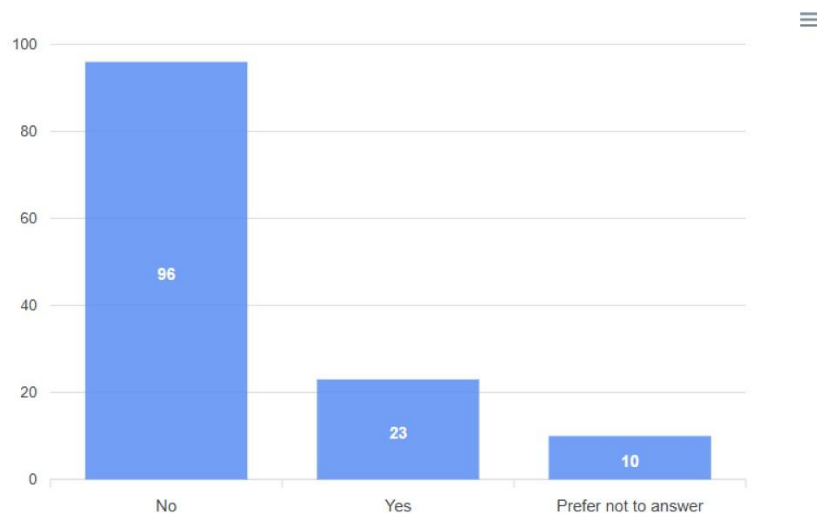
Summary:

The results of the survey portion of the online workshop are below. In summary, most participants drive between 1 – 20 miles with few trips under 1 mile and over 20 miles. 11% of participants self-identified as not owning a car. Most participants spend most of their time in the City of Kingston, Town of Esopus, Town of Marbleton, Town of Hurley, and Town of Saugerties. Most participants drive, followed by walking, public transportation, and biking respectively. The budgeting exercises were broken into two categories: transit aid and transportation aid. For transit aid priorities the top areas for investment were Increasing the bus service area, increasing the bus service frequency, regional bus service connections, and bus shelter amenities. For transportation aid priorities the top areas for investment were expanded shoulders on rural roadways, road surface repair, sidewalk repair, and active transportation.

How many miles is your average trip?

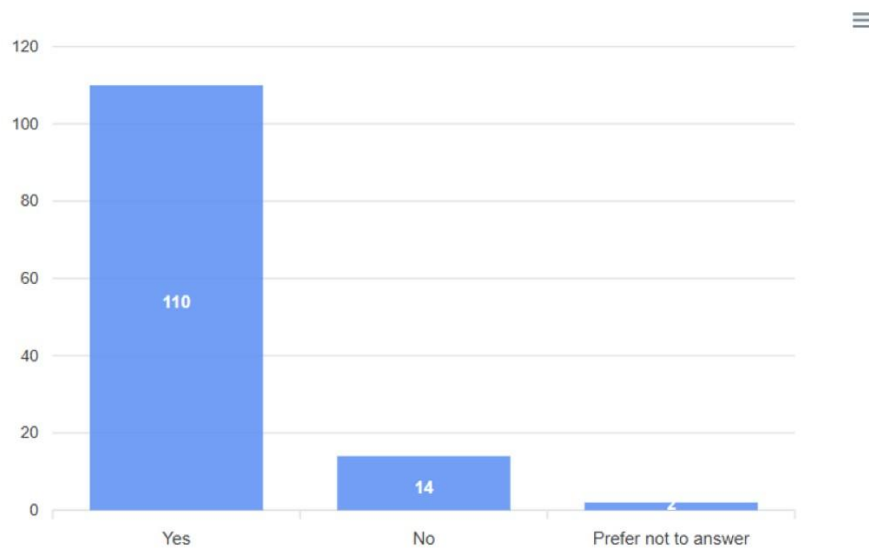


Do you identify as a person with a disability?



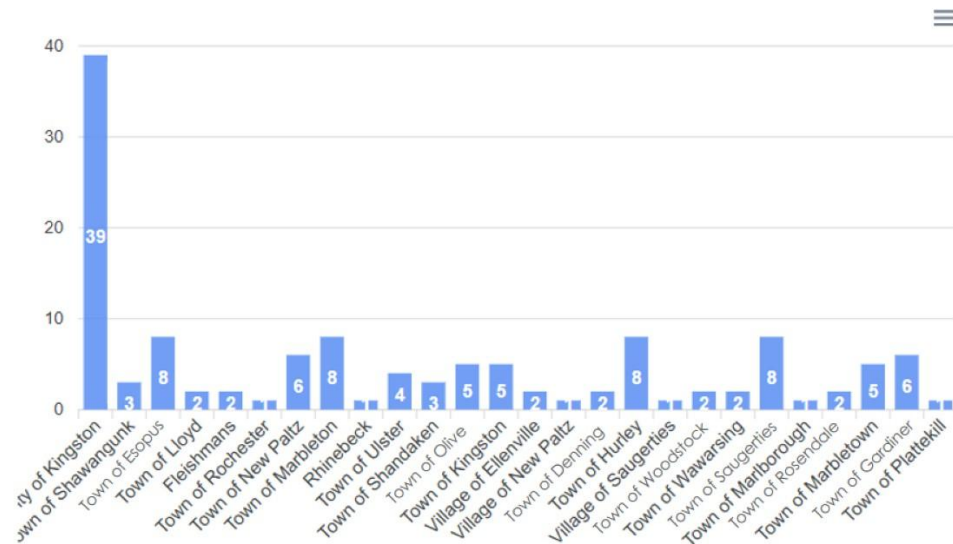
**18% self identified
as having a
disability**

Do you own or have access to a private vehicle?

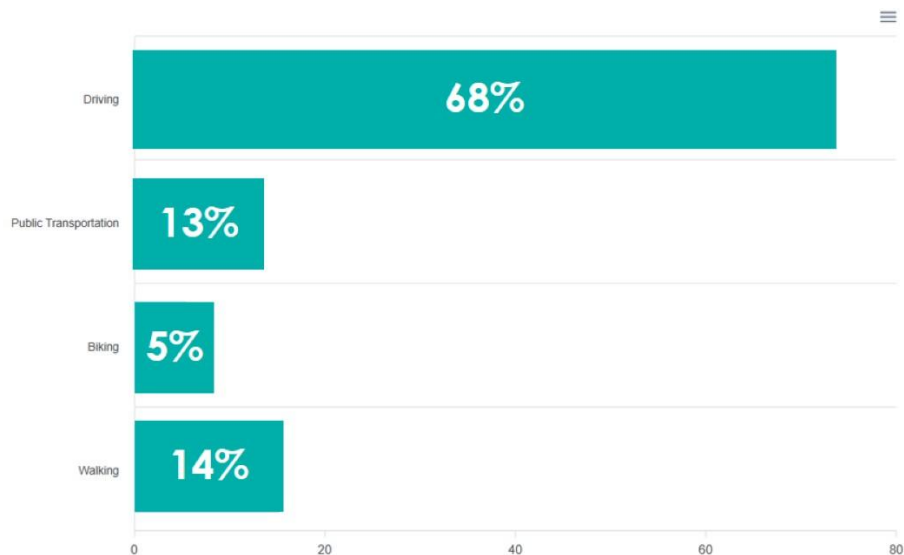


**11% self identified
as not owning a car**

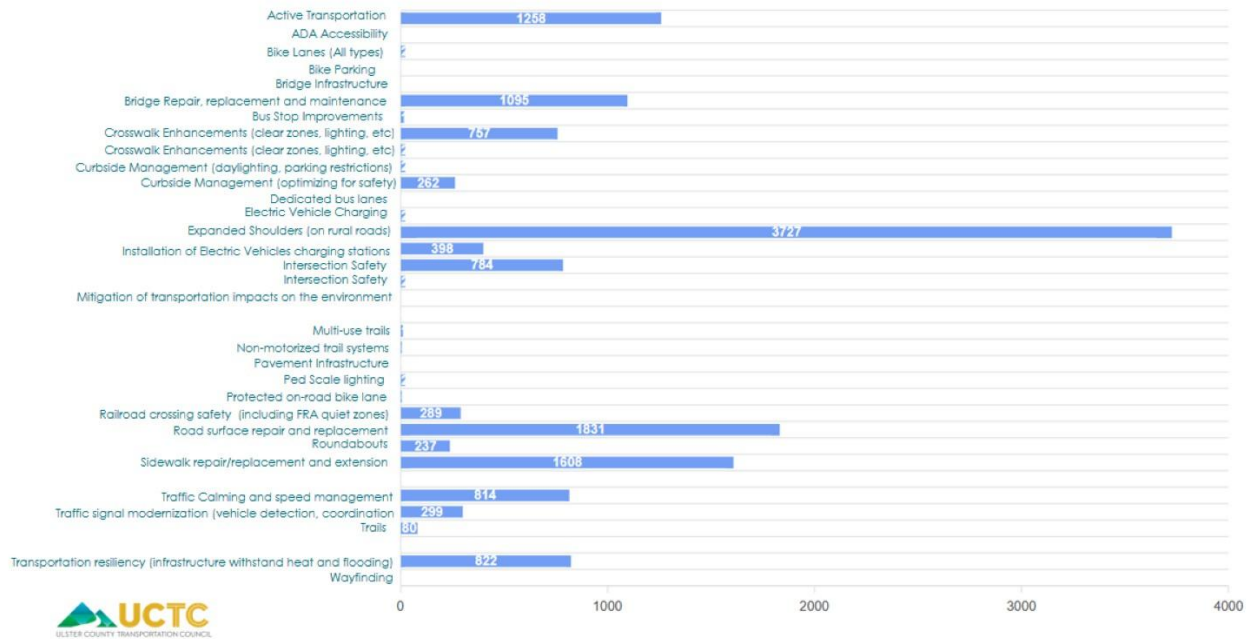
In what City/town do you spend your most time in? **Mobility 2050** Improving the Way Your Community Moves



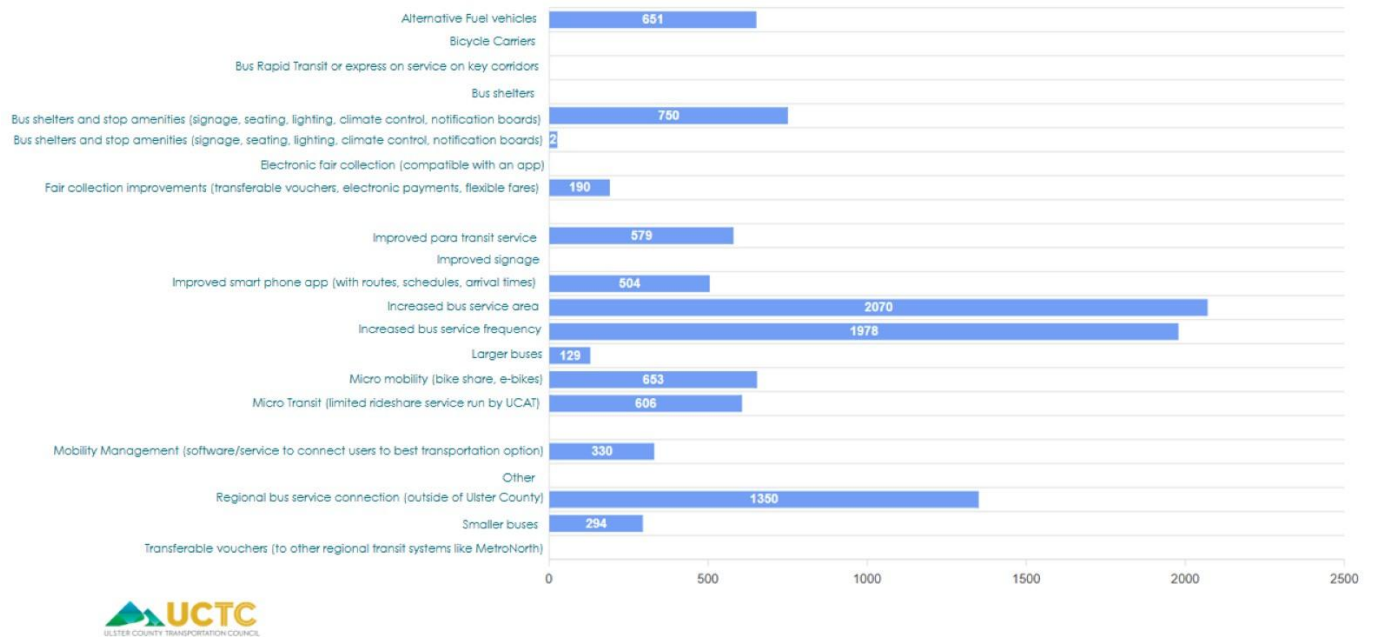
How often do you use each type of transportation? **Mobility 2050** Improving the Way Your Community Moves



Transportation Aid Budgeting



Transportation Aid Budgeting



Open Ended Summary

1. A focus on reducing the reliance on personal vehicles and increasing the use of public transportation, biking, and walking
2. Concerns about climate change and the need for more sustainable transportation options.
3. Calls for increased accessibility and connectivity throughout the county, including in rural areas.
4. Emphasis on safety for all users of the transportation system, particularly for vulnerable populations such as the elderly and disabled.
5. Suggestions for improved infrastructure, such as more bike lanes, sidewalks, and pedestrian-friendly roads.

6. Desire for a reliable, efficient, and frequent public transportation system that serves all communities in Ulster County.
7. Suggestions for expanding transportation options, such as rail lines, bus routes, and bike paths.
8. Support for initiatives such as Vision Zero, which aims to eliminate traffic fatalities and prioritize safety for pedestrians and cyclists.
9. Calls for improved road maintenance, bridges, and infrastructure to support sustainable transportation options.
10. Concerns about the affordability of transportation services and the need for increased funding and support for public transit.

APPENDIX H: PUBLIC COMMENTS

Comment provided by:	Comment	Response	Changes to the LRTP?	References
Rob Bellinger, City of Kingston resident	Vision Zero. I agree with other commenters that our goal should be to eliminate, not reduce, crashes that are fatal to vulnerable road users	The draft UCTC 2050 LRTP includes reference to the Safe Systems Approach, which is the primary framework identified by the US DOT/FHWA to achieve Vision Zero. The NYSDOT applies the same approach in its draft statewide Transportation Master Plan. This LRTP calls out the Safe System Approach in keeping with our partner agencies. UCTC notes it submitted a second grant application to the USDOT to conduct a Safe Streets for All planning project which, if awarded, would include the development of a consensus-driven policy framework to implement the Safe Systems Approach and help achieve Vision Zero. While we agree that striving for zero fatalities is the ultimate goal, we want this LRTP update to balance aspirational and achievable objectives. The LRTP prioritizes safety that will be part of all future projects and programs. Within the SMART framework of the LRTP UCTC believes that a reduction in fatal crashes rather than elimination of fatal crashes is the appropriate objective for this iteration of the LRTP.	No change	Draft NYS Master Transportation Plan, page 4 https://publicinput.com/Customer/File/Full/a2099040-2c39-4dfc-85a9-15e7539f246e USDOT - FHWA "Zero Deaths and Safe System" https://highways.dot.gov/safety/zero-deaths
Rob Bellinger, City of Kingston resident	Pedestrian Safety. Walking in Ulster County needs to be safe <i>and</i> comfortable. I applaud survey respondents for identifying the need for expanded shoulders in our rural areas.	Intersection traffic control is detailed on page 53 with a focus on safety; while the UCTC LRTP refers to “pedestrian phases at signalized intersections”on page 65 and 70, LPIs are not specifically mentioned. UCTC staff have worked closely with NYSDOT and local municipalities on a variety of signal design projects, including those in Saugerties, Gardiner, and the City of Kingston on Washington Ave, Broadway, Clinton Ave and elsewhere. LPIs are routinely raised as an important component of pedestrian safety and urged for consideration in new or redesigned signal systems.	Added reference to LPIs on pages 53 and 65 and included a call-out box that further describes and illustrates the effectiveness of LPIs.	
Rob Bellinger, City of Kingston resident	Pedestrian Safety. In cities and towns, we must prioritize safer street design and avoid waiting to implement low- or no-cost fixes. I am surprised that the words "leading pedestrian interval" do not occur in the draft plan. I live near the intersection of Washington Ave & Lucas Ave, where it's common to see pedestrians (both residents and tourists) assume that "beg buttons" simply don't work and start crossing against the light. Many residents cross mid-block because they know it is safer than crossing at a corner, where drivers often fail to yield, especially when turning right on red. I am an able-bodied person, yet it is often difficult for me to walk to the local CVS - two blocks away - without having a near miss with a driver who may be running a red light, turning through an occupied crosswalk while looking down at their phone, or driving over a sidewalk/parking lot to avoid stopping at a red light. This experience colors many			
Rob Bellinger, City of Kingston resident	Pedestrian Safety. We must revisit areas where road design encourages speeding and red light running. LPIs, which are basically zero-cost and have been proven to reduce pedestrian injuries, would be especially welcome at signalized intersections along Washington Ave (Schwenk Drive, N Front Street, Lucas Ave). Current signalization, which prioritizes every possible car movement over any possible pedestrian movement, signals to residents that they are not welcome in their own community, and that the government's priority is moving cars through			
Rob Bellinger, City of Kingston resident	Pedestrian Safety. It seems inequitable that LPIs were implemented as part of the Broadway Streetscape Project but not on Washington Ave. In fact, the crosswalk on the Grandma Brown Lane side of the Washington/N Front St intersection offers a leading <i>car</i> interval. I learned that a "no right on red" sign was removed from this intersection around 2009, no doubt to appease complaining and dangerous drivers, who now speed through the red light (and			
Rob Bellinger, City of Kingston resident	Pedestrian Safety. There are likely other intersections in Ulster County that would benefit from LPIs, giving pedestrians safer passage. I urge you to consider implementing more of them as part of the LRTP.			

Rob Bellinger, City of Kingston resident	Pedestrian Safety. In addition, we must address pedestrian access to the shelter hotels on Route 28, especially between Route 209 and I-87. Residents are expected to walk along a 4-lane highway and through major interchanges in order to access services in Kingston. It is common to see families with children and pets walking alongside traffic, because there are no sidewalks beyond the Kingston city line.	UCTC staff have worked closely with the Ulster County Planning Department, RUPCO, Ulster County Executive's Office, Ulster County Department of Social Services, Town of Ulster and NYSDOT addressing site-specific pedestrian accommodations of new and existing developments, including new and emergency housing units. In addition, the Ulster County Traffic Safety Board has responded by providing residents of emergency housing with reflective materials to wear after dark. Addressing these needs, brought about in part by the national housing crisis, is an ongoing issue that will require continued collaboration and problem solving. Expanding or reconstructing sidewalk networks is a continuous local need and UCTC staff have committed significant time and resources to providing municipalities with technical assistance in planning for sidewalk improvements, conducting sidewalk inventories and assessments, developing competitive grant applications for sidewalk replacements and extensions, and managing complicated construction projects. UCTC was pleased to note in the FFY2026-2030 UCTC Transportation Improvement Program that NYSDOT Region 8 has included a \$15 million multi-year federal aid construction project to address operational and pedestrian concerns along Washington Avenue between Schwenk Dr. and Sawkill Rd. Preliminary Design is scheduled to begin in FFY2027; the NYSDOT Project Development Process will include multiple opportunities for stakeholders, including	No change	
Rob Bellinger, City of Kingston resident	Pedestrian Safety. At least in priority corridors, sidewalk maintenance including snow removal should be handled by the county or municipality. Snow removal remains a huge issue in the winter, especially when city and state plow trucks create ice mounds that block crosswalks, which are then ignored. In New York City, the Dept of Sanitation hires day laborers to shovel out crosswalks.	The LRTP is not intended to address specific local maintenance agreements or practices; it does emphasize the need to improve sidewalk condition and expand them where pedestrian volumes are high or safety needs are great.	No change	
Rob Bellinger, City of Kingston resident	Driver Education. Statistics throughout the draft LRTP show that the overwhelming majority of danger to vulnerable road users comes from vehicles and drivers. But multiple mentions of "user responsibility" in the draft LRTP are assigned to pedestrians and cyclists, especially users of micromobility e-devices. However, driver education and misbehavior remain huge issues. It is common to hear drivers say or comment online that they don't understand what to do at a traffic circle or even a four-way stop. Many drivers mistakenly believe that bikes and e-bikes aren't allowed on public roads. We tend to give drivers a pass or to create PR campaigns begging them to be safer. Perhaps we need to provide more and better instruction, in the absence of any formal retraining program.	The 2025 UCTC Unified Planning Work Program includes task code 44.27.02 which can potentially address this concern. The Ulster County Traffic and Pedestrian Safety Education and Outreach Program purpose is to approach to highway related risk reduction and improving the safety of the roadway environment in Ulster County. Components may include a public education/awareness outreach events and/or advertising campaigns that promote comprehensive highway safety and risk reduction through structured learning experiences and a coordinated media and marketing campaign. The effort will focus on locally specific high risk transportation concerns while also providing a backdrop for comprehensive traffic safety issues. The objective is to provide a high profile safety campaign series that will engage all age groups in risk reduction, injury prevention, transit use, and multifaceted highway safety. It will serve as a venue to partner with and support existing local traffic safety projects, to galvanize the County's leadership in traffic safety, and to raise the	No change	

Rob Bellinger, City of Kingston resident	Developing and Promoting UCAT. Long story short, UCAT needs to offer more frequent service that runs later, seven days a week. We must think of UCAT as an opportunity to serve all residents and visitors, not just as a charity service for the indigent. UCAT offers an ingenious, nation-leading, fare-free program -- but we are starving the system of riders by not running enough service and not promoting the service we do offer. Many people who would use the service for discretionary trips don't even know about it, or that it's free.	UCTC has committed significant resources to provide planning assistance to the Ulster County Area Transit system including the latest planning effort, UPWP Task 44.27.07 (known as the "Route Optimization Plan") that will provide recommendations on the redesign of UCAT's routes throughout its service area. UCAT and Ulster County Government have anticipated a 3 year implementation horizon after the project recommendations are finalized in December 2025.	No change	
Rob Bellinger, City of Kingston resident	Developing and Promoting UCAT. UCAT should serve the county's hierarchy of transportation needs. People should be able to get to the grocery store and medical appointments - something that is now threatened by the alleged cancellation of bus service to Kingston Plaza. But people should also be able to get to work 7 days per week. Otherwise, people are forced to own cars to participate in society, a contributing factor to the poverty many county residents are forced to experience.	UPWP Task 44.27.07 Route Optimization Plan will includes recommended service improvements. It will offer options between service frequency, area covered, and time of day service in various cost scenarios. UCTC also assisted Ulster County Government with the preparation and submission of a new mobility grant application. If awarded the it would provide a new micro transit service to supplement fixed route services and to reach underserved parts of the	No change	
Rob Bellinger, City of Kingston resident	Developing and Promoting UCAT. With the rumor presently spreading that UCAT has been evicted from the privately owned Kingston Plaza, we have a unique opportunity to return our bus terminal to Midtown Kingston, the most densely populated part of the city. I hope the LRTP can mention the possibility of collaboration with the City of Kingston to develop a midtown terminal/transfer station that is accessible via the Midtown Linear Park, maximizing the number of residents served. The proposed movement of the bus terminal/transfer point to DSS on Ulster Avenue is not acceptable.	Service changes affecting UCAT during the summer of 2025 are considered near-term disruptions, The loss of the Hub at the Kingston Plaza will be factored into Route Optimization Planning effort. An example would be to provide for routes that reach multiple destinations without a required change of buses. Some interlining will always be necessary and where best for this occur may be more than one area. At this time UCTC, UCAT and Ulster County Government have no plans or expectations to purchase property for a new transit hub or multimodal center; however, UCAT -- with UCTC's assistance -- is working on the location and design of a satellite transit maintenance facility for its fleet driven both by size of the fleet and electrification of	No change	
Rob Bellinger, City of Kingston resident	Developing and Promoting UCAT. UCAT must also minimize trip time and the number of transfers required to travel between common destination. We cannot ask our seniors and disable residents to spend hours getting to and from medical appointments and grocery stores.	UPWP Task 44.27.07 Route Optimization Plan includes recommendations for improving communications and marketing by UCAT.	No change	
Rob Bellinger, City of Kingston resident	Developing and Promoting UCAT. Additionally, to capture "choice" riders, UCAT must serve choice trips. Ulster County is known for its vibrant music scene and increasingly for its restaurants. However, it is currently impossible to take a bus home from dinner or a show, because most routes don't run after 6 pm. As a result, we have rampant drunk driving that creates unnecessary risk for road users, every night. Kingston residents have long asked for shuttle service up and down Broadway so that they can travel to businesses and medical offices. Instead, we have two confusing, circular routes that inexplicably reverse directions and swap names on Saturday, then don't run at all on Sunday.			
Rob Bellinger, City of Kingston resident	Developing and Promoting UCAT. To reduce VMT and pollution, UCAT should also serve large-scale events in the county, as it does for the Fourth of July fireworks in the City of Kingston. However, over the past year, shuttle service to the Ulster County Fair and Saugerties Garlic Festival were basically eliminated -- except for extending the New Paltz Loop to the fair, yet now the New Paltz Loop itself is now being eliminated. These events are not equitable if they can only be accessed by private car.			

Rob Bellinger, City of Kingston resident	Building a Better Countywide Bike Network. As evidenced by survey input, danger from drivers and cars remains the biggest threat to expanding the number of bicycle trips. I know multiple people who refuse to bike in Kingston because they fear drivers and therefore aren't confident that they can complete their trip safely. As a result, we end up with even more cars on the road. Connectivity of trail systems is key (LRTP Fig. 5.15), between and within towns. Kingston's Greenline system needs marked or signed connector routes (this has been studied but nothing has been implemented). No bike connections exist between Kingston and Woodstock and Kingston and Saugerties -- other than highway shoulders. There's no safe way for Kingston residents to access the mall area by bike (which may be addressed in part by the 9W Mobility Plan, but that doesn't cover Ulster Avenue). I occasionally ride a pedal-assist beak to Adams or Aldi up on Ulster Avenue, where drivers rage and honk at you even though they have an open passing lane. At the very minimum, areas where cyclists are forced to share the road in route to common destinations would benefit from signage reminding drivers that bikes may legally use the full lane.	Section 5 of the document includes a new focus on Active Transportation (page 63). Addressing remaining gaps in the network and fostering connections from the network to nearby activity centers are among the stated goals beginning page 71.		
Rob Bellinger, City of Kingston resident	Building a Better Countywide Bike Network. In the City of Kingston, the Washington Avenue corridor holds a promise for a two-way protected bikeway/cycle track, which could connect State Bicycle Routes 28 & 32, the O&W Trail, and the Greenkill Avenue Trail/Empire State Trail. At the end of the O&W Trail, where John Lynch was killed by a driver, signage instructs trail users to use the sidewalk to cross Schwenk Driver. Meanwhile, the sidewalks show root damage/heaving of several inches and are in violation of ADA requirements. Adding a cycle track to Washington Avenue would also calm the violent traffic on this key "minor arterial", which includes daily instances of road rage, excessive speeding, and red light running. Washington Avenue is a significant missing link in the trail system that deserves serious consideration.	UCTC, working closely with the Ulster County Planning Department and NYSDOT Region 8, advocated for and supported the design and construction of the O&W Trail. Project sponsors have similarly worked to address gaps in the local trail network, including establishing a safe crossing along Washington Avenue through an unsuccessful Transportation Alternatives Program grant application in 2024. UCTC was pleased to note in the FFY2026-2030 UCTC Transportation Improvement Program that NYSDOT Region 8 has included a \$15 million multi-year federal aid construction project to address operational and pedestrian concerns along Washington Avenue between Schwenk Dr. and Sawkill Rd. Preliminary Design is scheduled to begin in FFY2027; the NYSDOT Project Development Process will include multiple opportunities for stakeholders, including municipalities and the public, to provide input regarding the design of the project. PIN 881759. NYSDOT project PIN 812220 in Woodstock will also address pedestrain and bicycle improvements on Rt 212 from the hamlet west to Bearsvillw as part of a \$28 million bridge reconstruction project. These are but two recent examples of major investments in improving the bicycle network in Ulster County.	No change	
Rob Bellinger, City of Kingston resident	Building a Better Countywide Bike Network. Ulster County also needs to address winter maintenance of paved trails and bike lanes. As the LRTP indicates, many or all serve as transportation facilities, as 40% of current bike trips are non-recreational. We don't close roads in the winter, but we effectively shut down trails and sidewalks. This leads to unnecessary reduction of bicycle and pedestrian trips in colder months and contributes to the current 90% private	Winter maintainance needs are addressed by the jurisdicitional owner of the facility according to local needs and preferences, available resources, and overriding stipulations of the funding source used to construct and maintain the facility.	No change	
Rob Bellinger, City of Kingston resident	Trailways. Trailways provide reliable service but frequently increase fares. Could fares be capped if Trailways receives NYSDOT and/or FTA funding? I have also noticed that Trailways charges it's \$2.99 booking fee on every intra-county trip. Thisfee should be eliminated. There is a small but significant population of intra-county commuters (e.g., Kingston to Rosendale, Kingston to New Paltz) who rely on Trailways because UCAT is either unreliable or offers schedules that are incompatible with their work or school schedules.	NYSDOT issues a competitive 5 year contract to award regional commuter service in the Mid Hudson Valley to qualified contractors; NYSDOT and the FTA are responsible for the conditions within that contract	No change	

Rob Bellinger, City of Kingston resident	Rail Freight. Even our trash drives more than it has to. While the West Shore Railroad passes through Ulster County, it would appear that very little rail freight is delivered or picked up within the county. There is a huge opportunity to reduce pollution, reduce VMT, reduce congestion, and address the landfill crisis by shifting our long-distance trash hauling to rail. Perhaps there is room for collaboration with UCRRA and municipalities.	Comment noted. The Mid Hudson Valley TMA Freight Analysis examined regional commodity flows in detail including engagement with major freight stakeholders.	No change	https://www.dutchessny.gov/FreightAnalysis.pdf
Rob Bellinger, City of Kingston resident	Rail Freight. For decades, there has been a growing regional trend towards moving municipal solid wasted (MSW) and construction and demoltion debris (C&D) by rail. However, everything is trucked out of Ulster County. As a Washington Avenue resident, I see, hear, and smell dozens of trash-hauling trucks from Kingston, Rosendale, and New Paltz every day, spewing black diesel exhaust as they transit a residential neighborhood. We should get these trucks off the road and get our trash onto the rails -- this is a matter of environmental justice just as much as it is reducing VMT and congestion. Perhaps the LRTP can			
Rob Bellinger, City of Kingston resident	All-season vehicle idling is incredibly common in Ulster County. For example, people leave their car running in the Plaza lot while they shop at Hannaford. Education and enforcement could help eliminate this unecessary pollution.	Comment noted.	Added "litter and odors" to the list of "potential impacts to the natural and human environment that may be affected by various actions associated with the 2050 LRTP" list on page 96	
Rob Bellinger, City of Kingston resident	Litter degrades and further denigrates the experience of vulnerable road users. On my residential stretch of Washington Avenue, drivers toss beer bottles, coffee cups, fast food containers, lotto tickets, cigarette butts, and all types of packaging out of their cars - on a daily basis. The few times I've attempted to ride State Bicycle Route 28 toward Woodstock, I found apple cores, chewing tobacco tins, and gum wrappers on the shoulder. We need to make all forms of transportation safe and comfortable. Walking and biking in drivers' garbage is not comfortable. I would love to see anti-litter campaigns and/or enforcement	UCTC will add litter and odor to the list of "potential impacts to the natural and human environment that may be affected by various actions associated wit hthe 2050 LRTP" list on page 97. It has been noted at previous Ulster County Traffic Safety Board meetings that some proportion of litter found near the highway is likely falling or blowing from passing garbage trucks, potenitally presenting an opportunity for future engagement and problem solving.		
Rob Bellinger, City of Kingston resident	While Ulster County is "graying" overall, recent population reports have not mentioned the trend of younger or mid-career professionals moving from large cities to Ulster County to engage in remote and/or hybrid work. In my household, we have one hybrid worker and one fully remote worker. These workers tend to be educated, prefer denser urban environments, and were comfortable using transit in their previous homes. They would likely appreciate the LRTP's commitment to diverse transportation modes including bikes and transit, as well as the goal of reducing VMT. They would also be comfortable using UCAT, if they knew about it and if the service ran later.	UCTC utilizes the latest data from the US Census to track demographic trends in the region and leverages efforts by our partners to analyze data. To date, while we find some evidence supporting the in-migration of young professionals, out-migration of residents continues to be an issue for the entire Hudson Valley region. While evidence suggests that those migrating to the region may have greater household income than those leaving, the conclusions of the impacts of these changes are far less certain, especially regarding the behaviors that characterize their individual consumer choices and preferences, which are anecdotal at best.		
Tany Garment, City of Kingston resident	How many draft will you be producing?	This current iteration is the only draft version. We will address comments and make any necessary revisions to this draft with accompanying comment response sheet [Appendix F], which will then go to the UCTC Policy Committee for approval in late September.		

Tanya Garment, City of Kingston resident	Here's one section that needs editing. Page 112: "ITS has consistently been integrated into recent UCTC-supported projects wherever appropriate, and as technology continues to develop UCTC is committed to pursuing opportunities to leverage the opportunities that become available. For instances, as part of the Broadway Streetscape Project, traffic signals were optimized and coordinated to improve transit and traffic flow from St James Street to Foxhall Avenue. Additionally, NYSDOT has a statewide Signals Laboratory which evaluates emerging signals technology and is available to support NYSDOT regions in rolling out advanced signals technologies as part of statewide deployment." My comment: Bicycles and pedestrians are traffic. Regarding Pedestrians: The traffic signals on Broadway were optimized for vehicular traffic specifically, at the expense of pedestrians' time - with in including of pedestrian actuated signals (colloquially called Beg Buttons) rather than automatic walk signals for pedestrians when the cars get the light in the same direction. Regarding Bicycles: The traffic signals are times to get vehicles through many lights if they drive at the speed limit. Cities that are more serious about minimizing VMT time the lights to <u>get bicyclists through multiple intersections, and encourage cars to drive slowly.</u>	The Draft 2050 LRTP seeks to balance infrastructure investment decisions among all modes of travel. The UCTC LRTP supports exploring new technologies that can improve mobility among all users, as well as implementing traffic calming and enforcement measures in communities and neighborhoods to increase safety.		
Tanya Garment, City of Kingston resident	I understand that this is kind of just a very much in line with the one from 2020. We're in a position now, federally, where, looking at this and all the things that I'm disappointed in this, it makes me wonder how much the language is to appease the federal government with being careful not to say things like reducing vehicle miles traveled. But I also don't see anything in here that will... that will actually reduce vehicle miles traveled.	UCTC is required to comply with all relevant federal laws, rules and directives as it fulfills its responsibility to complete this LRTP; failure to do so would jeopardize UCTC's standing as the recognized MPO for the Kingston Urbanized Area. Reducing VMT is not a federal requirement of MPOs or LRTPS, nor is it a stated goal of the UCTC LRTP or any UCTC document. VMT is nonetheless tracked as a performance metric on page 112 Table 7.9. Increasing mobility among all users by improving their travel options so that they can travel safely and affordably use their travel mode of choice are among the main goals of the UCTC LRTP. As such, Mode Share is tracked as a performance metric as shown on page 110, Table 7.7 We would also note that VMT is heavily dependent on land use, increased density and walkability are some key factors. These policies emerge in the active transportation section of the LRTP as well as the efforts of both the County and the State to encourage TOD development and growth around existing centers	No change	
Tanya Garment, City of Kingston resident	We... like, there are things... there's not enough talk in this about, pedestrians, how we deal with congestion, the answers to that are really about keeping cars moving. Even the, Broadway Streetscape is a great example, and it's pointed to in this, where we have the, signal optimization. And the signal optimization, I think that people should really understand what that signal optimization was all about. That was about keeping the cars moving. It's timed, at the maximum speed limit, signal optimization can be used to encourage more bicycle riding and pedestrian use, but because it was a NYSEDA grant, and they have this is this dinosaur of a program where they want to reduce emissions when we're moving towards electric by inducing demand for cars, by making it as easy as possible to go through and prioritizing cars on the Broadway streetscape. We made it so that cars can get through many lights. What we should have done is, if we really wanted to reduce vehicle miles traveled, and...[refer to the recording for further expression of commentor's sentiment]	Improving user safety and accommodating bicyclists and pedestrians were among the stated goals of the Broadway Streetscape Conceptual Design Study, a discrete corridor management study completed by UCTC in 2015. Signal upgrades were identified as a solution to both improve traffic capacity and pedestrian safety in the corridor. The City of Kingston was responsible for implementing the findings of that plan. Evidence supports that an improvement of safety among all users and a decrease in travel time were achieved, although UCTC and the City of Kingston will continue to monitor conditions along the corridor over time. UCTC also notes that the City of Kingston prepared a bike/ped master plan that offered the opportunity to address these issues. The 2050 LRTP will contain a reference to the use of LPI's that is consistent with both safety and convenience for pedestrians. The UCTC LRTP supports exploring new technologies that can improve mobility among all users, as well as implementing traffic calming and enforcement measures in communities and neighborhoods to increase safety.	No change	

Tanya Garment, City of Kingston resident	We need to be moving away from, especially in densely populated areas, moving away from ...pedestrian-actuated signals, so you will not get a walk signal unless you've asked permission. So you just can't keep walking.... It's bad, we need to not use it, we need to not just spread like a virus throughout the county using it for the same way.	Signal timing and design is at the discretion of the facility owner and should utilize available technology to balance interests of all users of the facility.	No change	
Tanya Garment, City of Kingston resident	In here, it says that, and I'm thankful, that it says that we need to improve service in our densely populated areas of New Paltz and Kingston. But look what we're doing, like, UCAT just announced, and the route optimization plan also, want to get rid of the new pulse loop, because UCAT claims it has poor ridership. It has poor ridership because UCAT has poor communication. And they don't have signage, and a lot of people don't know about it. It's a very badly run agency, and we need to... we can't just say, oh, well, there's bad ridership. We need to actually say, no, it's an important group. We need to give, in the densely populated areas, people a reason to jump on the bus. We need to...	UCTC is committed to providing UCAT with planning assistance as resources allow. As such, UCTC has funded a number of transit-related plans to assist UCAT with route, facility and other capital and service planning. The latest initiative - the Route Optimization Plan - will provide service recommendations that will see to improve coverage and service frequency throughout the system within the resources available.	No change	
Lisa Mitten, City of Kingston resident	Regarding Goals, surprised that there is not a Greenhouse Gas Emission reduction goal, considering the other greenhouse goals adopted by other Ulster County agencies given our green priorities here in Ulster County, and that greenhouse gas emissions in the transportation sector is the largest emitting sector in New York State..	The document, through projects listed on the UCTC Transportation Improvement Program, supports many projects that work to reduce GHGEs. Projects that promote active transportation and transit and invest in zero-emission vehicle infrastructure and deployment can have the benefit of reducing vehicle miles traveled (VMT) and/or	No change	
Lisa Mitten, City of Kingston resident	And I also just want to thank, the recognition of the connect... building connectivity between the rail trail system and communities, because that's what we've experienced, I work in New Paltz, a lot of discussion around, we have all these amazing rail trail systems, and how do we get to them safely from where we live and work?	Section 5 of the document includes a new focus on Active Transportation (page 63). Addressing remaining gaps in the network and fostering connections from the network to nearby activity centers are among the stated goals beginning page 71.	No change	
Ella Ray Kondrat, New Paltz resident	I believe that DOT prioritizes the movement of cars on Main Street in New Paltz over the safety and accessibility of people walking, as well as biking in the... in the town. And I would really I really think it would be good to have a statement from the county that explicitly says that When it comes to making decisions about Infrastructure safety is going to be prioritized over the movement of cars, because right now... it's not that way at all, and, you know, we're making little movements in that direction, but...you know, I feel impatient because I feel like we could be...we could be doing more and making larger steps, because people... a lot of people are in other places. Anyway, I'm kind of... I just wanted to say that, and I also would really like to see a goal for zero traffic fatalities for the	The 2050 Plan includes a discussion of the Safe System Approach that will guide the future plans and investments of UCTC. Similar comments and concerns have been expressed by the public and are captured in the most recent draft of the NYSDOT Transportation Master Plan for 2050. In response, the plan includes a number of goals that address transportation safety; accessible and affordable transportation choices; and a reliable and efficient transportation network.	No change	
Rose Quinn, City of Kingston resident	First, on page 13, I'm definitely very happy to see in the presentation the, the, that safety is, being prioritized. However, under the objectives column In page 13, in your vision, it says, reduce The number of fatal and serious injuries. Reduce The number of fatalities injuries to pedestrians and bicyclists. ...That should not be reduced. But I'm... I can... I'm going to say this as emphatically as I'm going to say it. This should be zero. That should be the goal.	see comment above RE: vision zero	No change	
Rose Quinn, City of Kingston resident	I'm very encouraged to hear that the county is finding different ways to measure vehicles on our roadways, because I, for a little while, have been saying that I think that vehicle miles traveled is fraught when you live in an area with so many transient population, we have this large SUNY, we have a huge, population of tourists, and we also have a lot of part-time workforce that I'm not completely, convinced are being, accounted for correctly.	Comment noted.	No change	

Rose Quinn, City of Kingston resident	in terms of public transportation and UCAT. Now, I am a UCAT rider when I can be. I'll tell you part of the reason why I don't ride UCAT more often is it not only does not come as often as I needed to for work, it's totally unsynchronized with my and most people's work schedules this evening bus. But it's very dangerous. It's a very dangerous wait. Waiting on Route 28, which is what you have to do. I try, by the way, I do try and call dispatcher, you know, and then tell them I'm going to be waiting someplace that's... but they often don't answer. Saturday, that was definitely the case. When I called dispatch to... after being told. pretty emphatically that if I would just call, I would get, some results. Nobody answered, and I was standing on Route 28 across the street from the shop where I work, moving about into some of the most terrifying circumstances. Frankly, with my bike. Still trying to be visible to the bus....I want to say that as a rider, that to not have my safety considered as a priority, is...difficult, and, a little insulting.	System Performance Report for Transit Safety is included in Appendix D of this report, Section 5; there were no reported fatalities or injuries on UCAT buses during the reporting period (2024). UCTC has also included transit safety as a performance measure (page 110) and will continue to track this metric over time.	No change	
Taylor Jaffe, Catskill Mountainkeeper	Taylor Jaffe with Casco Mountain Keeper, and we also anchor the Rethink Group 17 alliance and campaign, so over in...Orange County, and also Sullivan County, we've got a \$1.4 billion highway proposal for just 20 miles of highway, to unnecessarily expand it. So one piece I want to bring here to the Ulster County Transportation Council is, you know, maybe working with your, partners in the transportation management area to try to figure out how we can any portion of that \$1.4 billion to some of these safety and other priorities, that I think could use through 2050. So it's certainly a significant, level of investment just over in Orange County, and I think it is part of this whole region, so...ant to lift that up, and also wanted to amplify, some of the comments we've heard tonight. I think Vision Zero makes total sense, and I think that also aligns with some of the language coming out of the Department of Transportation, their 2050 mask...I think reducing VMT is a great goal, and I think adding that language would certainly be useful, as well as, you know, maybe language about increasing the percentage of spending on multimodal transportation. So that way we can kind of be both, you know, getting more folks into, you know, buses and focusing spending there while getting cars off the road and increasing safety overall. And just to go off what Tim was saying, and I left that part out, but it's so important, I would like to see more talk of workforce investment in terms of bus drivers, in terms of people who are going to help build out arts, particularly bus drivers. And maybe trying to figure out how we can incentivize, bus driver positions in Ulster County. Like, what can we offer people to get... I realize that the salary is going to be a tricky one with cost of living in Ulster County, but maybe there's some other	The Financial Plan included in Section 8 demonstrates how the adopted LRTP can be implemented over the 25 year planning horizon. UCTC uses a fiscally conservative calculation that assumes no significant increases in state and federal aid above the 2024 baseline actual levels. UCTC has further emphasized the need for applying for and securing discretionary, or competitive, aid sources to help supplement formula funds available for multimodal projects in the UCTC planning area. Workforce Development is being done by several entities within the County including Office of Employment Training, and UCAT to address vacancies	No change	
Lisa Mitten, City of Kingston resident	I just wanted to add two other comments. First...you talked about our population aging. I just want... To ask a question about the specific ways in which this plan supports an aging population.	Mobility and Safety objectives outlined in Section 2 state the need for expanded infrastructure that will make walking and biking easier and safer within the planning area.	No change	

Lisa Mitten, City of Kingston resident	And on a related question, I also sit on the Ulster County Community Services Board, and we're doing a behavioral health assessment right now, and one of the things that, ... one of the challenges it's facing by people who people with mental health conditions, for example, who live in hotels in Ulster County, who might be moving... I'm not really on track of what's going on at the new facility across circle, traffic circle, but, I'm just wondering how this study has layered, like, people living in motels Temporarily, with access to, like, pharmacies, medical, ... dose?	The UCTC Coordinated Human Services Transportation Plan is the foundational document developed to address transportation services to people with disabilities and the elderly. The Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities program (5310) is a federal grant program overseen by the Federal Transit Administration (FTA) to improve mobility for seniors and individuals with disabilities. The 5310 program requires funding recipients to develop a Coordinated Human Services Transportation Plan (Coordinated Plan), which is developed with human services transportation operators and clients. Projects must be directly included in the Coordinated Plan or must address a stated need or strategy included in the plan to be eligible for funding. Learn more at https://uctc.ulstercountyny.gov/projects/coordinated-public-transit-human-services-transportation-plans-2/	No change	https://uctc.ulstercountyny.gov/projects/coordinated-public-transit-human-services-transportation-plans-2/
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