

GOING PLACES

The 2020-2040 Long-Range
Transportation Plan for the
Herkimer-Oneida Counties
Transportation Study (HOCTS)

November 1, 2019



CREDITS PENDING

HOCTS reserves the right to change or modify any photographs, graphics, or maps, in this document prior to the publication of the final LRTP 2020-2040.

Welcome to Going Places, the Herkimer-Oneida Counties Transportation Study's 2020-2040 Long-Range Transportation Plan. Please contact us if you would like to receive information in your preferred language.

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Arabic

رېمېكريه عطاقم يف لقنللا ةساردل ىدملا ةلويوط لقنللا ةطخ ، لاقنللا نكامأ يف مكب أب حرم
ةلصفملا ةلصفملا كتغلب تامولعملا يقلت يف بغرت تنك اذا انب لاصتالا ىجري ادينوآ

Russian

Добро пожаловать в Going Places, План транспортных перевозок на дальние расстояния 2020-2040 гг., Разработанный Исследовательским округом Херкимер-Онеида. Пожалуйста, свяжитесь с нами, если вы хотите получать информацию на предпочитаемом вами языке.

Serbo/Croatian

Dobrodošli u Going Places, plan transporta velike udaljenosti Herkimer-Oneida županije 2020-2040. Kontaktirajte nas ako želite primati informacije na željenom jeziku.

Spanish

Bienvenido a Going Places, el plan de transporte de largo alcance 2020-2040 del estudio de transporte de los condados de Herkimer-Oneida. Póngase en contacto con nosotros si desea recibir información en su idioma preferido.

Vietnamese

Chào mừng bạn đến Địa Điểm, Nghiên cứu về Giao thông vận tải của các Hạt Herkimer-Oneida Từ 2020-2040. Vui lòng liên hệ với chúng tôi nếu bạn muốn nhận thông tin bằng ngôn ngữ ưa thích của bạn.

**GP&L RESOLUTION OF
APPROVAL PENDING**

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executive summary

The Herkimer-Oneida Counties Transportation Study (HOCTS) is the Metropolitan Planning Organization for Herkimer and Oneida Counties, responsible for a broad range of transportation planning activities in the region.

Going Places is HOCTS' Long-Range Transportation Plan (LRTP). It lays out a fresh vision for the region's transportation assets and services for the next 20 years, with a horizon year of 2040.

It updates HOCTS' previous (2014) LRTP. All of HOCTS' day-to-day activities are guided by the goals, objectives, priorities, and investment strategies outlined in its LRTP.

The main challenge for the HOCTS region will be to preserve the existing infrastructure to allow the transportation network to provide for tomorrow's mobility needs. Therefore, the vast majority of the region's transportation investment over the next 20 years will focus on state-of-good-repair maintenance and operations. However, constraints in the traditional sources of funding for transportation system investment mean that it is uncertain whether the required resources will be available. This is not limited to the HOCTS region – it is a recognized problem both statewide and nationally. While the solutions that will ultimately be enacted are unclear, Going Places discusses alternative funding options that are part of the national conversation about transportation infrastructure funding.

Aside from meeting basic maintenance needs, Going Places envisions taking action to ensure that HOCTS and its partners in the region are well-positioned to meet new challenges as they arise. The Plan aims to discuss the current and future transportation network, in accordance with the regional needs. It also includes a set of aspirational capital projects – projects that are identified as valuable, but not formally programmed for funding. Finally,

Going Places outlines a series of near-term in-depth studies to be undertaken, addressing emerging issues such as:

- The unique challenges raised by the on-road presence of Agricultural Vehicles in the HOCTS region;
- How the region can best leverage the national trend of rapid developments in Micromobility;
- Strategies to harden the region's infrastructure against the effects of extreme weather; and
- How to best prepare the region's infrastructure – including our communications networks – for the buildout of Connected and Autonomous Cars.

Going Places was prepared in the new Performance Based era of transportation planning in the U.S. The Plan describes HOCTS' commitments to supporting New York's statewide Performance Measures in areas such as safety, state-of-good-repair, and reliability. Progress towards Performance Targets will be monitored over time, and ultimately will help HOCTS in setting priorities in the future.

Long-Range Transportation Plans are periodically updated. Going Places will be revisited no later than 5 years after it is adopted by HOCTS. The HOCTS region has been buffeted by economic headwinds in recent decades, and has a number of active economic development efforts to attract and nurture growth industries such as Nanotechnology, Unmanned Aerial Systems, and Advanced Manufacturing. It is hoped that when this Plan is reviewed during HOCTS' next LRTP update, it will be recognized as having made a substantial contribution, by catalyzing transportation investments that support the region's efforts to achieve its potential.

acronyms

AASHTO	American Association of State Highway and Transportation Officials
AMPO	Association of Metropolitan Planning Organizations
CAV	Connected and Autonomous Vehicle
CBO	Congressional Budget Office
CFR	Code of Federal Regulations
CHIPS	Consolidated Local Street and Highway Improvement Program
CMAQ	Congestion Management Air Quality
CNYRTA	Central New York Regional Transportation Authority (Centro)
EV	Electric Vehicle
FAST Act	Fixing America's Surface Transportation Act of 2015
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GP&L	HOCTS' Governmental Policy and Liaison Committee
HOCTS	Herkimer-Oneida Counties Transportation Study
HSIP	Highway Safety Improvement Program
HTF	Highway Trust Fund
ITS	Intelligent Transportation Systems
LEP	Limited English Proficiency
LOTTR	Level of Travel Time Reliability
L RTP	Long-Range Transportation Plan
MEP	Modernization and Enhancement Program

MPO	Metropolitan Planning Organization
MVCC	Mohawk Valley Community College
NHFP	National Highway Freight Program
NHPP	National Highway Performance Program
NHS	National Highway System
NYS	New York State
NYS DOT	New York State Department of Transportation
ROI	Return on Investment
STBG	Surface Transportation Block Grants
STOA	State Transit Operating Assistance
TAMP	Transportation Asset Management Plan
TCC	HOCTS' Transportation Coordination Committee
TERM	Transit Economic Requirements Model
TIP	Transportation Improvement Program
TNC	Transportation Network Company
TPC	HOCTS' Transportation Planning Committee
TTTR	Truck Travel Time Reliability
U.S. DOT	U.S. Department of Transportation
UAS	Unmanned Aerial System (i.e. drone)
ULB	Useful Life Benchmark
UPWP	Unified Planning Work Program
VMT	Vehicle Miles Traveled

section 1 introduction

1.1 HOCTS' ROLE IN HERKIMER AND ONEIDA COUNTIES

Herkimer and Oneida Counties, located within New York State's Mohawk Valley, combine to form a region with a wide diversity of communities and landscapes, rich in historical significance dating to the pre-colonial era (see Figure 1.1).

The Herkimer-Oneida Counties Transportation Study (HOCTS) is the Metropolitan Planning Organization (MPO) responsible for planning the two-county region's transportation system.

Like all of the country's approximately 400 MPOs, HOCTS engages in planning processes guided by the "Three Cs" (Continuing, Cooperative, and Comprehensive), as enshrined in the enabling federal law.

MPOs vary greatly in size, geography, population, growth trends, the economic and social activities within their regions, and the nature of their transportation systems. New York State is home to 14 MPOs, which are the venues for managing the major challenges and

opportunities facing the transportation system in each of their regions.

HOCTS serves the Herkimer and Oneida Counties region through a broad set of ongoing transportation planning activities. HOCTS is charged with planning the region's transportation system, with specific focus on disbursing federal funding. Operations of the transportation network, however, are performed by HOCTS' partner entities in both the public and private sectors. For instance, Centro operates some of the region's public bus services, and the New York State Thruway Authority operates Interstate 90, the region's major east-west roadway corridor.

MPO planning activities are, by design, open processes. HOCTS meets and goes beyond baseline federal requirements by interacting with stakeholders in various ways, both formal and informal, as well as routinely engaging with the wider public in Herkimer and Oneida Counties.

MPO requirements vary depending on several factors. One is having an urbanized area over 200,000 population, and another is being in non-attainment with federal air quality standards. Neither of these apply to the HOCTS region

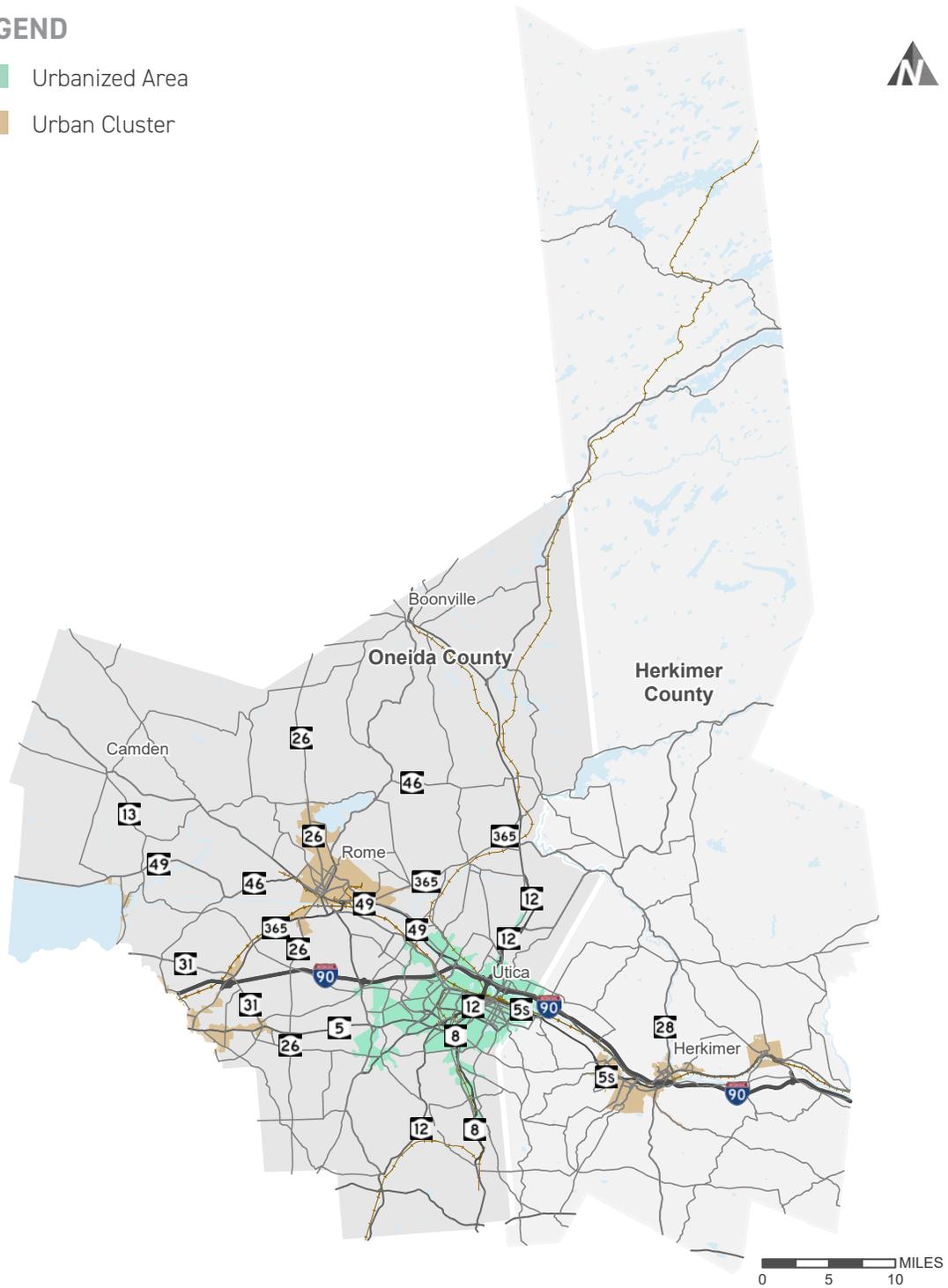
“[It is] national policy that the MPO designated for each urbanized area is to carry out a continuing, cooperative, and comprehensive performance-based multimodal transportation planning process”

U.S. Code (23 CFR § 450.300)

FIGURE 1.1: Overview of the Utica Urbanized Area and outlying Urban Clusters in Herkimer and Oneida counties

LEGEND

- Urbanized Area
- Urban Cluster



The Oriskany Street (NYS Route 5S) Safety Project is an active project on HOCTS' Transportation Improvement Program, led by NYS Department of Transportation Region 2. It utilizes NY state and Federal funding, leveraged with private investment. The completed project will create an urban boulevard entry to the City of Utica, address priority incident locations for accidents, create a bicycle and pedestrian friendly street environment, and connect previous infrastructure investments.



FIGURE 1.2: View of Oriskany Street improvements in downtown Utica.

GET IN TOUCH

HOCTS staff is available to discuss any suggestions or concerns about the region's transportation system, at any time, whether as part of a specific planning study or effort or more generally.

The HOCTS office is located in historic Union Station in downtown Utica.

Staff is able to receive input from any interested stakeholder or member of the public, in English or whichever language you are most comfortable communicating in.

HOCTS' formal Public Participation Plan can be accessed at:

<https://www.ocgov.net/oneida/sites/default/files/hoctsmmpo/PublicNotices/HOCTS%20PPP%20update%202016%20v1.4.2%20FINAL.pdf>

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1.2 WHAT IS A LONG-RANGE TRANSPORTATION PLAN?

MPOs produce three major Work Products with different time horizons, each of which is mandated by federal legislation.

This document, *Going Places*, is HOCTS 2020-2040 Long-Range Transportation Plan (LRTP). The primary MPO Work Products are as follows:

- **The Unified Planning Work Program (UPWP)¹**
A short-horizon document that identifies specific activities that will be performed in the next two-year period, and serves as a near-term budget.
- **The Transportation Improvement Program (TIP)²**
A mid-range (3-5 year) document that lists priority projects to enhance the region's transportation system
- **The Long-Range Transportation Plan (LRTP)** A document with a horizon of at least 20 years into the future.

All three of these documents must be fiscally constrained, meaning that planned investments are in balance with reasonably expected financial resources.

HOCTS has maintained a long-range transportation vision since its founding in the 1960s, with *Going Places* the newest edition. Prior to national MPO planning processes being instituted in the 1960s, earlier transportation planning

¹ <https://ocgov.net/sites/default/files/hoctsmmpo/UPWP/2019-20/HOCTS%20UPWP%202019-20%20W%20RES.pdf>

² <https://ocgov.net/sites/default/files/hoctsmmpo/TIP/2020-25/TIP%202020-25%20FINAL%20DRAFT%20050619.pdf>

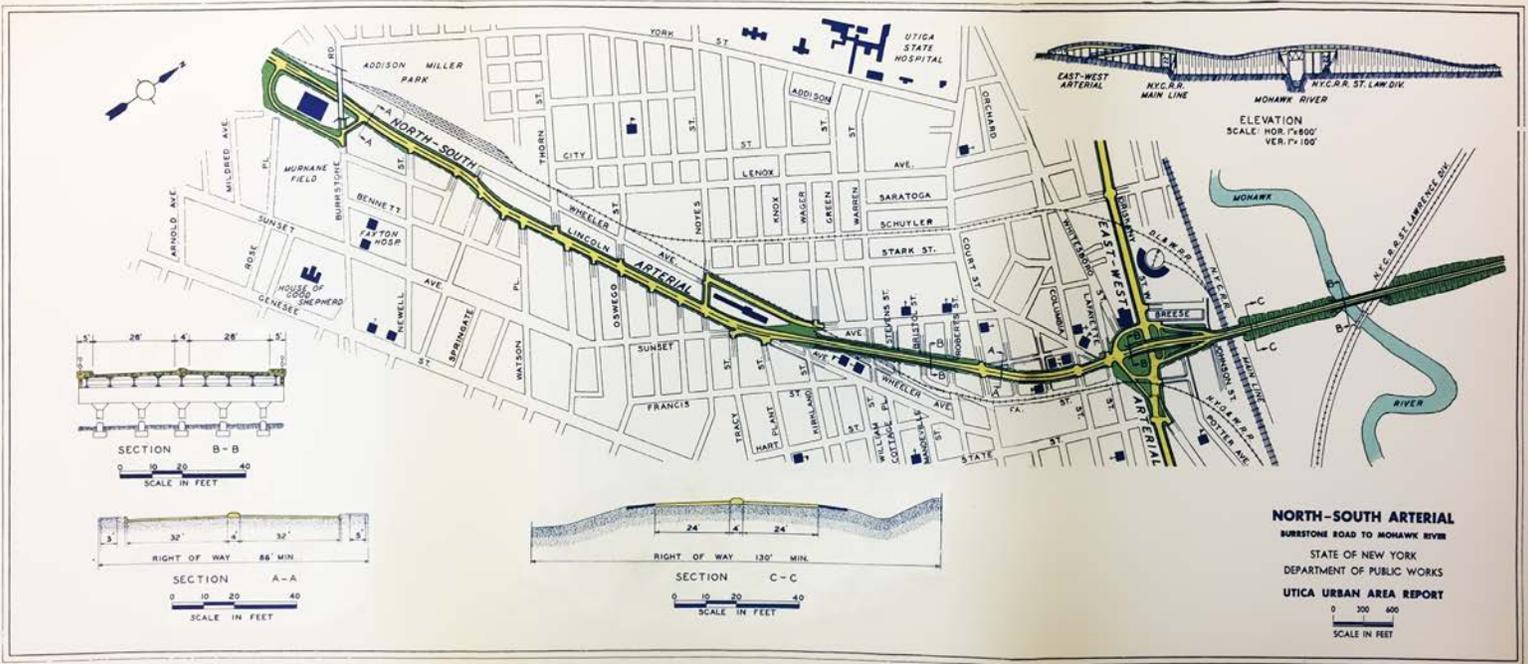


FIGURE 1.3: Mid-20th century conceptual designs for the North-South Arterial
 Reproduced from the Utica Urban Area Report (1950)

efforts in the region include planning studies for the NYS Thruway and the 1950 Urban Area Report for Utica, which proposed the region’s North-South Arterial Highway (Routes 8/12); see Figure 1.3.

1.3 FEDERAL TRANSPORTATION PLANNING REQUIREMENTS

Over the past six decades, there have been regular revisions to the basic “Three C” (Comprehensive, Cooperative, and Continuing) framework through which MPOs plan their region’s transportation system.

The most recent update comes from the 2015 federal legislation known as the FAST Act (see next page). Prior to this, the previous major piece of federal transportation was 2012’s MAP-21 law (Moving Ahead for Progress in the 21st Century). MAP-21 introduced the new requirement for MPOs to do Performance-Based Planning in support of decision-making about the transportation system. This involves setting Performance Measures, as well as Performance Targets, and engaging in actions to achieve the targets.

The FAST Act has brought heightened focus on performance-based, outcomes-focused planning. Planning for freight movements is further emphasized. MPOs are also now required to consider Resiliency, Reliability, and Stormwater impacts in their LRTPs, as well as Enhancing Travel/Tourism. These new planning factors are addressed in later sections of this document.

THE IMPORTANCE OF A LONG-RANGE TRANSPORTATION PLAN

The Long-Range Transportation Plan (LRTP) has the longest time horizon of any of HOCTS’ Work Products. Going Places looks 20 years into the future for Utica and its surrounding region, and MPOs of larger and more complex metropolitan areas must plan even further into the future.

Federal law requires HOCTS’ LRTP to be updated no less frequently than every five years.

During the next five years, HOCTS’ other planning efforts all must be consistent with the LRTP’s vision. Going Places is HOCTS’ primary opportunity for fresh thinking about the future of transportation in Herkimer and Oneida Counties.

FAST ACT | VITAL STATISTICS



FULL NAME

Fixing America's Surface Transportation Act



BIPARTISAN SUPPORT

Passed 83-16 in the U.S. Senate, 359-65 in the House of Representatives



SCOPE

Areas addressed by the FAST Act include highways, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs



RATIFIED

December 4, 2015



SCALE

Authorizes \$305 billion in federal funding, for the period 2016 to 2020

1.4 TRANSPORTATION PLANNING IN NEW YORK STATE

Transportation Planning in the HOCTS region is guided by and consistent with New York's priorities for the transportation network. HOCTS staff routinely work together with counterparts at the State level to ensure coordination between the regional and state levels of transportation planning. Of paramount importance are the "Forward Four" guiding principles established by the State:

- **Preservation First** The primary focus is on Safety and Preservation
- **System not Projects** Make most effective use of the current system, considering transportation projects in the context of the wider system

- **Maximize Return on Investment (ROI)** Invest resources to produce greatest benefits in the current resource-constrained environment
- **Make it Sustainable** Incorporate sustainability considerations into decisions and actions.

NYS prepares a Statewide Transportation Improvement Program³, a process which involves consultation with HOCTS and the other MPOs in New York State. The State's Transportation Master Plan⁴, published in 2005, is due to undergo a multi-year updating process beginning in 2020. This will follow on from the State's publication in August 2019 of the first Statewide Freight Plan.⁵ Other relevant efforts at the State level include New York's Energy Plan,⁶ Rail Plan,⁷ Transportation Asset Management Plan,⁸ Mohawk Valley Regional ITS Architecture,⁹ Regional Economic Development Councils, planning efforts,¹⁰ and Climate Change policymaking¹¹.

3 <https://www.dot.ny.gov/programs/stip>

4 <https://www.dot.ny.gov/portal/page/portal/main/transportation-plan/repository/masterplan-111406.pdf>

5 https://www.dot.ny.gov/portal/page/portal/content/delivery/Main-Projects/projects/P11618881-Home/P11618881-repository/NYS%20Freight%20Plan%20September_2019.pdf

6 <https://energyplan.ny.gov/>

7 <https://www.dot.ny.gov/divisions/policy-and-strategy/planning-bureau/state-rail-plan/repository/State%20Rail%20Plan%202009-02-10.pdf>

8 <https://www.dot.ny.gov/programs/capital-plan/repository/Final%20TAMP%20June%2028%202019.pdf>

9 <http://www.consystec.com/newyork/mohawkv/web/files/projectdocs/NYSDOT%20R2%20Architecture%20Document-%20Final.pdf>

10 <https://esd.ny.gov/regions/mohawk-valley> and <https://regionalcouncils.ny.gov/mohawk-valley>

11 <https://www.governor.ny.gov/news/statement-governor-andrew-m-cuomo-passage-climate-leadership-and-community-protection-act>

1.5 HOCTS' PLANNING PARTNERS

The urban transportation planning framework created in the 1960s placed the cooperative nature of the process at the core of the system.

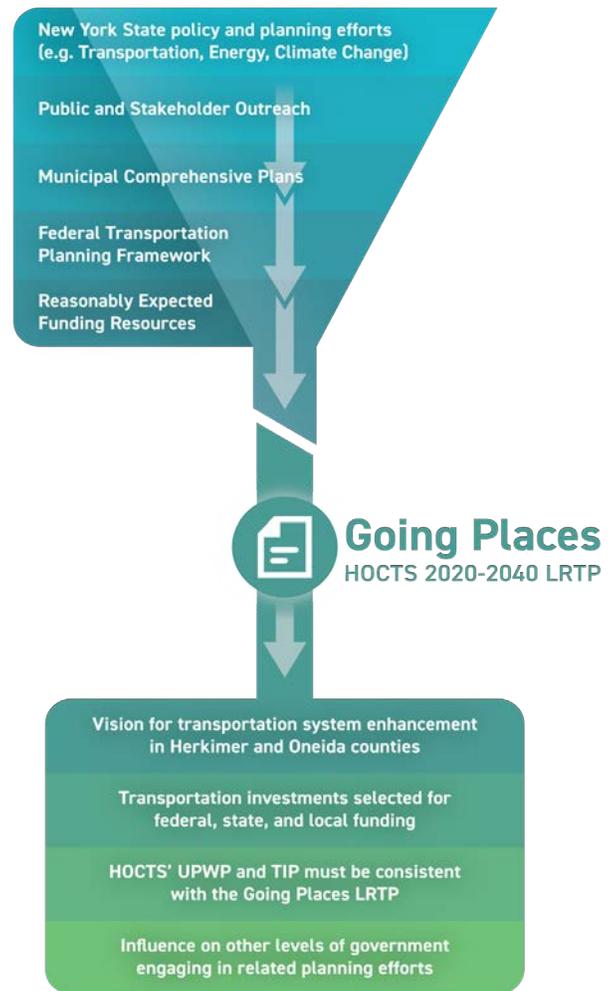
In this spirit, *Going Places* has been prepared as a partnership between HOCTS and our partners in planning the region's transportation system, with a three-tier approach.

The first tier of partners is the membership of the Technical Committee for overseeing the preparation of *Going Places*:

- Birnie Bus Service, Inc. (third-party contracted operator of Oneida County Rural Transit and various human services transportation)
- Central New York Regional Transportation Authority (Centro)
- City of Rome
- City of Utica
- Federal Highway Administration
- Herkimer County Highway Department
- New York State Department of Transportation
- New York State Thruway Authority
- Oneida County Planning Department
- Oneida County Department of Public Works
- Parkway Center (Oneida County's third-party contractor for mobility management)

Members of the Technical Committee met regularly throughout the second half of 2019 to oversee the development of this Plan.

The second and third tiers of HOCTS' partners are stakeholders (which are external organizations, whether public or private), and the wider public in Herkimer and Oneida Counties. Section 9 describes the Outreach activities to engage stakeholders and the public as part of the development of the *Going Places* long-range transportation plan.



“Insufficient investments have resulted in declining system conditions and a growing backlog of needs in order to bring our system to a state of good repair. Simply stated, we have more needs than money—both our federal and state resources are constrained.”

New York State Department of Transportation

(<https://www.dot.ny.gov/divisions/operating/opdm/local-programs-bureau/srts/repository/guiding%20principles.pdf>)

section 2 vision & guiding principles

VISION STATEMENT

To develop an integrated, intermodal transportation system which efficiently, conveniently, and reliably provides a mobility network that is responsive to the community's needs for the safe and secure movement of people and goods.

2.1 THE HOCTS VISION

As the entity responsible for comprehensive transportation planning in Herkimer and Oneida Counties, HOCTS seeks to invest strategically in the transportation system to advance the region's Goals and Objectives, which are presented in the next section of this plan.

2.2 HOCTS' GUIDING PRINCIPLES

The following principles guide and underscore HOCTS' planning activities.

HOCTS GUIDING PRINCIPLES

- 1** Transportation plans and programs will seek to **maintain the *established and varied setting*** that makes the area an attractive place to live, work and visit, while bringing positive changes to the natural and built environments that outweigh the associated costs.
- 2** Maintaining and operating an integrated transportation system that considers ***safety for all users and all modes***.
- 3** ***Coordination*** of land use planning, economic development, and transportation planning activities is essential to maximize the region's potential.
- 4** ***Encouraging infill development and redevelopment*** through the prioritization of system investments is preferable to facilitating large-scale development outside of established residential and commercial areas that result in expansions.
- 5** Improving the scope and ***coordination of the transit system*** will enhance mobility options for those that cannot or will not rely solely on the automobile; in turn it will help reduce the physical, environmental, and capital costs associated with the transportation network.
- 6** Emphasis will be placed on designing capital projects that routinely consider ***accommodations for non-motorized modes of transportation***.
- 7** ***Regional issues require cooperation*** of municipalities and organizations that transcend established jurisdictional boundaries.
- 8** A continued ***commitment to public participation*** will be upheld to ensure HOCTS is planning with the region's residents, recognizing them as the customers of the system and the group most directly affected by its operations.

section3 goals & objectives

TOP PRIORITIES AMONG HOCTS' GOALS AND OBJECTIVES

The Going Places Technical Committee engaged in a Priority Evaluator exercise. While HOCTS seeks to progress each of its Goals and Objectives listed in this section, the Priority Evaluator exercise was intended to help identify the relative prioritization among them.

Via this exercise, the Committee identified the following Goals as the top two priorities for the HOCTS region:

- 1. System Preservation**
- 2. Mobility and Accessibility**

The Priority Evaluator found the following Objective to be the top priority among Committee members:

Mobility/access to places of work and locations where goods and services may be obtained.

3.1 FEDERAL PLANNING FACTORS AND OUR GOALS/OBJECTIVES

HOCTS established Goals and Objectives for itself in coordination with its planning partners in the two-county region. This process is guided by the federal planning factors updated by the FAST Act, the nation's most recent major legislation affecting urban transportation planning processes (see next page).

HOCTS' Goals and Objectives from the previous LRTP were reviewed as part of the development of the Going Places LRTP and updated to reflect the new national Planning Factors as well as the region's priorities.

HOCTS' Objectives are each oriented around one of the Goals. These are presented on pages 11 and 12.

FEDERALLY MANDATED PLANNING FACTORS



Support the **ECONOMIC VITALITY** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency



Enhance the **INTEGRATION** and **CONNECTIVITY** of the transportation system, across and between modes, for people and freight



Increase the **SAFETY** of the transportation system for motorized and non-motorized users



Promote **EFFICIENT** system management and operation



Increase the **SECURITY** of the transportation system for motorized and non-motorized users



Emphasize the **PRESERVATION** of the existing transportation system



Increase **ACCESSIBILITY** and **MOBILITY** of people and freight



Enhance **TRAVEL** and **TOURISM**



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



Improve the **RESILIENCY** and **RELIABILITY** of the transportation system and reduce or mitigate stormwater impacts of surface transportation

--U.S. Code (23 CFR § 450.306)



h o c t s



MOBILITY AND ACCESSIBILITY

GOAL

Use a strategic approach to provide mobility and accessibility opportunities.

OBJECTIVES

- Implement ITS strategies and other remedies to alleviate congestion.
- Ensure sufficient mobility and adequate access to places of work and to locations where goods and services may be obtained.
- Expand inter-city and rural public transportation as appropriate and economically feasible.
- Reduce conflicts among transportation modes and services through coordination of operations and improvements.
- Implement cost-effective improvements that reduce the frequency and severity of crashes.
- Support multimodal accessibility to the region's tourist facilities, for all travelers including the mobility disadvantaged.



ECONOMIC EFFICIENCY

GOAL

Judiciously allocate resources to maximize the efficiency of transportation improvements.

OBJECTIVES

- Reduce congestion.
- Maximize the benefits from investment in transportation improvements.
- Minimize the cost of transportation improvements.
- Emphasize energy conservation in transportation improvements.
- Encourage investment in intelligent transportation systems (ITS) technologies to improve the reliability of the transportation network.



LAND USE

GOAL

Develop a transportation system which is supported by and supports regional land use planning and local land use plans.

OBJECTIVES

- Provide transportation improvements consistent with regional and local land use plans.
- Extend public transportation services to new areas.
- Minimize transportation improvements that require significant impact on agricultural lands.
- Improve access to commercial and industrial sites and regional employment centers.

goals



SYSTEM PRESERVATION

GOAL

Invest in preserving the transportation system to make the most sustainable use of existing assets, services and resources.

OBJECTIVES

- Operate and maintain the transportation network to enhance comfort, convenience, safety and security.
- Use existing parking facilities efficiently.
- Enhance existing facilities to provide for better bicycle and pedestrian circulation within the transportation network.
- Protect the capital investment in existing infrastructure and contribute to safety and stable traffic flow through state-of-good-repair maintenance.
- Encourage the continuation of operating assistance for public transportation to ensure adequate levels of service.



ENVIRONMENTAL IMPACTS

GOAL

Avoid and/or mitigate negative environmental impacts while protecting the region's transportation infrastructure from environmental threats.

OBJECTIVES

- Encourage transportation improvements that are located within existing rights-of-way.
- Minimize impacts of transportation improvements on residential neighborhoods.
- Reduce the impacts of transportation improvements within industrial and commercial areas.
- Mitigate impacts on environmentally sensitive areas, as well as natural, historic, and archaeological sites.
- Manage impacts on stormwater flow patterns.
- Enhance the resiliency of the region's transportation system by preparing infrastructure for the impacts of increasingly extreme weather events.

section4communities

4.1 REGIONAL SETTING

The Utica urbanized area and surrounding Herkimer and Oneida Counties (the HOCTS region) is situated between Syracuse (approximately 50 mi. to the west) and Albany (roughly 80 mi. to the east).

The two counties are each roughly the same physical size (Oneida is 1,412 sq. mi. and Herkimer is 1,213), however Oneida County has approximately three times the population of Herkimer County. Herkimer County is predominantly rural, with vast tracts of wilderness and other protected conservation areas.

The region's population centers are oriented primarily along the east-west Mohawk River Valley corridor. For HOCTS' transportation planning purposes, the Utica urbanized area (see Figure 1.1) is centered on the City of Utica and stretches from Rome in the west to Little Falls in the east. Through HOCTS

Resolution 2013-10, HOCTS has elected to smooth the boundaries of the 2010 Census-designated urbanized area (which are highly irregular) for its transportation planning activities. The entirety of the two counties, encompassing both urban and rural areas, is the HOCTS metropolitan planning area.

The HOCTS region contains five urban clusters, which have smaller population levels than urbanized areas:

- Ilion-Herkimer;
- Little Falls;
- Oneida;
- Rome; and
- Sylvan Beach.

Population in the two-county region reached a peak of 341,000 in the 1970 Census, and stood at 299,000 at the 2010 Census (see Table 4.1 showing the time trend, and Figure 4.1 showing population density in the region). This decline can be attributed to deindustrialization and the loss of manufacturing jobs that adversely affected many of the nation's legacy industrial employment centers, particularly in the Northeast and Midwest.

Population has been essentially stable between 2000 and 2010, after the sustained declines experienced in the late 20th Century, however the U.S. Census Bureau's most recent estimates for the two counties combined is a decrease of 3% between 2010 and 2018, with faster population decline in Herkimer County (-4%)

“We are working to modernize our manufacturing base, the core of our regional identity. We are unleashing the power of innovation by focusing investments in STEM industries to engineer the technology of the future. We are working with our local municipalities to create new downtowns, main streets, and to build sustainable neighborhoods. We are bringing locally produced farm products to your table, and tables across the country. Along with our partners in workforce development, we are working to unlock the potential of our entire population to make sure nobody is left behind.”

--MV EDGE (Mohawk Valley Economic Development Growth Enterprises Corporation) 2018 Annual Report

TABLE 4.1: Population change in the HOCTS region, from 1950

YEAR	POPULATION (Thousands)	CHANGE FROM PREVIOUS CENSUS
2018	291	-3%
2010	299	0%
2000	300	-5%
1990	317	-1%
1980	320	-6%
1970	341	+3%
1960	331	+16%
1950	284	N/A

than Oneida County (-2%). This trend is based on estimates, and the full population count in the 2020 Census will be needed to determine whether population has decreased as is currently estimated by the Census Bureau.

As of 2018, the estimated median age – where half of the population is older and half is younger – in Oneida County is 41 years and in Herkimer County is 44 years. This compares to 39 years for New York State as a whole. Median age in the HOCTS region has been steadily increasing, as it has in both New York State and nationally. 18% of residents are age 65+.

Within the HOCTS region, 16% of residents live in poverty. This increases to 26% among children. 18% of residents receive food stamps or SNAP benefits. Poverty is concentrated in denser urban areas, however is also found in rural portions of the counties. 15% of the HOCTS region population identifies as having a disability, including 34% of elderly residents.

While the percent of the population identifying itself as being African-American has increased slightly (from 4.6% in 2012 to 5.2% in 2017), the Asian population has increased by a third, with more than 9,500 residents saying they are of Asian descent. The number of residents identifying as Hispanic

has grown from 12,000 in the 2010 Census to nearly 14,000 in 2017.

Overall, the Census Bureau estimates there are approximately 44,000 people in the region who qualify as being of “minority” racial status (that is to say they identify themselves as something other than “white non-Hispanic”).

The two-county region has a Limited English Proficiency (LEP) population of approximately 10,000 residents.

Utica is a U.N. designated refugee resettlement city.

Immigrants/refugees to the region tend to settle primarily within the City of Utica and are often initially heavily dependent on social services. The cultural differences and language barriers of these immigrant/refugee populations create significant barriers for securing employment, accessing public transportation and obtaining personal transportation.

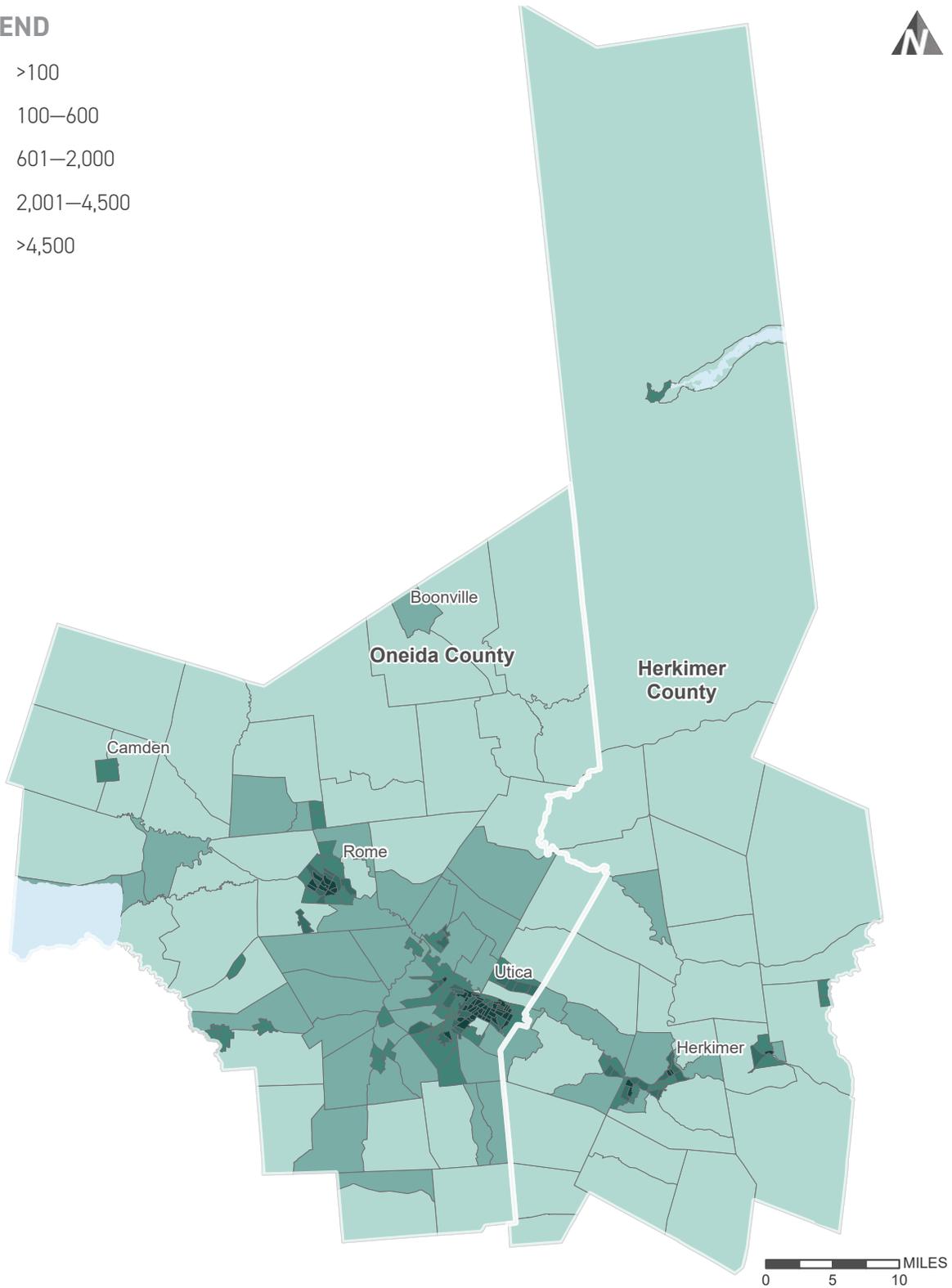
The municipalities within the HOCTS region with the greatest number of housing starts between 2000 and 2017

HOCTS partners with the US Census Data Affiliate housed in the Oneida County Department of Planning to monitor trends and analyze demographic data for the two-county planning area.

FIGURE 4.1: Distribution of population density in the HOCTS region, by Census Tract

LEGEND

- >100
- 100–600
- 601–2,000
- 2,001–4,500
- >4,500





SNAPSHOT

HOW RESIDENTS OF HERKIMER AND ONEIDA COUNTIES TRAVEL

More than four out of five workers residing in the HOCTS region drive to work alone. This fraction has increased slowly in recent decades.

Carpooling has decreased steadily over time, with working at home becoming

more common. The majority of workers report a commute of under 20 minutes duration.

11% of households in the region do not own an automobile, which is a structural constraint on this population's mobility options.

were New Hartford (990) and Utica (632), both in southeastern Oneida County, followed by the town of Webb (550) in northern Herkimer County. The most recent update of municipal Comprehensive Plans in the region varies greatly, with Marcy having completed an update in year 2016, others dating from decades ago, and still other communities having no formal Comprehensive Plan.

4.2 ECONOMY

The HOCTS region has experienced economic challenges beginning in the late 20th Century. The U.S. Bureau of Economic Analysis estimates average personal income at \$40,000 in Herkimer County and \$43,000 in Oneida County (as of 2017). Both are roughly 20% lower than the statewide level of \$62,800, which is higher in part due to more affluent downstate counties. For comparison, average income in other selected locations upstate is \$41,000 in neighboring Montgomery County (which includes Amsterdam), \$49,000 in Schenectady County, \$49,000 in Erie County (which includes Buffalo), and \$50,000 in Onondaga County (which includes Syracuse).

HOCTS actively engages with the region's Limited English Proficiency population. The survey performed for this project was translated into the five languages spoken most frequently in LEP households: Arabic, Russian, Serbo/Croatian, Spanish, and Vietnamese. Speakers of other languages were also provided, in writing in every language supported by Google Translate, the opportunity to request the survey in their preferred language.

The City of Utica, where refugees are estimated to account for 11% of the population, has been dubbed "the town that loves refugees." More than 16,000 people have come to the region through the Mohawk Valley Resource Center for Refugees, including 3,000 since 2010.

FIGURE 4.2: Distribution of employment in the HOCTS region by industry type, year 2010

LEGEND

Industry Type

- Healthcare & Education
- Manufacturing & Logistics
- Professional Services
- Public Administration (Government)
- Retail, Hospitality, & Entertainment

Number of Employees

- 50
- 700
- 1,350
- 2,000

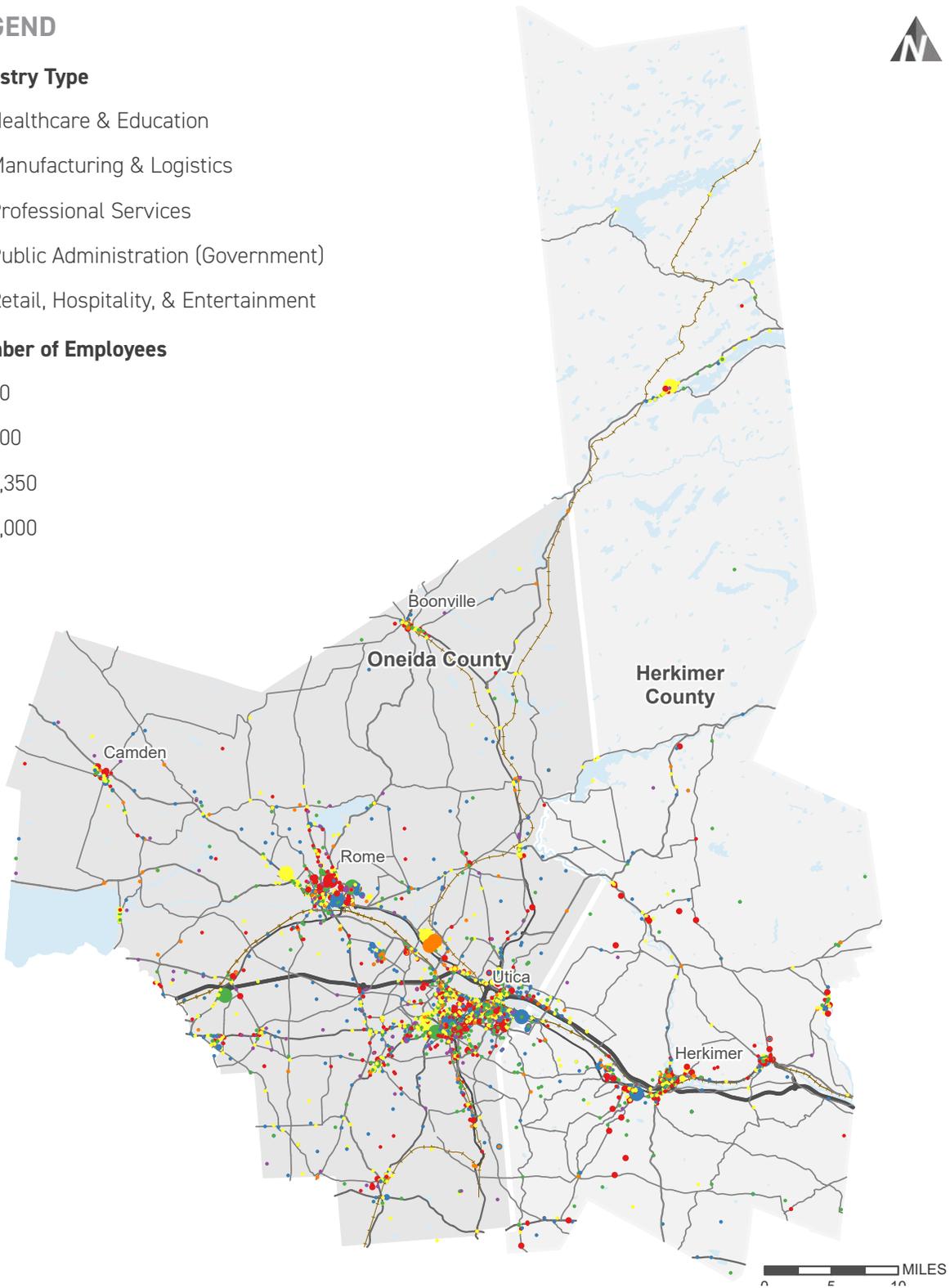


TABLE 4.2: Employment by industry in the HOCTS region

INDUSTRY	2018 EMPLOYMENT	% CHANGE FROM 2010
Education and Health Services	26,773	+8%
Trade, Transportation, and Utilities	20,377	-4%
Manufacturing	11,257	+1%
Leisure and Hospitality	10,734	+7%
Professional and Business Services	7,832	-6%
Financial Activities	6,508	-7%
Other Services	3,447	+4%
Construction	3,143	+4%
Information	1,552	-31%
Natural Resources and Mining	551	+11%
Unclassified	92	-1%
All Private Sector	92,266	+1%
Local Government	20,307	-6%
State Government	7,321	-7%
Federal Government	2,392	-26%
Total	122,285	-1%

The table above shows trends in employment between 2010 and 2018, per the U.S. Department of Labor. Overall employment declined very marginally in the 2010s, however private sector employment grew slightly.

The largest sector (by employment) is Education/Health Services, followed by Trade/Transportation/Utilities, Local Government, Manufacturing, and Leisure/Hospitality (see Table 4.2). The region's largest single employer is the Turning Stone Resort Casino located in the western portion of Oneida County, in the town of Verona. Opened in 1993, the Turning Stone Casino is an enterprise of the Oneida Indian Nation.

Particularly important sectors of HOCTS region's economy include the Agriculture, Education, Healthcare, Manufacturing, and Tourism. These sectors are each discussed later in this section.

A major event affecting the region's economy was the 1995 closure of Griffiss Air Force base located in Rome. At full operation, Griffiss AFB accounted for one-third on Rome's economy.

Griffiss AFB, through the Base Realignment and Closure (BRAC) program, has been transitioned to the 3,600 acre Griffiss Business and Technology Park, which includes the Griffiss International Airport. The Technology Park hosts a workforce of 5,800 and a total of 77 employers. There are plans for a Commercial Passenger Terminal Building on the airport. In addition, new housing is in progress within the Technology Park to meet the growing market demands. As noted in Section 5.6, a unique asset is the designation of the former base as one of six testing sites nationally for unmanned aerial systems (i.e. drones).

MANUFACTURING

Manufacturing is a key part of the region's economic base, and the focus of much of its economic development efforts.

In addition to longstanding manufacturing firms located in the HOCTS region, such as the 1,200-employee Remington Arms plant in Ilion, the two counties are oriented towards attracting employers in sectors that are emerging as new growth opportunities in

thINCubator

the home for INNOVATIVE NEW COMPANIES

the 21st Century, such as nanotechnology and advanced manufacturing.

A noteworthy recent success is the announcement in Fall 2019 that Cree, Inc. would invest \$1 billion to build the world's largest silicon carbide fabrication facility in Marcy, leading to the creation of 600 jobs.

AGRICULTURE

The HOCTS region's agricultural sector encompasses some 1,572 operating farms as of 2017, per the U.S. Department of Agriculture. Agriculture in the region is also linked with other economic sectors such as tourism. The F.X. Matt Brewing Company's brewery in Utica, for instance, is an "agritourism" draw.

The U.S. Department of Agriculture's 2017 Census of Agriculture reports that there are 117,000 and 193,000 acres of farmland in Herkimer and Oneida Counties, respectively, with annual production worth \$158 million.

The trend over time has been consolidation into a smaller number of larger farms. Farmland preservation is an issue of concern in the region. Oneida County's 2017 Agricultural and Farmland Protection Plan¹ identifies the Town of Marcy as having the agricultural resources under the greatest threat, due to development pressures related to nanotechnology development in Marcy. Herkimer County is currently updating its

Agricultural and Farmland Protection Plan. It should be noted that Oneida County is currently in the process of updating the Agriculture and Farmland Protection Plan.

As noted in Section 5, the highways in the HOCTS region are trafficked by a relatively large number of agricultural vehicles. These present unique safety and operational risks, as well as the possibility of premature wear and tear to the road surface. HOCTS therefore proposes (see Section 8) to undertake a detailed study of issues raised by the presence of agricultural vehicles and operations on the roadway network.

EDUCATION

Education plays a unique role in the region's economy, as both a major employment sector and a provider of training opportunities for workforce development.

Major educational institutions in Herkimer and Oneida Counties include:

- Hamilton College
- Herkimer College
- Houghton College
- Mohawk Valley Community College (MVCC)
- Pratt MWP
- SUNY Polytechnic Institute
- Utica College

MVCC hosts thINCubator, an 8,500 square foot facility that supports the development and growth of small business in the region through dedicated co-working space and a range of educational initiatives tailored to entrepreneurs.

The region's education sector coordinates closely with the private sector and economic development agencies in the region on workforce development. For instance, the 2019 announcement of Cree, Inc's

“A diversity of creative entrepreneurs built on a model of partnerships with our educational institutions, employers, community agencies, and students will drive the City's economy, increase job opportunities, and contribute to a greater quality of life for all.”

-- City of Utica 2011 Master Plan

¹ <https://www.ocgov.net/oneida/sites/default/files/exec/FarmlandProtection/Oneida%20County%20Farmland%20Protection%20Plan.pdf>

ONEIDA COUNTY VISION 2020

Oneida County launched the Vision 2020 initiative in 2013, with a mission to address the needs of preparing the County for a new economy.

Vision 2020 includes a focus on transportation in the County, among other county-wide issues including workforce development, housing, and supporting under-served populations.

Vision 2020's Transportation Committee was initiated in 2015, and has three distinct focus areas: Accessibility, Connectivity, and Alternatives to the Automobile.

Vision 2020 has a goal of supporting the development of this Long-Range Transportation Plan. Among other specific accomplishments, Vision 2020 has formalized the need for a study addressing Thruway Exit 31 and regional connectivity, which is reflected in the Going Places Project Listing (Section 8). The Transportation Committee is also considering the possibility of a county-wide "Complete Streets Policy," as well as opportunities to improve subregional connectivity of the transportation network.



advanced manufacturing facility in Marcy was accompanied with a statement of intent to develop training programs and internships with the region's community colleges and four-year institutions.

HEALTH CARE

Along with Education, Health Care was the fastest growing economic sector in the HOCTS region in the 2010s. Health care is likely to continue playing a leading role, given expected continued aging of the region's population.

The health sector is particularly relevant to HOCTS' mission because of the mobility challenges to access essential health care services.

It is also important economically as an entry point to the labor market for the welfare-to-work pathway, however transportation has been identified in the region as a major barrier to accessing this category of employment.

A wide range of health-related agencies and external organizations serve on HOCTS' Transportation Coordination Committee, which provides input into

“There is an overwhelming need for reasonably priced and reliable medical transportation services...Hospitals in the area tend to resort to taxi service very often due to a lack of good medical transportation service.”

-- HOCTS 2017-2020 Coordinated Public Transit-Human Services Transportation Plan

the region's Coordinated Public Transit-Human Services Transportation Plan and related ongoing efforts. The current plan was adopted in 2016 and is due for updating by the end of 2020.

Major sites in the region's health care industry include the St. Luke's and St. Elizabeth's campuses of the Mohawk Valley Health System, Rome Memorial Hospital, Little Falls Hospital, as well as skilled nursing facilities, nursing homes, and physician's offices located throughout the two counties.

TOURISM

HOCTS closely coordinates with Oneida County Tourism, which supports visitors



FIGURE 4.3: Ft. Stanwix National Monument
(SOURCE: Wikimedia Commons)

through travel guides as well as other activities. A wide variety of tourist attractions are found throughout the two counties, many of which have distinctive seasonal profiles:

- Adirondack Park
- Annual Boilermaker Road Race
- Erie Canal Heritage Corridor, including Lock 17
- F.X. Matt Saranac Brewery
- Fort Stanwix National Monument
- Gems along the Mohawk
- General Herkimer Homestead
- Herkimer Diamond Mines
- Munson Williams Proctor Arts Institute
- Oriskany Battlefield
- Turning Stone Resort Casino
- Utica Zoo
- Water Safari

The Ft. Stanwix National Monument in Rome is a National Park overseen by the U.S. National Park Service. It is a strategic site of historical significance from the pre-European settlement and Colonial eras. The U.S. Department of

Transportation's Volpe Center is currently in the early stages of a study of access to Ft. Stanwix. HOCTS is actively participating in this study, which is updating the most recent similar study published in 2010.

4.3 OUTLOOK

The following Forecasting snapshot (next page) describes the demographic and employment forecasting processes. Regionally, a small population decline (-3%) is forecast over the next 20 years, with employment essentially flat.

We close this section by noting that the demographic and employment forecasts are not foregone conclusions. The region is the subject of multiple active economic development efforts sponsored by various levels of government. The success of the region at attracting growing 21st Century industries will play the most important role in determining the region's future patterns of demographic and employment growth. The role of HOCTS is to ensure that transportation infrastructure and services in the two counties support the region in growing and developing to its full potential.



SNAPSHOT

DEMOGRAPHIC AND EMPLOYMENT FORECASTING

Planning for future transportation needs requires insight into how the future patterns of population and economic growth will build on past trends in the region. Therefore, population and employment forecasts for individual portions of the HOCTS region were prepared as part of the development of Going Places.

The approach to forecasting population for the two-county region draws on Census data from years 2000 and 2010 as well as County-level population projections for year 2040 which are prepared for each of New York State's counties by Cornell University's Program on Applied Demographics (PAD).

PAD's year 2040 population forecasts for Herkimer and Oneida Counties were used as control totals for each county, and growth/decrease patterns for each Census block group during the 2000-2010 period were projected forward, subject to maintain the overall control totals. Figure 4.1 shows the 2010 distribution of population, and Figure 4.4 shows the changes forecast by the year 2040.

Cornell PAD forecasts population to decrease in both of HOCTS' counties to the year 2040, with an overall decrease of 4% from 2019-2040. There is considerable uncertainty about population projections for the region, which will depend heavily on future trends in each of the contributors to population change: Births, Deaths, In-migration, and Out-migration. There are a range of divergent views among demographers in the region about the likelihood that the Cornell PAD projections of smoothly decreasing future population out to the year 2040 will occur.

A different approach was taken to forecast total employment for each block group. Future-year employment forecasts at the county level are not available for the HOCTS region, as is the case for future-year population forecasts.

Therefore, the overall approach to forecasting employment was to project forward the trendline in each block group's employment level during the years 2010-2017, subject to smoothing to avoid unreasonable rates of growth or decrease within individual block groups. Employment levels for each block group in the HOCTS region were generated using the U.S. Census Bureau's "LODES" dataset¹.

Figure 4.5 shows the year 2015 pattern of employment levels by block group, and Figure 4.6 shows the forecasted changes by 2040. Regionwide, the projected trend in total employment is essentially flat, an increase of 0.1% between 2017 and 2040.

¹ <https://lehd.ces.census.gov/data/>

FIGURE 4.4: Projected change in population 2010 to 2040, by block group

LEGEND

Absolute Population Change 2010-2040

-  ≤250
-  -250— -10
-  -10—10
-  10—250
-  >250

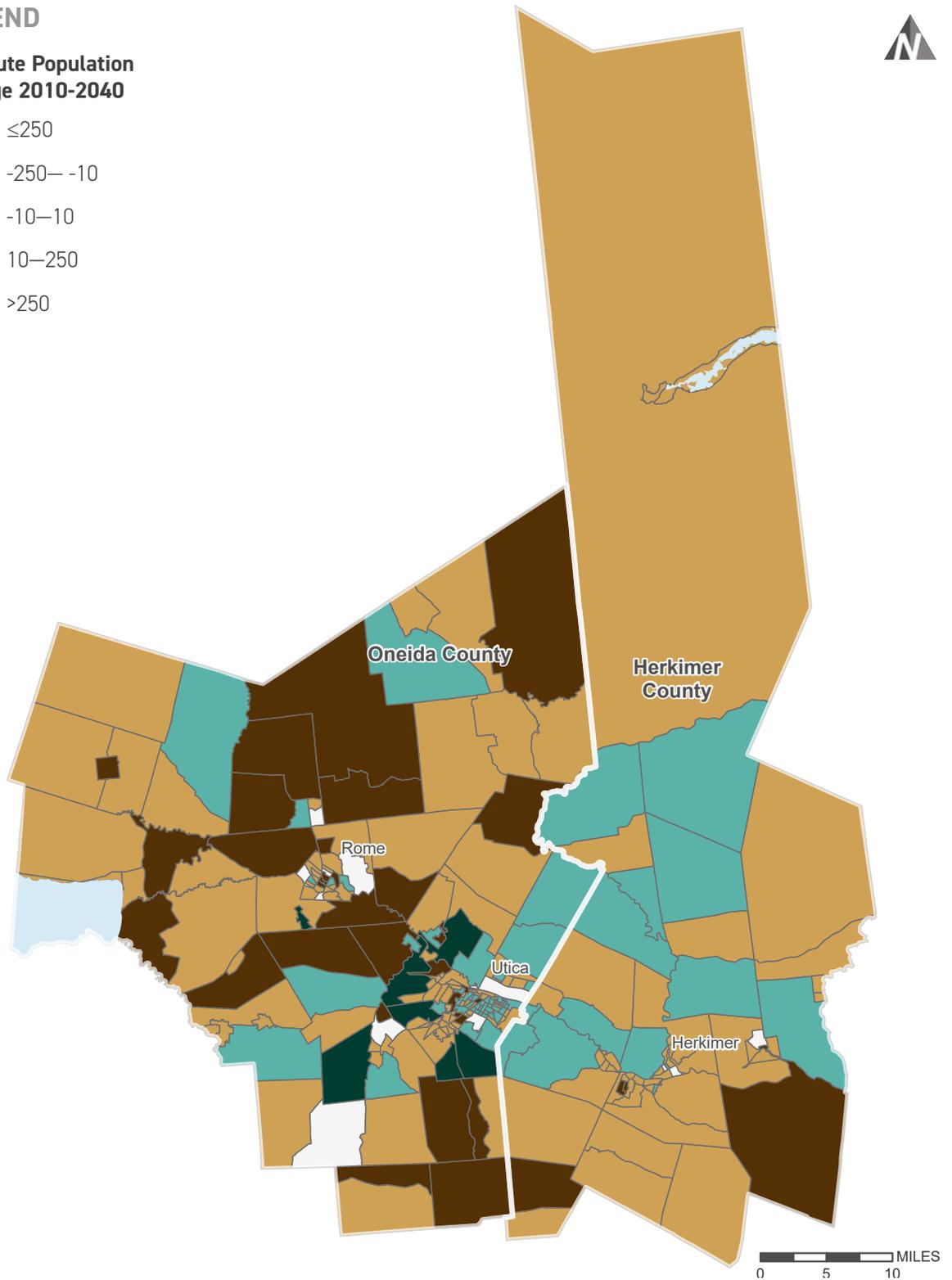


FIGURE 4.5: 2017 employment density, by block group

LEGEND

**2017 Employment Density
by Block Groups**

- 0–50
- 50–100
- 100–200
- 200–1,000
- >1,000

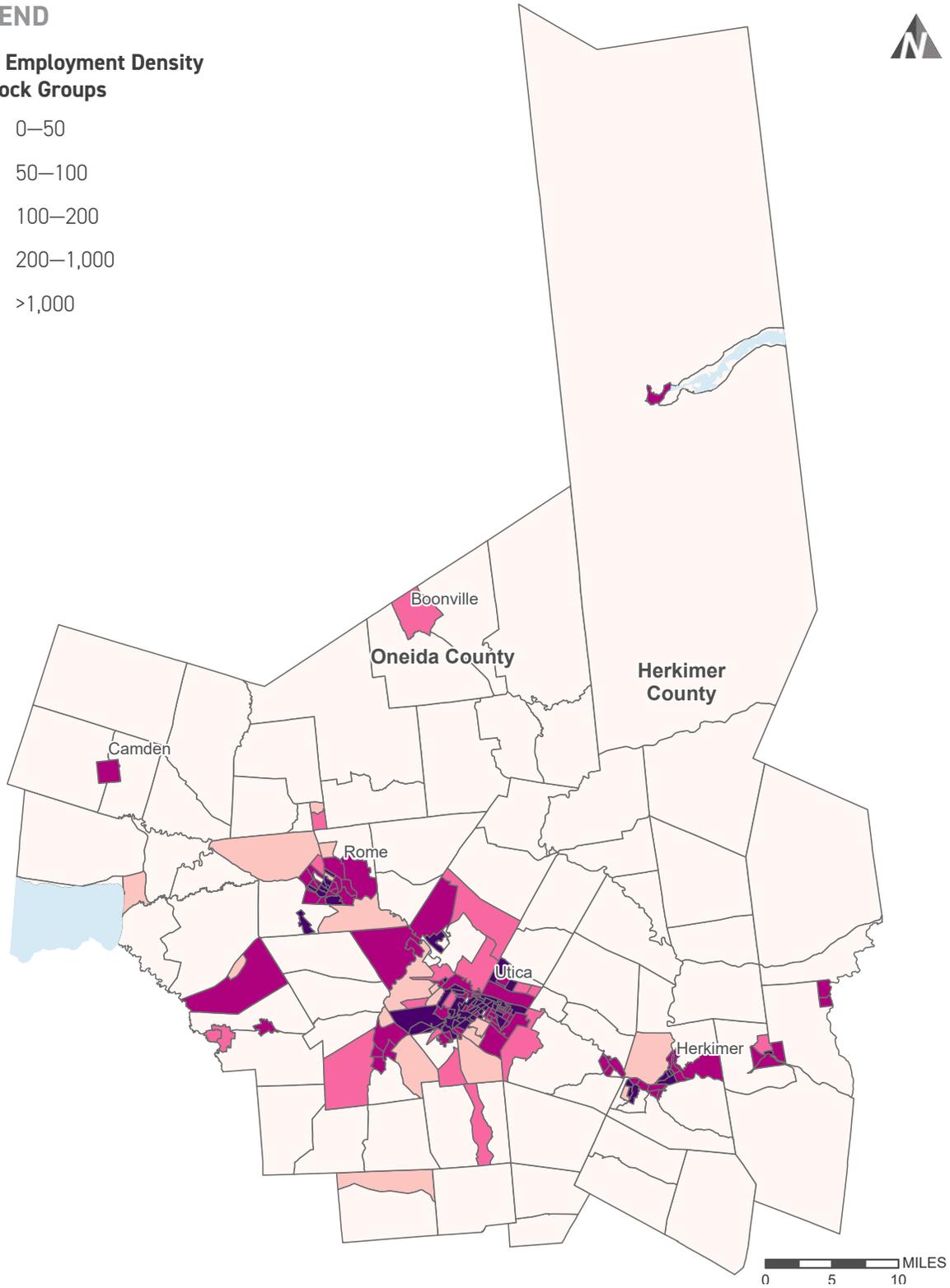
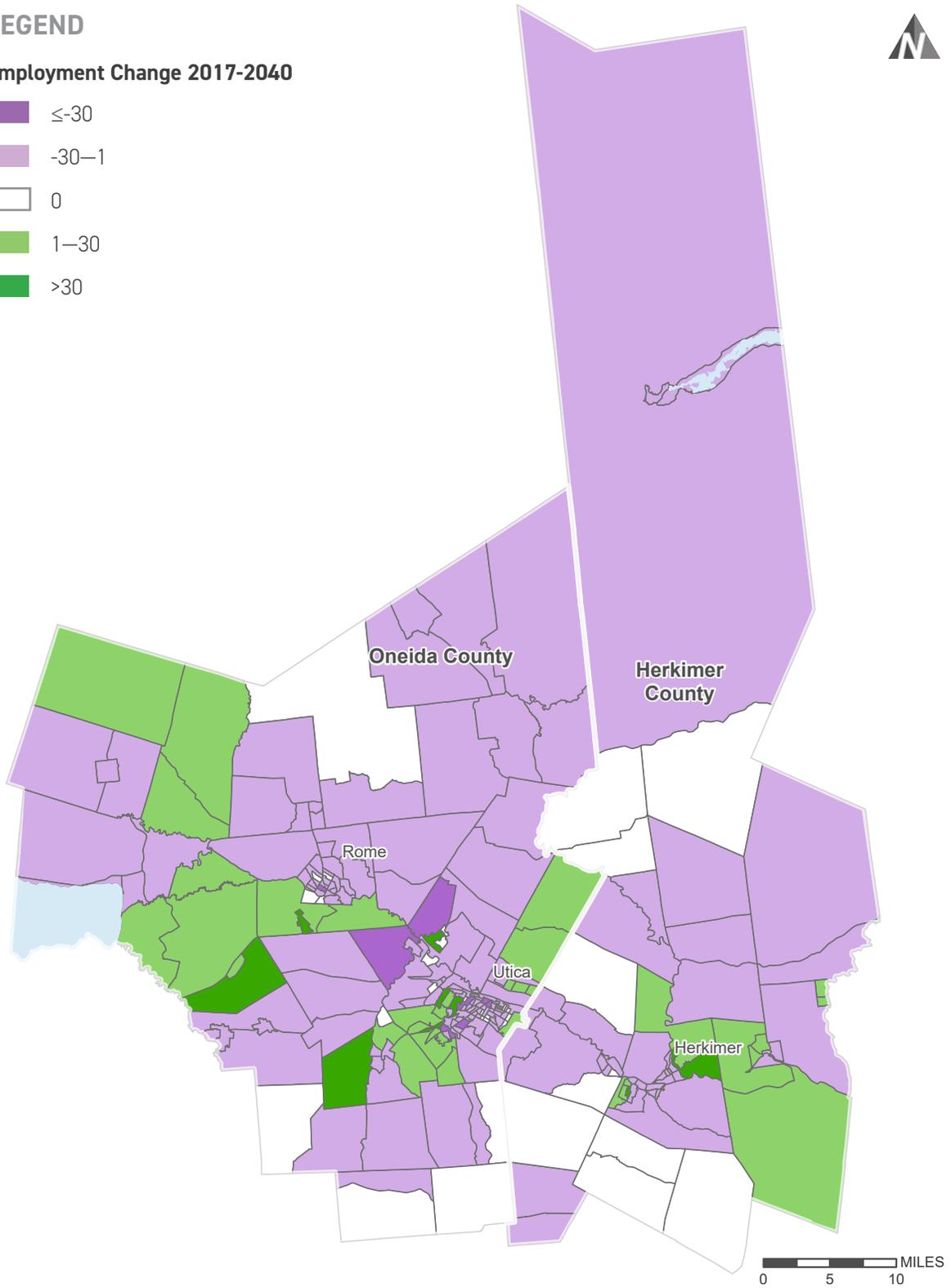


FIGURE 4.6: Projected change in employment 2017 to 2040, by block group

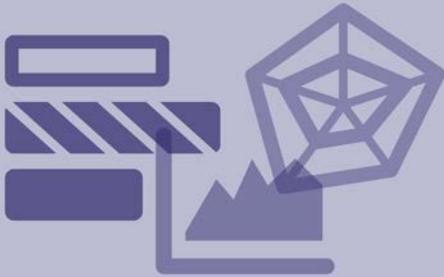
LEGEND

Employment Change 2017-2040

- ≤-30
- 30-1
- 0
- 1-30
- >30



section 5 transportation system



HOCTS AS THE REGION'S TRANSPORTATION DATA MANAGER

One aspect of HOCTS' unique role is to manage a wide range of datasets and other resources about the region's transportation system. Going Places presents a high-level overview of the region's transportation system. More detailed data can be found on our website, at:

www.ocgov.net/oneida/planning/hocts

5.1 OVERVIEW

The main component of the transportation system in Herkimer and Oneida Counties is the roadway network, which is reflected in the large mode shares for automobiles (passengers) and on-road commercial vehicles (freight). However, alternative modes are becoming increasingly important in specific applications within the region and will continue to do so in the future as personal mobility evolves.

The great diversity in the HOCTS region's density of development is reflected in its transportation network. While the urban areas have well-developed road networks with challenges of preservation and maintenance of aging legacy infrastructure, other parts of the region are deep rural, with very different challenges such as poor connectivity to the road network and poor accommodation for non-motorized travel.

This section summarizes the current state of the region's transportation system and concludes with a brief discussion of the outlook for the future.

5.2 HIGHWAYS AND BRIDGES

The HOCTS region is home to approximately 4,400 miles of roadway, the vast majority of which is owned locally, with the remainder forming the County and State route networks that carry regional traffic (see Figure 5.1). There are 785 road bridges of over 20 feet in the region.



The region's main Interstate Highway is I-90, the tolled New York State Thruway, which connects to Schenectady and Albany to the east and to Syracuse, Rochester and Buffalo to the west. The Thruway parallels the supporting state highways (NYS Routes 5 and 20), Erie Canal, and the CSX rail line through the Mohawk River Valley. This east-west corridor is designated by New York State as the Mohawk-Erie Multi-Modal Transportation Corridor (I-90 Corridor).

This corridor facilitates significant inter-regional east-west movements. However, it also serves as a barrier to north-south mobility, with the road crossings serving as bottlenecks. Because there are relatively few north-south roads that cross the east-west corridor, they carry heavy traffic volumes. The I-790 crossing of the east-west corridor carries more traffic than any other road segment in the region, at 56,000 vehicles/day as of 2016.

Regionally significant state highways include the North-South Arterial (comprised of NYS Routes 5/8/12) through Utica, NYS Route 49/365 connecting to Rome, US Route 20 through the region's southern portions, NYS Route 13 in western Oneida County connecting north and south routes of NYS Routes 8 and 12, and NYS Routes 5 and 5S which parallel the Thruway.

Vehicle-miles of travel on the region's roadways increased by 1% in 2017, the most recent data available.

The conditions of road pavement and bridges are routinely monitored in the HOCTS region, to support infrastructure owners making informed decisions about priorities for rehabilitation. As of

2016, 61% of non-NYS federal-aid roads in Herkimer County were rated "good" or better, as compared to 79% in Oneida County. As has been seen throughout New York State, there have been isolated instances of bridges in the region being closed due to severe deterioration.

Major projects undertaken to improve the region's road network in recent years include the North-South Arterial Viaduct Replacement (which included bicycle and pedestrian improvements), and the ongoing construction of the NYS Route 5S Safety Project in the City of Utica.

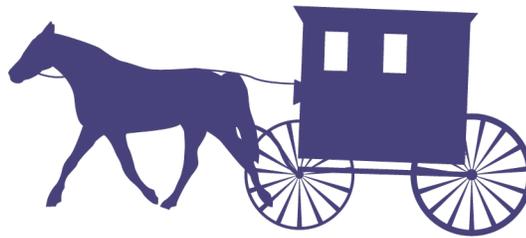
HOCTS' road network is not subject to systemic area-wide congestion as is the case in many larger or faster-growing regions, meaning a less intense trade-off between allocating road space for automobiles versus alternative modes.

Preservation of the roadway network in the HOCTS region, to allow it to continue to function appropriately and support economic and community development, is planned to account for the vast majority of transportation investment in the region through 2040. In addition to dedicated projects to improve non-motorized travel, HOCTS will also seek opportunities to incorporate Complete Streets

The Thruway is currently implementing cashless tolling statewide. The five interchange toll plazas in the HOCTS region, NYS Thruway Exits 29A, 30, 31, 32, and 33, will all be outfitted with automatic gantries as part of the cashless tolling project. The east-west roadways in the Mohawk River Valley that parallel the Thruway in much of the HOCTS region present an attractive opportunity to re-think the Thruway's connections with the region's arterial street network.

Peak tourism and construction seasons overlap in the HOCTS region, complicating efforts to maintain the transportation network.

There is a growing presence of **HORSE-DRAWN CARRIAGES** on roadways in the area



principles during routine rehabilitation projects, so as to balance support of automobile travel and alternative modes.

The highway network in Herkimer and Oneida Counties faces a number of issues in coming decades, however, beyond preserving the existing system of roads and bridges. Hardening infrastructure to withstand increasingly frequent extreme weather events beyond those historically experienced is a growing priority, with floods in the 2010s having destroyed roadways, bridges, and other critical infrastructure in the region. Other priority issues include identifying how the road network can optimally be adapted to maximize the benefits of new technologies such as electric vehicles and autonomous vehicles.

Enhancing safety will also be a priority; in 2017 there were 27 deaths on HOCTS-region roads. HOCTS has agreed to support NYSDOT's statewide goal of reducing the number of fatalities and serious injuries from crashes (see Sections 5.8 and 6).

An issue unique to HOCTS' social and economic context is the presence of Agricultural Equipment (sometimes horse-drawn) on roadways. In addition to the safety issues of slow-moving agricultural equipment operating in mixed traffic, the weight loads of the equipment, and distinctive wheel design of some agricultural equipment can lead to premature wear and tear of the roadway surface. Data is very limited, however, thus HOCTS proposes to undertake a comprehensive study of this issue (see project listing in Section 8).

“The Regional ITS Architecture covers services across a broad range of ITS, including traffic management, transit management, traveler information, emergency services, archived data management, and maintenance and construction operations.”

Mohawk Valley Regional ITS Architecture (2010)

Managing the region's roadways requires a combination of technology and local knowledge. The modern iteration of this is captured with Intelligent Transportation Systems (ITS). ITS have been implemented across the HOCTS region, guided by the Mohawk Valley Region's ITS Architecture. The regional ITS Architecture was published in 2010, and is now nearing the end of its 10-year horizon. The New York State Energy Research and Development Authority (NYSERDA) sponsored a study published in summer 2019 with detailed recommendations for ITS investment in seven corridors in Oneida County. Funding is now sought from NYSERDA for a similar study in Herkimer County, as well as implementing the recommendations in Oneida County.

Finally, while traffic congestion in the region is quite limited from a systemwide perspective, spot congestion exists at specific times (morning and evening commuting) and places (cultural and sporting venues) and will continue to in the near-term.

NYSDOT published the State's Transportation Asset Management Plan (TAMP) in June 2019.

The TAMP highlights the importance of Life Cycle Planning and Risk Management practices for the State's transportation infrastructure assets. It noted that six bridges in the HOCTS region are part of the State's "Critical Bridges over Water" program.

The TAMP presents scenario analysis of how the State's Bridges and Pavement conditions would vary by future funding levels.

TAMP envisions NYSDOT taking the following approaches to asset management:



Improve the quality of investment decisions



Leverage existing data and tools



Establish collaborative relationships



Employ asset management guidance developed by the American Association of State Highway and Transportation Officials (AASHTO)

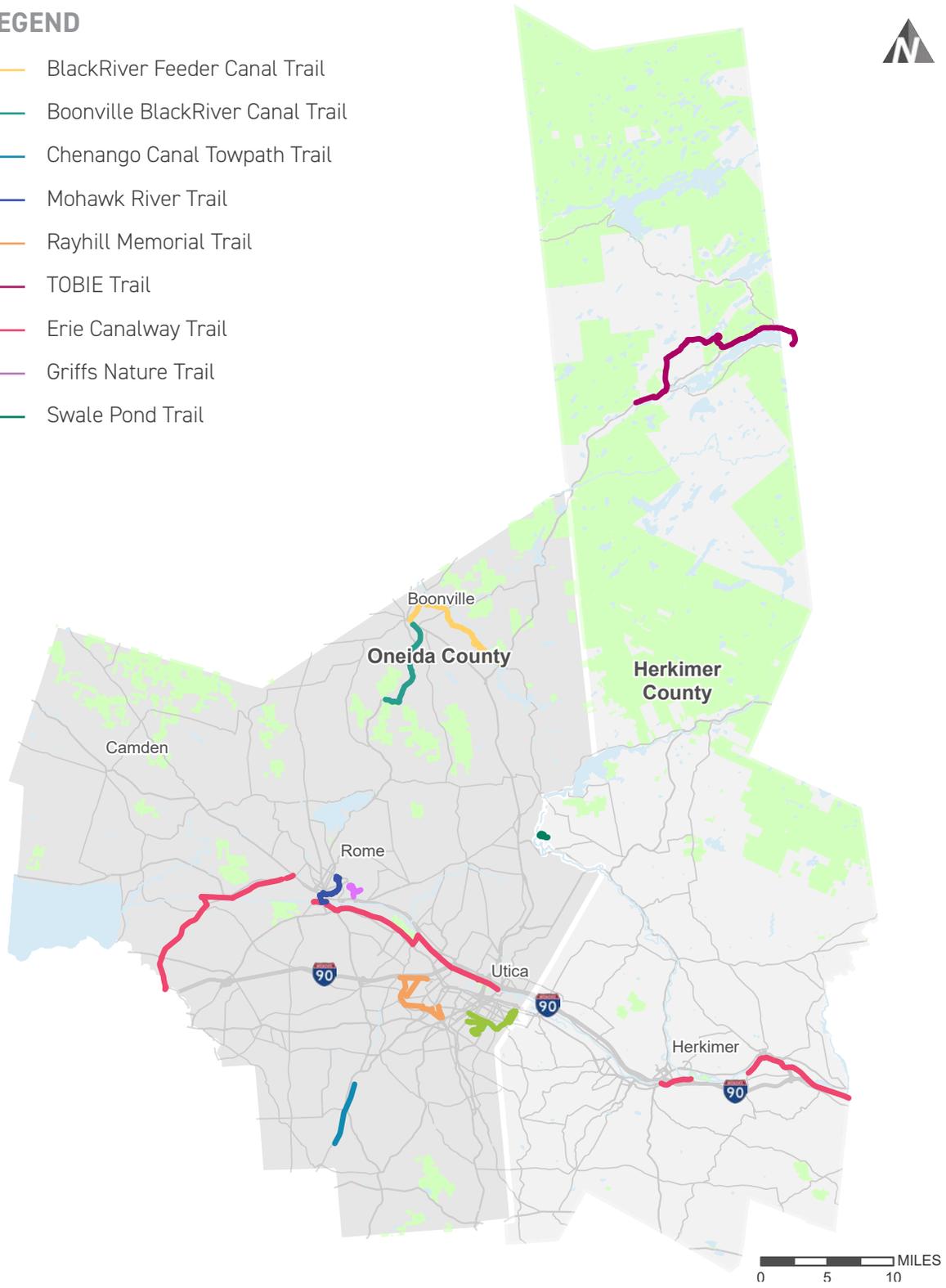


Adopt a systems approach

FIGURE 5.2: Non-motorized trails in the HOCTS region

LEGEND

- BlackRiver Feeder Canal Trail
- Boonville BlackRiver Canal Trail
- Chenango Canal Towpath Trail
- Mohawk River Trail
- Rayhill Memorial Trail
- TOBIE Trail
- Erie Canalway Trail
- Griffs Nature Trail
- Swale Pond Trail



4% 
of commuters walk
or bike to/from
work regularly



FIGURE 5.4: Bikesharing in the HOCTS region

5.3 BICYCLE AND PEDESTRIAN

The walking or bicycling experience in the HOCTS region varies. Acknowledging this, HOCTS and its planning partners continue to pursue opportunities to make improvements. Walking and cycling are effectively emissions-free, helping reduce energy consumption and vehicle miles of travel.

Beyond the network of sidewalks (mainly in urban portions of the region) and shoulders of roadways (which can be dangerous for pedestrians in some circumstances), the HOCTS region contains ten dedicated multi-use trails, depicted in Figure 5.2. A general weakness of the trails is the limited connectivity between them; much of the trails are effectively disconnected segments rather than an interconnected network.

Efforts are underway to better connect the non-motorized network. Significant improvements include the NYS designated Empire State Trail, which incorporates the Erie Canalway Trail and portions of NYSDOT's network of signed bicycle routes, to create a continuous trail network of over 700 miles spanning New York

State east to west and from the Canadian Border to New York City. Continuing to improve connections between the trail network is a priority for HOCTS, and has therefore been identified as a Need (see Section 8).

Incorporating Complete Streets principles into roadway reconstruction cycles is another opportunity to improve the quality of life in the region and promote the use of non-motorized modes. Over ten municipalities in the HOCTS region have formally adopted Complete Streets policies, and HOCTS fully supports these efforts.

5.4 PUBLIC TRANSPORTATION AND NEW MOBILITY

Multiple operators provide transit service in Herkimer and Oneida counties to differing market segments, ranging from rural services (e.g. Oneida County Rural Transit's system) to Centro's urban routes in Rome and Utica, as well as inter-urban services by private operators. Figure 5.3 shows the extent of the region's fixed-route bus network.

A growing issue is the need for ensuring public

“The state of pedestrian infrastructure in OC [Oneida County] is terrible, you can’t walk anywhere without putting your life at risk. There is opportunity in Downtown, Rayhill trail, and canal but it is underutilized/lacking.”

“I live too far from work to bike or walk; I’d need a shower at work. In addition, weather is too uncertain for me to walk or bike the six miles. I could walk and then have to walk home in a thunderstorm. Perhaps snowmobiling would be an option for some people who live in Lee and work in places accessible by snowmobile trail.”

--Comments received from members of the public during the development of Going Places

“Complete Street practices must be recognized as an opportunity when maintaining existing infrastructure.”

--City of Rome 2018 Comprehensive Plan

THE ERIE CANALWAY

- ▶ The Erie Canal played a foundational role in shaping both the transportation network and the economic activities of Herkimer and Oneida counties.
- ▶ Today the Erie Canalway National Heritage Corridor (designated in the year 2000) connects the 234 cities, towns and villages that the canal system traverses.
- ▶ The canalway system balances between conservation and moderate intensity development, particularly in support of tourism activity. It also provides a corridor that facilitates non-motorized travel.
- ▶ In order to support further development of the potential for water-based tourism on the Erie Canal, we have identified a Need to upgrade the publicly owned Ilion Marina (See Section 8).



1% of commuters take transit to/from work regularly

transportation access to major employment sites located outside the urban core. HOCTS is currently performing a detailed study of the region's bus services, which is expected to produce actionable recommendations for realignment of the system. A large component will be developing a branding and marketing campaign to inform people and attract them to use transit service. This study is slated for publication in 2020.

HOCTS has identified a need to better integrate between the public transportation network and non-motorized, active transportation modes. The project listing in Section 8 therefore includes a proposed investment in bike racks for Centro's fleet of buses.

The major challenge for the region's bus services is structural deficiencies in capital and operating funding. The consequence has been fare increases and service cuts. HOCTS' focus is to increase ridership

In recognition of the FAST Act's heightened focus on inter-city bus services, HOCTS has for the first time included questions about inter-city buses in the survey undertaken as part of this LRTP update (See Section 9).

through partnerships and new alignments of services. Efforts to increase ridership will reduce funding deficiencies and promote transit as a viable travel option for people.

MPOs work with human service agencies and public transport operators to develop a coordinated service plan. HOCTS performs these responsibilities through the work of the Transportation Coordination Committee, which has a membership of some 40 partner agencies. The largest provider of human services transportation in the region is the private operator Birnie Bus Services, Inc., which operates under contract with numerous human service agencies.

Inter-city bus services that connect the HOCTS region to external points operate to Union Station in downtown Utica, with destinations served including Albany, New York City, Syracuse, and Buffalo. The operators of these services include Birnie Bus Services, Coach USA, Greyhound, and TrailwaysNY.

An emerging trend is the deployment of "New Mobility" or "Shared Mobility" services, in which travelers can access a vehicle for short-term use. Bike sharing is available in Utica and Rome (see Figure 5.4). Also, in 2017 New York State legislation enabled Transportation Network Companies (TNCs) to provide ride hailing services in upstate NY, with private operators now serving the HOCTS region.



FIGURE 5.6: Unmanned Air Systems Control Center at Griffiss International Airport (source: Northeast UAS Airspace Integration Research)

While the two-county region has yet to see the rapid growth of micromobility (dockless bike shares, electric bikes, e-scooters, etc.) that has been experienced in some larger metropolitan areas, HOCTS is aware of the national trends. As such, HOCTS plans to undertake a detailed study of the potential for micromobility of various forms to play a contributing role achieving the region’s mobility and transportation goals, and the enabling actions that HOCTS and its partners can take in support.

5.5 RAIL

The HOCTS region was historically served by streetcar services locally and regionally by passenger rail services. Today passenger rail service is provided in the form of Amtrak’s inter-city Empire Corridor operations from the Rome and Utica stations. Three freight rail operators are active (see Figure 5.5), with CSX owning the mainline rail lines in Herkimer and Oneida Counties.

While there have been proposals for high-speed passenger rail along the Albany to Buffalo corridor that passes through Herkimer and Oneida counties, there are currently no active plans for a project of this type.

In addition to the region’s regular passenger rail services, the Adirondack Scenic Railroad operates seasonal tourist trains from Utica to points north, including Remsen, Thendara, and Big Moose.

The region’s three freight rail operators are:

- **CSX** The Class 1 railroad which operates the major east-west corridor along the Mohawk River Valley;
- **NYS&W (New York, Susquehanna, and Western)** The Class 2 railroad which connects from Utica towards the southeast, to Binghamton and intermodal transfer facilities in northern New Jersey’s port district;
- **MA&N (Mohawk, Adirondack & Northern)**, a short line railroad connecting between the CSX main line and points to the north and west, including the Griffiss Technology Park.

“Please fix the Rome train station!”

--Comments received from members of the public during the development of Going Places

5.6 AVIATION

There are several aspects of air travel in and around the HOCTS region.

Proximate major commercial airports are located in Syracuse (to the west) and Albany (to the east), providing passenger service to national and international destinations.

Griffiss International Airport in Rome has undergone investment in recent years, as it transitions to serve the region’s 21st century needs. The former Air Force base currently operates as a general aviation facility and is incorporated in the Griffiss Business and Technology Park (see Section 4).

FIGURE 5.5: Rail corridors in the HOCTS region

LEGEND

- Amtrak Stations
- Railroad Lines



Griffiss' specialized resources led to it being selected by the federal government as one of the nation's six unmanned aircraft (i.e. drones) test sites. This unique facility, now the Griffiss International Airport Unmanned Aircraft Systems Test Site, (see Figure 5.6), presents an opportunity to leverage the region's transportation infrastructure to support the 21st century industrial sector and beyond.

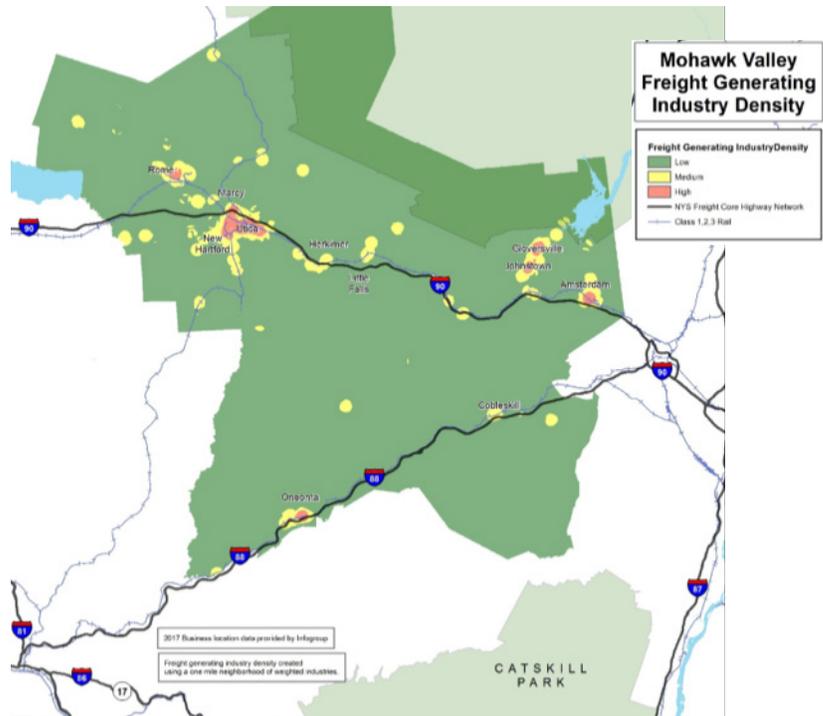
5.7 FREIGHT

Movement of freight has taken on increasing focus in recent federal transportation legislation. New funding opportunities and programs focused on goods movements have been created at the federal level, along with requirements that MPOs place greater emphasis on freight.

New York's 2019 Freight Plan forecasts freight movements to increase statewide by nearly 50% during the period 2012-2040, with truck travel remaining the dominant mode at roughly 85% of tonnage. Interstate 90 through the HOCTS region is a designated Corridor Segment of NYS' Freight Core Highway Network.

Figure 5.7 shows where industries that generate high levels of freight activity are situated in and around the two-county region. Concentrations can be seen in Rome and Utica, as well as along corridors immediately to Utica's south and west.

In early 2019, a 925,000 sq. ft. distribution center for Tractor Supply Co. opened



in Herkimer County off of NYS Route 5S. Employing upwards of 350 people, the warehouse will service retail stores throughout the northeast. This is the largest economic development in Herkimer County in the past 30 years.

Freight-dependent land uses are closely linked with HOCTS' transportation network, particularly the east-west Thruway (I-90) and CSX rail line, and to a lesser extent the North-South Arterial and other north-south corridors such as

In September 2019, Cree, Inc. announced plans to build a new 480,000 sq. ft. silicon carbide device manufacturing facility in Marcy, which will be the largest such plant globally. Advanced manufacturing facilities of this type that the region seeks to attract tend to have freight-intensive profiles.

NEW YORK STATE'S TOP FIVE FREIGHT COMMODITIES (BY TONNAGE):



Nonmetallic Minerals
(Aggregate, sand, gravel, etc.)



Secondary Traffic (Eg: retail & warehouse goods)



Food and Related Products



Petroleum and Coal



Concrete, Clay, and Glass

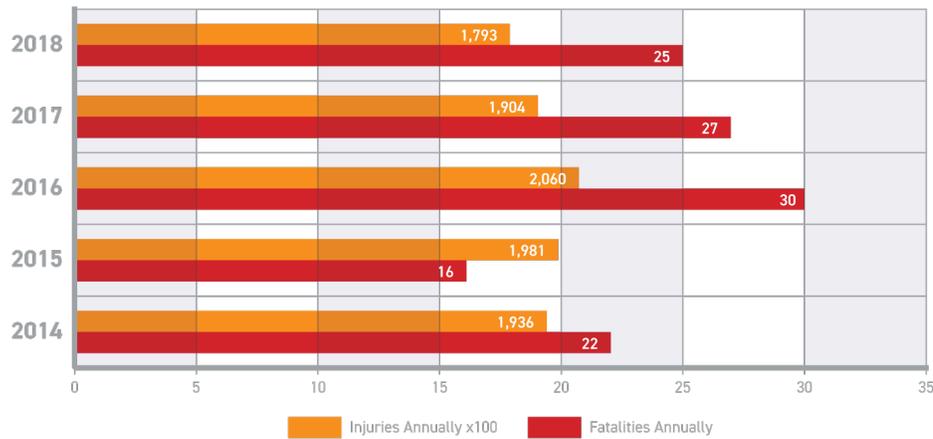


FIGURE 5.8: Traffic fatalities and injuries annually in the HOCTS region

NYS Routes 8 and 12. The region is home to logistics centers for retailers such as Family Dollar, Tractor Supply, and Wal-Mart.

The 2019 NYS Freight Plan programs approximately \$19M in combined federal funding (through the National Highway Freight Program) and NYS funding to increase vertical clearance and replace the Route 8 bridge for the NYS Routes 5/8/12 interchange in the town of New Hartford and the City of Utica.

The HOCTS region is landlocked, thus has no direct seaport access for international trade. HOCTS does have designated coastal land due to the Erie Canal and NYS Barge Canal running through the center of the two counties. There have been recent efforts to bring one or more "inland ports" to Central or Western New York State. This would involve shipping containers being moved by rail, rather than truck, between the Port of New York/New Jersey and the new specialized inland facilities. HOCTS will continue to monitor such efforts, which have the potential to impact freight movements across the region.

5.8 SAFETY AND SECURITY

Safety on the transportation network occurs from the combination of engineering, education, and enforcement. It is a top priority for the transportation system within Herkimer and Oneida counties, as it is both statewide and nationally. Thus, many of the HOCTS region's projects include elements to enhance safety (see Section 8).

New York's current (2017-2022) Strategic Highway Safety Plan expresses the goal of reducing fatalities and serious injuries by two percent annually.

The HOCTS region experienced 25 motor vehicle fatalities in 2018 (see Figure 5.8). This compares to an average of 24 annually for the years 2014-2018. There has been a year-on-year declining trend since 2016's 30 fatalities.

HOCTS works closely with partners to improve traffic safety, including NYSDOT, the Oneida County Sheriff's Office, NYS Police Troop D, local law enforcement agencies, and the Safety Working Group of the NYS Association of MPOs.

EMPHASIS AREAS OF NEW YORK STATE'S STRATEGIC HIGHWAY SAFETY PLAN



Intersections
(including at-grade rail crossings)



Lane Departure



Vulnerable Users



Age-Related



Road User Behavior



Speed

Roundabouts are given priority in New York State when evaluating potential intersection improvements.

Roundabouts are found in the HOCTS region at Oneida Square in Utica, and at various locations along the Marcy-SUNY Parkway and NYS Route 825 in the Griffiss Business and Technology Park.

Safety measures are typically components of transportation enhancement projects in the HOCTS region. Measures frequently include:

- Improved signage;
- Street lighting;
- Reflective pavement markers;
- Intelligent transportation system (ITS) technologies;
- New routings; and
- Roadway reconfiguration (including roundabouts).

Cyclists, pedestrians, and motorcyclists are particularly vulnerable users of the transportation system, with crashes involving them far more likely to lead to injuries and fatalities. In 2018, there were 27 injuries among cyclists and 82 among pedestrians, with three pedestrians fatally injured. In 2017, there were 27 injuries among cyclists and 82 among pedestrians. 3 pedestrians were killed. There were no cyclist fatalities in 2018, however there were two in 2017. There were two fatalities and 86 injuries among motorcyclists. Strategies to improve safety for vulnerable users include:

- Connecting the network of dedicated off-road trails;
- Grade-separating road crossings;
- Improving signage, signals, lighting, and pavement markings;
- Implementing bicycle lanes where physically separated trails are not feasible;
- New/rebuilt sidewalks, and improved winter plowing;

Rural portions of the road network present heightened risks for pedestrians, due to the lack of sidewalks and difficulty of

justifying new sidewalk construction on the basis of traffic and statistical studies.

The NYS Strategic Highway Safety Plan notes that work zone fatalities/injuries have been trending upwards at the state level. The HOCTS region has invested in both portable and stationary message boards to use in work zones. Also, plans for maintenance and protection of traffic (M&PT) during construction are routinely reviewed by the regional Traffic Operations Center.

Across New York State, safety among younger drivers has been improving while there has been an increasing trend in fatalities/injuries among older drivers.

In recognition of the user behavior aspect of road safety, the region actively supports NYSDOT's traveler information systems and participates in school and community safety programs.

In the mid- to long-term, Connected and Autonomous Vehicle (CAV) technologies have great potential to enhance road safety in the HOCTS region.

“I feel to [be] feasible and safe, autonomous travel needs to be connected to a network to monitor oncoming vehicles. The area I reside in has no availability to consistent high speed network or cell signal”

“An autonomous car would be great for my mother who's visually impaired.”

--Comments received from members of the public during the development of Going Places

“The effort to attain improved security, without unreasonably sacrificing mobility and reliability, requires a multifaceted approach”

--New York State's Transportation Master Plan for 2030



FIGURE 5.9: Electric vehicle charging stations at Rome City Hall are one of five sites where they can be found throughout the city (reproduced from the Mohawk Valley Electric Vehicle Charging Station Plan)

HOCTS therefore plans to undertake a study of the opportunities and challenges of CAV technologies in Herkimer and Oneida Counties. Specific known challenges include the state of the broadband and cellular networks. The region's communications networks are less well-developed than in other parts of the country, leaving many populations disadvantages and vulnerable to being left behind.

Safety on the HOCTS region's transit systems is delivered through a systems approach, including driver training, two-way radios on board vehicles, and surveillance cameras.

Security was defined to be a distinct national planning factor through federal legislation in the year 2005 (See Section 1). HOCTS has previously defined security as "actions to deal with significant and unforeseen disruptions to the transportation systems. In this area, this can include disruptions caused by

weather events, as well as the more traditional security-related issues".

Security in the HOCTS region is characterized by close multi-jurisdictional coordination, involving entities such as the U.S. Department of Homeland Security, the NYS Office of Homeland Security, the NYS Department of Transportation, and law enforcement agencies at the federal, state and local levels of government.

State-level planning identifies bridges, tunnels, and railroads as security risks particularly relevant to the HOCTS region. Both Amtrak and the region's freight rail operators implement measures to enhance security, such as onboard security checks (on Amtrak) and risk reduction measures for freight railcars transporting toxic chemicals (for freight).

The New York State Police oversees the SAFENYS Terrorism Tips Hotline (1.800.SAFENYS), which allows the public to confidentially report observed suspicious activity on the transportation system.

5.9 ELECTRIC VEHICLES

HOCTS is committed to increasing the energy efficiency and sustainability of the region's transportation system, consistent with national and state goals (see text box).

One aspect of achieving a cleaner and more energy-efficient system is to increase vehicle electrification. This depends in part on EV charging infrastructure, which is within the purview of HOCTS (see Figure 5.9). However, it also depends in part on consumer behaviors and decisions by automotive manufacturers, which HOCTS has little ability to influence.

The 2016 Mohawk Valley Electric Vehicle Charging Station Plan proposed a set of electric vehicle charging infrastructure projects, which are included in the project listing of Going Places (see Section 8). The Plan was developed with funding from NYS Energy Research and Development Authority and partnership with Energetics and HOCTS.



NEW YORK STATE CLIMATE LEADERSHIP & COMMUNITY PROTECTION ACT

This landmark 2019 law commits NYS government to preparing a cross-sectoral Scoping Plan within the next three years, which will address: “land use and transportation measures aimed at reducing greenhouse gas emissions from motor vehicles,” including “electrification of personal and freight transport”.



NEW YORK STATE'S ENERGY PLAN

New York State's Energy Plan highlights the potential for energy efficient transportation:

“Building a cleaner, more efficient, and sustainable transportation system is a critical component of the State's energy strategy.

A cleaner transportation system will include more vehicles using clean transportation fuels (especially plug-in electric vehicles [PEV]) on the road, public transportation systems that use less energy per passenger mile and provide enhanced service to a broader customer base, transportation management infrastructure that integrates the latest communications technologies to enhance traffic flow, and clean fuel infrastructure that supports and scales the use of these new technologies.”

5.10 OUTLOOK

HOCTS' investment priorities are one of a wider set of factors that will determine the future of the transportation system in Herkimer and Oneida Counties.

This Plan has been developed with acknowledgment that other important factors include:

- Federal, state and local **policies outside of HOCTS' purview**, such as land-use decisions, energy, climate change policies, overall funding levels for transportation investment, and the types of financing mechanisms that are prioritized;
- Challenges of preserving the region's aging **legacy transportation infrastructure**;
- **Demographic shifts**, such as the unique demands an aging population may have for specific types of transportation services;
- Private-sector decisions, such as **investment decisions** and siting decisions for major employment centers;
- **Economic growth** rates and patterns, and the rapid growth in online retail and tele-commuting;
- **Technological trends**, such as the pace and nature of the rollout of Connected/Automated Vehicle technologies and shared/micro-mobility services; and
- **Resilience** of the HOCTS region's infrastructure to extreme weather events.

section 6 performance measures



“Each metropolitan planning organization shall establish performance targets... to use in tracking progress toward attainment of critical outcomes for the region”

--U.S. Code (23 CFR § 450.306)

6.1 NATIONAL PLANNING GOALS

Like all MPOs, HOCTS must take a performance management approach in carrying out the region's transportation planning and programming activities.

The seven specific national performance goals for the federal-aid highway program are:

- **Safety** To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Capital Assets Condition** To maintain the highway infrastructure and transit capital asset systems in a state of good repair.
- **Congestion Reduction** To achieve a significant reduction in congestion on the National Highway System
- **System Reliability** To improve the efficiency of the surface transportation system.
- **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.

- **Environmental Sustainability** To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **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

Federal regulations similarly require a performance management approach to advance the general policy and purposes of the public transportation program.

Transportation Improvement Programs and Long-Range Transportation Plans are required to include performance measurement targets for the following measures:

- Highway Safety Improvement Program and Highway Safety
- Transit Safety¹
- Transit Asset Management
- Pavement and Bridge Condition
- Systems Performance/Freight/Congestion Mitigation and Air Quality Improvement Program

HOCTS overall strategy is to support statewide targets for the relevant performance measures in each of these four categories.

The statewide targets that HOCTS is committed to supporting are described in the remainder of this Section. As the federal Performance Measurement regulations are new to States and MPOs, NYSDOT sets statewide targets for all federally required

¹ The Transit Safety Performance Measure is not required for LRTPs/TIPs as of 2019. It will be required to be taken into account in HOCTS' future LRTPs/TIPs adopted or amended after July 2021.

PERFORMANCE MEASURE	BASELINE (5yr Statewide avg 2012-16)	NY STATEWIDE TARGET 2019	NY STATEWIDE TARGET 2020
Number of Fatalities	1,112	1,086	1,020
Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)	0.87	0.87	0.82
Number of Serious Injuries	11,508	10,442	10,392
Rate of Serious Injuries per 100 million VMT	9.04	8.39	8.42
Number of Non-motorized Fatalities and Serious Injuries	2,835	2,716	2,557

performance measures, after which the individual MPOs will have up to 180 days to either support the State's targets or adopt their own. HOCTS has chosen to support the statewide targets to date. At any time HOCTS can develop independent metrics, per federal regulations, and adopt targets independent of New York State. HOCTS programs projects in the TIP, and engages in planning activities, in a way that supports the NYS targets. In 2020, New York State will report progress against initial targets to the the U.S. Department of Transportation. Further details about the Performance Measures can be found in the HOCTS 2020-2025 Transportation Improvement Program, which is accessible on the HOCTS website.

6.2 HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) AND HIGHWAY SAFETY

Via HOCTS Resolutions #2019-09 and 2019-21, HOCTS agreed to support the 2019 and 2020 safety performance measures shown in in the table above, based on five-year rolling averages.

During each TIP/STIP cycle, the extent to which candidate projects improve the safety of the existing transportation system is taken into consideration in the project selection process.

HOCTS' 2020-2025 Transportation Improvement Program has been reviewed and the anticipated effects of the overall program are that it will contribute to:

- **Progress made in addressing the safety performance targets established by New York State.**
- **Progress toward achieving the established transit asset management targets.**
- **The National Highway System pavement and bridge condition performance targets established by New York State.**
- **The system performance and freight performance targets established by New York State.**

ASSET CATEGORY Performance Measure	ASSET CLASS	USEFUL LIFE BENCHMARK (years)	2019 TARGET
Rolling Stock			
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Bus	14	0%
	Cutaway Bus	8	0%
	Over the Road	14	0%
Equipment			
Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB	Non-Revenue/Service Automobile	n/a	0%
	Trucks and other Rubber Tire Vehicles	8	0%
	Maintenance Equipment	n/a	0%
	Auto	8	0%
Infrastructure			
% of track segments with performance restrictions (as applicable)	Rail fixed guideway track	n/a	0%
Facilities			
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economix Requirements Model (TERM) Scale	Administration	3	0%
	Maintenance	n/a	0%
	Parking Structures	n/a	0%
	Passenger Facilities	3	0%
	Shelter	n/a	0%

6.3 TRANSIT ASSET MANAGEMENT

In 2018, Centro established the transit asset management targets in the table above for Fiscal Year 2019. The “0%” values indicate that Centro’s targets are for all of their assets in each category to be younger than the category’s Useful Life Benchmark.

HOCTS Resolution #2018-08 committed HOCTS to supporting Centro’s targets, through planning and programming actions that make progress toward achieving the targets.

6.4 PAVEMENT AND BRIDGE CONDITION

Statewide pavement and bridge condition targets for New York State are set by the NYS Department of Transportation. The two-year and four-year targets in the table above represent pavement and bridge conditions at the end of calendar years 2019 and 2021.

Through HOCTS Resolution #2018-19, HOCTS agreed to support the statewide targets in the table on the next page (top).

PERFORMANCE MEASURE	BASELINE (5yr Statewide avg 2012-16)	NY STATEWIDE TARGET 2-YR (2019)	NY STATEWIDE TARGET 4-YR (2021)
% of Interstate pavements in good condition	52.2%	46.4%	47.3%
% of Interstate pavements in poor condition	2.7%	3.1%	4.0%
% of non-Interstate NHS (National Highway System) pavements in good condition	20.4%	14.6%	14.7%
% of non-Interstate NHS pavements in poor condition	8.3%	12.0%	14.3%
% of NHS bridges by deck area in good condition	20.2%	23.0%	24.0%
% of NHS bridges by deck area in poor condition	11.7%	11.6%	11.7%

6.5 SYSTEM PERFORMANCE, FREIGHT, AND CONGESTION MITIGATION AND AIR QUALITY

Three performance measures within this category have been developed by the U.S. Department of Transportation's Federal Highway Administration (FHWA).

PERFORMANCE MEASURE	NY STATEWIDE TARGET 2-YR (2019)	NY STATEWIDE TARGET 4-YR (2021)
Interstate LOTTR % of person-miles on the Interstate system that are Reliable	73.1%	73.0%
Non-Interstate NHS LOTTR % of person-miles on the non-Interstate National Highway System (NHS) that are Reliable	0.87	63.4%
TTTR Index Index of Reliability of travel times for trucks on the Interstate system	2.00	2.11

These performance measures relate to System Performance and Freight. The reference in this category's title to "Congestion Mitigation and Air Quality" performance measures is not relevant to the HOCTS region, because the region is in air quality attainment status.

Two of the measures characterize congestion affecting all motorized vehicles and are related to FHWA's Level of Travel Time Reliability (LOTTR) metric.

The LOTTR measures are expressed as the percentage of person-miles traveled on the Interstate and non-Interstate National Highway System that are Reliable.

The freight performance measure that complements the all-traffic LOTTR measures is the Truck Travel Time Reliability Ratio (TTTR).

Through HOCTS Resolution #2018-19, HOCTS agreed to support the NYS statewide LOTTR and TTTR performance measures presented in the table below. As with the other performance measures described earlier in this section, HOCTS considers the System (LOTTR) and Freight (TTTR) Performance Measures in the project selection process for inclusion on HOCTS' Transportation Improvement Program.

reliability meas in depth



Level Of Travel Time Reliability (LOTTTR)

The LOTTTR is defined as the ratio of longer (80th percentile) travel times to a normal (50th percentile) travel time.

A roadway segment is defined to be Unreliable if its LOTTTR is 1.5 or greater during any of the time periods. Otherwise, it is defined to be Reliable.

LOTTTR is calculated for each applicable road segment for four time periods:



Weekday AM
Peak Hours

Weekday
Middav

Weekday PM
Peak Hours

Weekends

Overnight

asures



Truck Travel Time Reliability (TTTR)

The TTTR is defined as the ratio of longer (95th percentile) truck travel times to normal truck travel time (50th percentile).

The highest TTTR Index value among the five time periods is multiplied by the length of the segment, and the sum of all length-weighted segments is then divided by the total length of Interstate. This produces the TTTR Index performance measure.

The TTTR Index is calculated for each segment of the Interstate system over five time periods:



Weekday AM
Peak Hours

Weekday
Middav

Weekday PM
Peak Hours

Weekends

Overnight

section 7 financing

“The estimated lack of funding over time will likely take its toll on the road system and a decline in pavement quality is projected to take place”.

--Previous (2015-2035) HOCTS Long-Range Transportation Plan

7.1 REQUIREMENTS FOR HOCTS' FINANCIAL PLAN

This section of the plan provides details on how the members of HOCTS will fund operations, maintenance, and improvements to the transportation system over the next 20 years. Sources of revenue for transportation and cost estimates are summarized below.

This section describes the basis for cost estimates, and matches those costs to forecasted revenues in each federal funding program in the FAST Act. It also provides detail on state and local sources that complement the federal grants and formula funding and sometimes serve as required matching funds for federal programs with cost-sharing requirements.

7.2 SOURCES OF TRANSPORTATION FUNDING

A variety of sources contribute funding for transportation.

Through a project's lifecycle, agencies fund the planning, design, and construction of transportation projects, plus the ongoing costs of maintenance and operations. Some funding sources can be only used

for specific purposes according to federal or state law. HOCTS works closely with its member agencies and with its partners at the state and federal levels to align appropriate funding sources with the range of needs identified across the region.

In Going Places, HOCTS is required demonstrate that there will be enough funding sources of each type to cover the anticipated costs of investment over the next 20 years.

7.2.1 FEDERAL FUNDING FOR TRANSPORTATION

The federal government is one of the region's most important sources of funding for transportation, providing approximately half of the total funds in the HOCTS region. About every five years, Congress passes an "authorization bill" that defines how and where funding can be spent for roads and highways, transit systems, and sidewalks and trails (all parts of the surface transportation system). The most recent is 2015'S FAST Act (see Section 1). The specific provisions of the FAST Act will need to be extended, revised, or replaced in a new authorization bill passed by Congress in 2020.

Each year, Congress passes an "appropriations bill" that sets the budget for that year across all the programs authorized by the FAST Act. The U.S. Department of Transportation (DOT) is responsible for ensuring the funding is distributed and used according to the laws passed by Congress. The U.S. DOT in turn is comprised of several administrations (or "agencies"). Those most pertinent to the HOCTS Planning Area include the following:

FEDERAL REQUIREMENTS FOR AN MPO'S FINANCIAL PLAN

Federal laws and regulations governing Metropolitan Planning Organization (MPO) planning processes state that all Long Range Transportation Plans produced by MPOs include a financial plan with “estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways and public transportation” in the MPO planning area.

The financial plan:

- *May* include estimates of resources from both public and private sources;

- *Shall* include a description of potential financing strategies, for example bonds or other debt funded by tolling, pricing, other transportation user fees, or revenues from public private partnership arrangements; and
- *May* include examples of additional “illustrative” projects that would depend on availability of additional resources beyond those identified in the financial plan.

HOCTS Going Places LRTP must be “fiscally constrained,” meaning the projected costs of implementing strategies in the plan must not exceed the revenues projected to be available to the region over the next 20 years.

- **The Federal Highway Administration (FHWA)** oversees programs related to the Interstate Highway System, the remainder of the National Highway System, and certain other local roads, bridges, and facilities that are “federal aid eligible” (meaning Congress has authorized federal funding to be spent on their construction, maintenance, or operation). Federal funding for roads typically flows to states, so the New York State Department of Transportation has the primary responsibility for allocating federal highway funding to its eleven regions, and then to Metropolitan Planning Organizations (MPOs) within those regions.
- **The Federal Transit Administration (FTA)** oversees most funding programs specific to public transportation. Transit funds typically flow directly to transit operators or to NYSDOT’s Public Transit Bureau for specialized transit programs. In the HOCTS region, these operators are Birnie Bus Services, Inc. (contracted operator of Oneida County Rural Transit, on behalf of Oneida County) and CNYRTA (the operator of Centro).

- **The Federal Railroad Administration (FRA)** oversees programs related to heavy rail infrastructure. Class I rail operator CSX and the other operators in the HOCTS region are subject to FRA oversight and can receive certain discretionary grant funding and loan guarantees from the FRA.

Federal funds overseen by FHWA, FTA, and FRA can be used for specific purposes, including but not limited to the following:

- **Highway safety improvements** that help achieve a significant reduction in traffic fatalities and serious injuries on public roads (Highway Safety Improvement Program, or HSIP);
- **Maintenance and improvement activities on the National Highway System** that address the condition of pavement and bridges and address travel time reliability for people and freight (National Highway Performance Program, or NHPP);

- **Projects to preserve and improve a federal-aid facility**, including roads, highways, bridges and tunnels, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals (Surface Transportation Block Grant Program, or STBG)
- **Transit capital projects, preventive maintenance, some operating costs, and transit system planning and program administration** (Section 5307 Urbanized Area Grants and Section 5340 Grants for High Density and Growing States);
- **Replacement, rehabilitation, and purchase of buses, related equipment, and bus facilities** (Section 5339 Grants for Bus and Bus Facilities);
- **Mobility for seniors and persons with disabilities**, including financial assistance to private nonprofit groups in meeting the transportation needs of the elderly and persons with disabilities when the transit service provided is unavailable, insufficient, or inappropriate to meeting these needs (Section 5310 Grants for Enhanced Mobility of Seniors and Persons with Disabilities); and
- **Projects and services to support rural transit**, including capital costs, planning, and operating assistance; job access and reverse commute project; and the acquisition of transportation services in order to support public transportation in areas with an urban population less than 50,000 (Section 5311 Grants for Rural Access).

In addition to core formula funding programs and block grants, Congress periodically allocates money in the annual federal budget to discretionary grant programs. More generally, discretionary funds may become available at any point throughout the 20-year horizon from various levels of government. A recent example is NYSDOT's application in July 2019 for \$25 million in funding from the USDOT's discretionary BUILD (Better Utilizing Investments to Leverage Development) grant program for the rural and small urban category for the North Genesee Street corridor. HOCTS and its members will continue to actively seek such opportunities, and when awards are made will take actions accordingly when updating the HOCTS L RTP and Transportation Improvement Program.

TRANSPORTATION PERFORMANCE MANAGEMENT AND PROJECT FUNDING

As a condition for receiving federal funding, HOCTS and NYSDOT need to demonstrate to FHWA and FTA that they are planning and funding projects, maintaining infrastructure, and operating the transportation system in a way that supports national goals for the transportation system.

The national goals were defined by Congress (see Section 6.1), and both FHWA and FTA subsequently issued detailed regulations for how states, MPOs, and transit agencies need to monitor and report on their progress toward those goals.

In some circumstances, as with HSIP and NHPP funding, states and MPOs can lose flexibility in how funds are allocated to different types of projects if FHWA or FTA finds they are not making sufficient progress toward a national goal.

Section 6 discusses the national goals, the performance measures used to track and report progress, and the connection to how NYSDOT, HOCTS, and operators of public transit services in the region are planning and funding transportation projects, and otherwise working to advance the federal goals.

7.2.2 STATE AND LOCAL FUNDING FOR TRANSPORTATION

About one-third of transportation funding in the HOCTS region is derived from state funds for roads, bridges, and public transit, and other state sources. Local sources, including local taxes, user fees like tolls and transit fares, and both financial and in-kind contributions from the private and not-for-profit sector, account for the remainder.

Typically, states and local governments need to provide “matching funds” to qualify for federal funding. That means, for example, if a federal funding source provides up to 80 percent of a project’s costs, New York State and a local government in the HOCTS region would need to contribute a minimum of 20 percent of the project’s costs. The New York State Legislature created the Municipal Streets and Highway Program, commonly referred to as the **Marchiselli Program**, as a means of assisting municipalities in financing the non-federal share of federally aided highway transportation projects. The Marchiselli Program is the primary state aid matching program for locally administered, FHWA-funded projects, contributing up to 75 percent of the required local match (meaning, in the example above, that the federal funds would contribute 80 percent of total project costs, Marchiselli Program funds would cover 15 percent, and local funds would need to cover the remaining 5 percent).

Three additional state programs fund transportation in New York State:

- **The Modernization and Enhancement Program (MEP)** provides funds for capital projects that are 100 percent state-funded. These are dedicated to upgrade and enhance public transportation systems and provide funds for innovative capital projects.
- The **State Transit Operating Assistance (STOA)** program provides funding to operate transit services in the HOCTS region.

One potential source of funding is capturing a portion of the \$20 billion that leaves the State through the purchase of transportation fuels.

By capturing and investing a portion of this outflow, the State could generate revenue to increase economic activity, create jobs, and increase revenue generated under current tax structures—a “dividend” to the State and its residents from reduced oil consumption and the GHG emissions that cause climate change.

--New York State Energy Plan (2015)

- The **Consolidated Local Street and Highway Improvement Program (CHIPS)** assists localities in funding the construction, reconstruction, or improvement of local highways, bridges, highway-railroad crossings, and/or other local facilities. An Operation and Maintenance (O&M) direct grant component of CHIPS is funded from the New York State General Fund, while the Capital Reimbursement component is funded from the sale of New York State Thruway Authority bonds.

The New York State Thruway Authority is a public authority that derives most of its revenues from tolls and concession agreements at service plazas. Projects on the Thruway-owned facilities in the HOCTS region are funded by the Authority.

Local property taxes, excise taxes, and user fees (such as transit fares) fund the local share of state and federal projects, and these taxes and fees fund projects that counties, villages, cities, and towns in the HOCTS region undertake. Historically, municipalities in the HOCTS region have been able to fund the local matching share of federally-funded projects, and this financial plan assumes municipalities will continue to make adequate local funds available.

HOCTS members also partner with the private sector and institutions like colleges, economic development agencies, and not-for-profit organizations to plan, build, operate, and maintain transportation improvements. These entities can provide the local share of

required matching funds for federal or state-funded projects, and they may fund operations and maintenance of transportation facilities and services. HOCTS members are exploring additional partnerships with the private sector in an effort to find new and expanding funding to address gaps in available resources. Finding new revenue sources is always challenging. Support may only be achieved if there is a belief that the existing funds are being spent efficiently and providers of new financing are convinced that the benefits of the transportation investment exceed the additional cost.

OTHER FUNDING SOURCES AND FINANCING TECHNIQUES

HOCTS is working with its partners in the private and not-for-profit sectors to identify innovative approaches to fund and finance transportation improvements, operations, and maintenance. Three approaches have emerged as the most viable, although HOCTS will be open to exploring any new transportation revenue sources to assist in implementing this plan and moving toward the county's vision and goals for transportation.

First, HOCTS is looking to build on a long history of partnering with the private sector and not-for-profit entities to fund capital projects and then operate and maintain elements of the transportation system. Developer contributions fund improvements to local, county, and state roads, sidewalks, bike infrastructure, and transit systems to accommodate the additional transportation demand generated by new housing, commercial and office space, and industrial development.

Organizations like health care provider groups, colleges and universities, and charities that fill gaps in transportation services for vulnerable populations are an important source of funding and volunteer resources for transportation.

“Motor fuel [tax] revenues, when adjusted to constant dollars...have been on a downward trend since 1998.”

-- Mileage-Based User Fees: Prospects and Challenges

Study commissioned by NYSDOT/NYSERDA (2012)

In the HOCTS region, an example of this is the Mohawk Valley Health System's sponsorship of the region's bike share program.

Funding can be up to 100 percent private, organizations can contribute to the local match for federally-funded projects, and/or they can assume responsibility for operating services and maintaining vehicles, bus stops on their properties, and other transportation infrastructure.

Joint development of transit infrastructure with private sector partners is a possibility in the HOCTS region. Value capture through Tax Increment Financing, special taxing districts, and other mechanisms can also be used to divert a portion of increased property values to fund transportation improvements that improve access and connectivity to those properties. Many value capture mechanisms would require changes to New York State law, although there is precedent for using value capture in New York State, notably to finance construction of New York City Transit's 7 train extension from Times Square to the West Side of Manhattan.

Finally, New York State, in association with national organizations like the American Association of State Highway and Transportation Officials and groups like the multi-state I-95 Corridor Coalition, is exploring alternative transportation funding sources to replace or supplement the motor fuel tax. A leading candidate is "mileage-based user fees" that would charge motorists directly based on the miles they drive instead of indirectly via motor fuel taxes, which have been declining in purchasing power.

These fees can be flat per-mile fees, or they can vary based on time of day, type of facility or area where the miles are driven (e.g., limited access highway vs. local road or village center vs. rural area), or amount of congestion present at a given time. Mileage-based user fees can apply to all vehicles (cars and trucks), they can be assessed exclusively on vehicle fleets (such as taxis, vehicles operated for transportation network companies like Uber and Lyft, rental cars, or privately-owned fleet vehicles), they can apply only to all-electric vehicles that pay no motor fuel taxes, or they can be voluntary opt-in programs for people and businesses who

choose that option over motor fuel taxes, registration fees, tolls, or other user fees. Mileage-based user fees can be uniformly assessed regardless of income (like current motor fuel taxes), or they can be means-tested or assessed on a progressive scale matched to income and ability to pay.

The I-95 Corridor Coalition and others are exploring how to address trips that cross state and jurisdictional boundaries, how to allocate costs and revenues across different facility owners and operators, and how to collect and process payments, among other challenges.

7.3 RESOURCE FORECASTS

As this plan is being adopted, funding for transportation is in a state of transition. There is not sufficient funding from any source to cover the costs of preserving existing infrastructure, operating transit, and delivering other transportation services. Building and operating new capacity to improve regional connectivity and access is ever-challenging.

As noted above, the current surface transportation authorization law, the FAST Act, will expire in 2020. Congress has allowed disbursements from the Federal Highway Trust Fund to exceed receipts from tax revenues, leading to a shortfall that will need to be addressed through new revenue sources in the next five-year bill, or ever-increasing transfers from the General Fund (see sidebar on following page). New York State faces similarly dire forecasts as debt service and pension/healthcare liabilities consume larger shares of available resources and the costs of construction, operations, and maintenance increase year over year.

The transportation community is debating many complex issues, such as how to ensure a safe, secure, and resilient transportation system in the face of known

and unknown risks, how to manage and maintain transportation assets such that their full value can be realized, how the government and the private sector should share risks, responsibilities, and profits associated with transportation investments, and how publicly- and privately-operated transportation services can coexist while ensuring equitable access to opportunity and responsible environmental stewardship. More broadly, it is becoming clear that regulations and tax policies can be designed to help address transportation needs while addressing the broader context of housing and development patterns; public health, equity and justice; the environment and climate change; and economic prosperity. HOCTS member agencies are monitoring local, state, and national conversations about potential changes to tax laws and regulations so the region can stay abreast of these changes and be prepared for them.

While these changes unfold, HOCTS is remaining conservative in its estimate of future available resources for transportation. This LRTP financial plan relies on the following assumptions:

- The source for the first five years of revenue estimates is the HOCTS Transportation Improvement Program (TIP) for Federal Fiscal Years (FFY) 2020-2024. The baseline for calculating resource forecasts for FTA programs are the FFY 2019 FTA apportionments published in the Federal Register.
- Balancing the possibility that Congress may support a new funding source for transportation against the likelihood that revenues from the federal gas tax will continue to decline, funding for all federal programs is assumed to grow no more than 2 percent per year after 2024. If FHWA or FTA programs are significantly changed by Congress in the next authorization bill, this Financial Plan may be amended.

- Funding levels for New York State programs for highway and bridge construction, plus state transit operating assistance, also are assumed to increase at 2 percent per year after 2024. The post-TIP funding amount (for FFY 2025) is assumed to be the average of the TIP years plus 2 percent. The availability of Marchiselli funding (the source of the state match for federal grants) is contingent upon the annual budget/appropriations process, but those funds are assumed to be available as they have reliably been in the past. The County match to NYSTOA is currently, and is assumed to be, provided by the private transit operator from its total operations.
- Local funding for the County transit system is held flat for 2020-2024, then increased by 2% for each of the subsequent 5-year blocks in this financial plan.
- In development of the TIP, NYSDOT provided the initial forecasts for FHWA programs, and for NYS Dedicated Highway and Bridge Fund. Oneida County, BBS, and CNYRTA, in the role of rural and urban transit operators, provided the forecasts for the FTA programs.
- Resource forecasts are generated for five-year blocks, as shown in the Highway and Transit Fiscal Constraint table below.

the next 20 years. This plan demonstrates fiscal constraint by ensuring that, in any given 5-year period, expected expenditures do not exceed the resources from funding programs listed above that can be reasonably expected to be available over the 20-year planning horizon.

Although, as noted above, all but a fraction of the available revenues for transportation are assumed to be directed to operations and maintenance activities, HOCTS has included illustrative capital projects in the plan that are in the planning process or are simply project concepts that may not have precise cost estimates at the time this plan is adopted. HOCTS members will work with partners to advance projects through the planning and development pipeline and make amendments to this plan and the TIP when appropriate.

Cost estimates for the projects listed in Section 8 were developed as appropriate to each individual project. Where project sponsors were able to provide cost estimates, these are the cost estimates shown. For the Bridge Replacement and Pavement Rehabilitation system-level items (Projects S1 and S2), average annual expenditure in HOCTS' current TIP in these categories over the next 5 years was escalated by 2 percent per year after 2024 and summed over the 20-year period. For illustrative projects where cost is not presently knowable, this is noted in the Project Listing.

A number of the items in the Project Listing are planning studies to be undertaken by HOCTS and member agencies. Revenues to conduct planning studies in the HOCTS region average about

7.4 PROJECT COST ESTIMATES

Cost estimates for this plan are provided by program area, based on the general types of projects and strategies that are expected to be implemented in the HOCTS planning area over

THE FEDERAL HIGHWAY TRUST FUND

Federal excise taxes on gasoline and diesel fuel are the main sources of revenue for federal transportation programs. Tax revenues are deposited by the U.S. Treasury into the Federal Highway Trust Fund (HTF), the primary mechanism for directing federal transportation funding to states and local governments. Congress originally intended for gasoline and diesel taxes to sustain the HTF, but the taxes are not indexed to inflation, and Congress must pass a law in order to increase the taxes. Congress last raised the federal excise tax on gasoline in 1993, to 18.4 cents per gallon and 24.4 cents per gallon for diesel fuel, and the taxes have not been increased since.

As vehicles have become more efficient, and as construction costs have increased, payments from the HTF have begun to exceed revenues from gas and diesel taxes. Thus, Congress transferred

more than \$140 billion from the U.S. General Fund into the HTF from 2008 through 2019. The U.S. Congressional Budget Office (CBO) projects that the HTF will require an additional \$171 Billion in funding from the General Fund or other sources in order to remain solvent through Federal Fiscal Year 2029.

The future solvency of the HTF is a great source of uncertainty in projecting available revenues for the next 20 years. Congress, U.S. DOT, various states, and national organizations like the Association of Metropolitan Planning Organizations (AMPO) and the American Association of State Highway and Transportation Officials (AASHTO) are exploring new funding mechanisms to replace or supplement gas and diesel taxes so that the HTF can once again become a sustainable and reliable source of transportation funding.

\$450,000 per year, which provides sufficient revenues to fund anticipated planning studies.

on need, priority and other criteria, primarily through the TIP development processes.

7.5 FISCAL CONSTRAINT

NYS DOT Region 2 provides HOCTS with current financial and schedule data for existing projects and estimates of funds available for programming over the next TIP period. This begins the cyclical TIP development processes in a constrained manner. Federally-aided local highway projects on the TIP are already fiscally constrained to the federal and state funds not already programmed in the TIP period. Available funds are allocated based

To keep the TIP fiscally-constrained as amendments are processed, offsets are determined for cost increases and schedule changes. The search for an offset begins with the agency responsible for the project amendment. If no agency derived offset is available at that level, the next place to look for an offset is within the overall program with the county, then within the entire MPO, then within all of NYSDOT Region 2. The Region 2 program as adopted, and as shown in the STIP, is fiscally constrained

7.6 FINANCIAL TABLE

HIGHWAY AND TRANSIT FISCAL CONSTRAINT TABLE (in Year of Expenditure (YOE) Dollars)

FUND SOURCE	FFYS 2020-2024**		FFYS 2025-2029		FFYS 2030-2034		FFYS 2035-2039	
	Antic. Fed Funds Available	Antic. Programming	Antic. Federal Funds Available	Antic. Programming	Antic. Federal Funds Available	Antic. Programming	Antic. Federal Funds Available	Antic. Programming
National Highway Performance Program (NHPP)*	97,910,837	83,960,920	84,970,953	84,281,756	85,512,572	84,818,981	86,057,640	85,359,627
Congestion Mitigation Air Quality (CMAQ)	0	0	0	0	0	0	0	0
Highway Safety Improvement Program (HSIP) *	10,596,152	7,481,720	10,021,435	7,481,720	10,021,435	7,481,720	10,021,435	7,481,720
Highway Safety Improvement Program - Rail (HSIP RAIL) *	860,000	860,000	0	0	0	0	0	0
Surface Transportation Block Grant Program (STBG FLEX) - includes STBG RURAL, STBG SM URBAN*	88,673,960	87,890,720	88,743,570	87,890,720	88,743,570	87,890,720	88,743,570	87,890,720
STBG Large Urban (STBG LG URBAN)	0	0	0	0	0	0	0	0
STBG Off-System Bridge (STBG-OFF)	7,093,416	7,831,640	7,093,435	7,831,640	7,093,435	7,831,640	7,093,435	7,831,640
National Highway Freight Program (NHFP)	0	0	0	0	0	0	0	0
Urbanized Area Formula Grants (Section 5307)	12,260,607	10,644,000	13,536,716	11,299,930	14,945,638	12,476,046	16,501,203	13,774,571
Enhanced Mobility Services Seniors/Individuals with Disabilities (Section 5310)	1,307,295	0	1,443,346	0	1,593,549	0	1,759,385	0
Public Transportation Safety Program (Section 5329)	0	0	0	0	0	0	0	0
State of Good Repair Grants (Section 5337)	0	0	0	0	0	0	0	0
Bus and Bus Facilities Program (Section 5339)	3,232,052	1,998,824	3,568,459	3,536,673	3,939,880	3,904,781	4,349,957	4,311,205
TOTAL (Highway)	205,134,365	188,025,000	190,829,393	187,485,836	191,371,012	188,023,061	191,916,080	188,563,707
TOTAL (Transit)	16,799,954	12,642,824	18,548,521	14,836,603	20,479,067	16,380,827	22,610,545	18,085,776

* Anticipated Federal Funds represents regionwide target.

** Reflects amounts in FFY 2020-2024 TIP, effective October 2019

section 8 project listing

“Funding for transportation infrastructure continues to be inadequate...most municipalities do not have the requisite funding to keep pace with growing infrastructure maintenance needs even with the availability of federal funding...numerous roadways are beyond maintenance treatments being effective, and deficiencies greatly affect the mobility and serviceability of the road.”

--Previous (2015-2035) HOCTS Long-Range Transportation Plan

“...the federal government has not addressed the problem of not enough funding and too many transportation needs.

This transportation funding shortfall has been and continues to be documented by many national professional and advocacy organizations.”

-- Current (2015-2040) Long-Range Transportation Plan for the Albany, NY region (Capital District Transportation Committee)

8.1 OVERVIEW

A consistent theme both nationally and across New York State is the structural divergence between resources available for investment in the transportation network and identified needs.

The HOCTS region is no exception to this trend of limited financial resources available for system enhancement. Going Places therefore proposes to allocate the vast majority of funding resources during the 20-year horizon to preserving the existing transportation network in Herkimer and Oneida Counties.

This is consistent with New York State's "Preservation First" principle for the State's transportation system.

8.2 HOCTS' PROCESSES FOR PROJECT PRIORITIZATION

HOCTS regularly undertakes a solicitation process for candidate projects. Most recent, this process was conducted in late 2018 into early 2019 (see previous page).

HOCTS' member agencies and partners first submit a project narrative and proposal worksheet for each candidate project. The proposals are then evaluated in a formal and open review process. This project prioritization process is guided by the extent to which each proposed project is consistent with the Goals identified in HOCTS' LRTP, as identified by the project sponsor and reviewed by HOCTS' members.

The list of projects included in the Transportation Improvement Program, and the year of funding for each project, is ultimately approved by resolution of HOCTS' Governmental Policy and Liaison Committee.

"Current levels of maintenance funding are inadequate to address all the needs of the existing system."

--Current (2015-2050) Long-Range Transportation Plan for the Syracuse, NY region (Syracuse Metropolitan Transportation Council)

"The cost of operations and maintenance are estimated to consume all of the available funding beyond the current TIP. In fact, agencies are faced with the potential future need for disinvesting in a portion of the existing system and must consider if and how to plan for this potential."

--Current (2020-2045) Long-Range Transportation Plan for Orange County, NY (Orange County Transportation Council)

8.3 PROJECT LISTING

Some of the projects listed in this section are included in HOCTS' and New York State's Transportation Improvement Programs. However, most projects are not yet funded.

There is no intended priority in the order of projects in the listing that follows.

As noted in Section 7, projects identified as "illustrative" are deemed to be valuable investments, however financial constraints, regulatory limitations, and programming strategy require that these projects be held until adequate funding or programming capacity become available. Should additional resources materialize, these projects could be considered as candidates to include on a future Transportation Improvement Program. These projects are aspirational and are included consistent with federal regulation. As a formal matter, however, no HOCTS, NYSDOT, or federal action will be taken on an illustrative project until it is placed onto the current TIP.

The projects are grouped into categories, which identify the main types of outcomes that each of them are intended to deliver:

- **State-of-Good-Repair/Resilience**
Projects that preserve the region's transportation assets, including hardening infrastructure against extreme weather;
- **Connectivity Projects** that would enhance the region's transportation network through new or improved facilities/services;
- **Multimodality Projects** that support alternatives to personal automobile use;
- **Technology/System Management Projects** that use new and established technologies to increase system efficiency;
- **Accessibility Projects** that improve access from the regional transportation network to strategic locations in the two counties.

PROJECTS IN THE STATE-OF-GOOD-REPAIR/ RESILIENCE CATEGORY

S1 BRIDGE REPLACEMENTS, ACROSS HERKIMER AND ONEIDA COUNTIES

- i** **SUMMARY**
Conceptually this project would seek to maintain travel throughout the two-county region by rehabilitating or replacing bridge structures located on local or NYS Highways.
- !** **ISSUES**
Right-of-way, easements, environmental impacts, funding.
- \$** **COSTS**
Using the allocation for bridge projects in the 2020-2024 TIP and escalating 2%/year, this item is estimated at \$500M - \$700M over the 2020-2040 LRTP time horizon.
- 🕒** **TIMEFRAME**
Continuous (short and long-term)

S2 PAVEMENT REHABILITATION, ACROSS HERKIMER AND ONEIDA COUNTIES

- i** **SUMMARY**
Conceptually projects would seek to maintain travel throughout Herkimer County by rehabilitating pavements on local or NYS Highways.
- !** **ISSUES**
Right-of-way, easements, environmental impacts, funding.
- \$** **COSTS**
Using the allocation for pavement rehabilitation projects in the 2020-2024 TIP and escalating 2%/year, this item is estimated at \$500M - \$700M over the 2020-2040 LRTP time horizon.
- 🕒** **TIMEFRAME**
Continuous (short and long-term)

S3 MOHAWK VALLEY INFRASTRUCTURE RETROFITTING FOR RESILIENCY

- i** **SUMMARY**
This project addresses the growing need to protect the HOCTS region's non-state federal-aid transportation infrastructure from increased intensity and frequency of severe weather events.
- !** **ISSUES**
Unpredictable storm impacts. Cost; some improvements involve altering infrastructure that was recently constructed.
- \$** **COSTS**
\$250K (for prioritization studies; construction costs not knowable at present)
- 🕒** **TIMEFRAME**
Continuous (short and long term)

S4 AGRICULTURAL EQUIPMENT ON ROADWAYS

- i** **SUMMARY**
Animal-drawn and specialized agricultural equipment on roadways in the HOCTS region are leading to premature degradation of roadway pavement as well as safety concerns. This project will seek to document existing demand patterns and user needs of these vehicle classes, establish where safety issues are most acute and roadway infrastructure is most susceptible to premature degradation, and identify mitigation strategies.
- !** **ISSUES**
Funding, data; safety, right-of-way constraints, system-user education
- \$** **COSTS**
\$200K
- 🕒** **TIMEFRAME**
Short-term

PROJECTS IN THE CONNECTIVITY CATEGORY

C1 ROUTE 5S: FRANKFORT TO ROUTE 28

i **SUMMARY**
Conceptually this project would improve the corridor with potentially additional travel lanes and improvements to intersection / interchanges.

! **ISSUES**
Funding, with potential property and environmental impacts

\$ **COSTS**
Illustrative project; construction cost is estimated at up to \$45.0 M.

🕒 **TIMEFRAME**
Long-term

C2 PLANNING FOR GATEWAY ACCESS AT NYS THRUWAY EXIT 31/NORTH GENESEE STREET/UTICA-ROME EXPRESSWAY

i **SUMMARY**
Conceptually this project would improve connections between the Utica-Rome Expressway, the N.Y.S. Thruway (Interstate 90), and the local road network. This would improve access within the Mohawk Valley / Adirondacks, and Central New York, including major economic development sites and major tourism destinations.

! **ISSUES**
Jurisdiction/coordination; funding; high-speed E-Zpass statewide implementation, possible ROW/property/environmental impacts

\$ **COSTS**
Illustrative project; this project has an estimated cost of \$40.5M

🕒 **TIMEFRAME**
Long-term

C3 ROUTES 5, 8, 12 & 840 INTERCHANGE

i **SUMMARY**
The Route 5/8/12/840 Interchange Reconstruction Project will reconstruct the interchange to make improvements to the geometry of the interchange that will improve safety and mobility within the interchange.

! **ISSUES**
Funding, with potential property and environmental impacts

\$ **COSTS**
Illustrative project; costs estimated at \$40M.

🕒 **TIMEFRAME**
Short-term for planning/engineering studies; long-term for construction

C4 HERKIMER COUNTY RAIL FREIGHT ENHANCEMENT STUDY

i **SUMMARY**
This study would evaluate the potential for new or improved freight rail access to the CSX corridor within Herkimer County, to support economic development as well as provide an alternative means of access to bypass port congestion.

! **ISSUES**
Funding, right-of-way, property impacts, environmental impacts

\$ **COSTS**
Study costs are estimated at \$75K

🕒 **TIMEFRAME**
Short-term (to perform study); construction possible in long term

C5 LOCAL ROADWAY IMPROVEMENT PROJECTS

i **SUMMARY**
This project would address issues such as high accident locations (HALs) or Americans with Disabilities Act (ADA) facilities. This would include identifying and addressing mobility, safety, capacity, intersection, pedestrian, and bicyclist needs and deficiencies, or rehabilitating pavement and improving ADA facilities to support community vitality and encourage economic development.

! **ISSUES**
Funding, right-of-way

\$ **COSTS**
Illustrative project; costs estimated at \$7.5M – \$15M (dependent on project locations)

🕒 **TIMEFRAME**
Short-term (to perform study); construction possible in long term

PROJECTS IN THE TECHNOLOGY/ SYSTEM MANAGEMENT CATEGORY

T1 INTELLIGENT TRANSPORTATION SYSTEMS (ITS) CONSTRUCTION/INITIATION

- i** **SUMMARY**
This project will address the technology-implementation recommendations of Oneida County's recently completed Intelligent Transportation Systems Plan for 7 corridors, which was funded by NYSERDA.
- !** **ISSUES**
Cost/funding; technology not fully mature
- \$** **COSTS**
This project is estimated to cost approximately \$8M. Funding is sought from NYSERDA for a similar study in Herkimer County, as well as implementing the recommendations for ITS in the HOCTS region.
- 🕒** **TIMEFRAME**
Continuous (short and long term); construction in years 0-5, O&M in later years

T2 ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

- i** **SUMMARY**
This project will support construction of approximately five Level 2 public charging stations (est. at \$10,000/station) and one "DC Fast Charging" station (est. at \$80,000/station), as proposed in the Mohawk Valley Electric Vehicle Charging Station Plan.
- !** **ISSUES**
Cost/funding; technology not fully mature
- \$** **COSTS**
\$150K
- 🕒** **TIMEFRAME**
Short-term

PROJECTS IN THE ACCESSIBILITY CATEGORY

A1 MODERNIZATION OF ILION MARINA

- i** **SUMMARY**
This project will address the technology-implementation recommendations of Oneida County's recently completed Intelligent Transportation Systems Plan for 7 corridors, which was funded by NYSERDA.
- !** **ISSUES**
Cost/funding; technology not fully mature
- \$** **COSTS**
This project is estimated to cost approximately \$8M. Funding is sought from NYSERDA for a similar study in Herkimer County, as well as implementing the recommendations for ITS in the HOCTS region.
- 🕒** **TIMEFRAME**
Continuous (short and long term); construction in years 0-5, O&M in later years

A2 WAYFINDING ENHANCEMENTS

- i** **SUMMARY**
This project will focus on enhancing wayfinding within the HOCTS region, to provide a clear identity for connecting to public facilities and move around member municipalities. It is anticipated that improved wayfinding would be particularly valuable for tourism, where out-of-area travelers typically are actively in need of relevant travel and facility information.
- !** **ISSUES**
Funding, coordination
- \$** **COSTS**
\$100K
- 🕒** **TIMEFRAME**
Short-term

PROJECTS IN THE MULTIMODAL CATEGORY

M1 ROUTE 5S: FRANKFORT TO ROUTE 28

i **SUMMARY**
This project will address multimodal connectivity and accessibility in the vicinity of the Fort Stanwix National Monument, and the center city of Rome.

! **ISSUES**
Funding, historic resources, balancing between non-motorized and motorized modes

\$ **COSTS**
Illustrative project; \$4-6M

🕒 **TIMEFRAME**
Long-term

M2 PLANNING FOR COMPLETE STREETS AND CONTEXT-SENSITIVE DESIGN

i **SUMMARY**
This project will enable multiple small to moderate-scale planning studies to support the implementation of Complete Streets principles on the transportation network as ongoing maintenance/rehabilitation projects are undertaken. It will also support a program of educational outreach regarding best practices in Context-Sensitive Design applicable to the variety of road types in member municipalities.

! **ISSUES**
Integration with existing roadways; available ROW; funding; coordination

\$ **COSTS**
\$250K (for studies; capital or O&M expenditure not knowable at present)

🕒 **TIMEFRAME**
Continuous (short and long term)

M3 ROME STATION UPGRADES

i **SUMMARY**
This project addresses the need to better connect Amtrak's passenger rail service at Rome Station to downtown Rome through multimodal networks including transit, bicycle, pedestrian, and trail facilities.

! **ISSUES**
Funding

\$ **COSTS**
Illustrative project

🕒 **TIMEFRAME**
Long-term

M4 TRANSIT SERVICE RESTRUCTURING

i **SUMMARY**
HOCTS is currently undertaking a major review of the existing transit systems in the region, in the interest of updating and enhancing service delivery, particularly with underserved populations and rural areas of the region. This project will support implementing the recommendations of this study.

! **ISSUES**
Projects are unknown; ongoing study of the HOCTS region transit systems has yet to make recommendations

\$ **COSTS**
Illustrative project; costs are not knowable at present

🕒 **TIMEFRAME**
Short-term

M5 CENTRO OF ONEIDA BUS BIKE RACKS

i **SUMMARY**
Expand Centro's bus bike racks (found on Syracuse's system) to buses in Utica and Rome. This will require review of vehicle maintenance facilities to support the fleet upgrade.

! **ISSUES**
Funding

\$ **COSTS**
\$100K

🕒 **TIMEFRAME**
Short-term

M6 MOBILITY MANAGEMENT COORDINATION

i **SUMMARY**
This project will support activities that will aim to improve the range of options that residents have to access essential life needs, taking into account issues such as public health, social policy, and environmental elements. Outcomes will be developed through HOCTS' Transportation Coordination Committee, which is a network of human service providers and agencies.

! **ISSUES**
Funding

\$ **COSTS**
\$150K

🕒 **TIMEFRAME**
Short-term

M7**NON-MOTORIZED TRAIL CONNECTIONS****SUMMARY**

This project provides resources for feasibility and planning studies to connect and close gaps in the non-motorized trail network within the HOCTS region.

**ISSUES**

Funding

**COSTS**

\$100K

**TIMEFRAME**

Continuous (short and long term)

M8**PLANNING FOR MICRO-MOBILITY SERVICES****SUMMARY**

This project enables a planning study to establish how emerging micro-mobility services can be most effectively implemented within the HOCTS region. Opportunities may range from micro non-motorized or motorized vehicles (e-scooters, etc.) through to ride hailing (possibly with autonomous vehicles), and van-type demand-responsive transit services. The study will evaluate vehicle sizing and technology, target market segments within member municipalities, and the range of options for service delivery.

**ISSUES**

Funding, private/public and inter-agency coordination, right-of-way

**COSTS**

\$100K

**TIMEFRAME**

Short-term

M9**EDUCATIONAL OUTREACH FOR BICYCLISTS AND PEDESTRIANS****SUMMARY**

This project supports continuous update of the Bicycle and Pedestrian Trail Guide as an outreach resource for encouraging non-motorized travel in the HOCTS region. It also supports programming, such as training for both municipal staff and the traveling public regarding transportation planning principles and land use management.

**ISSUES**

Coordination

**COSTS**

\$50K

**TIMEFRAME**

Short-term

M10**HERKIMER COUNTY COMMUNITY DEVELOPMENT PLAN****SUMMARY**

HCCDP's focus is on connectivity, collaboration, tourism, economic development and agriculture within Herkimer County. Projects that emerge as recommendations from this planning effort that are aligned with HOCTS' goals and objectives will be considered in its TIP programming processes.

**ISSUES**

Funding, historic resources, balancing between non-motorized and motorized modes

**COSTS**

Illustrative project; costs are not knowable until specific projects have been identified.

**TIMEFRAME**

Long-term

section 9 outreach

9.1 OVERVIEW

The LRTP is the guiding document for all the MPO's day-to-day activities. As such, there is a recognized need for heightened outreach efforts in the LRTP process, well beyond the public outreach efforts that HOCTS staff continually performs.

HOCTS Public Participation Plan¹ formalizes this commitment to enhanced public outreach during LRTP update processes. Going Places was thus developed with opportunities for public input at its core.

As noted in Section 1, outreach for the development of Going Places involved three tiers of engagement:

The first tier, which consisted of the members of the Technical Committee that guided the development of this Plan;

The second tier, which consisted of external stakeholder entities that are impacted by HOCTS' transportation planning; and

The third tier, which was the general public of the two-county region.

This section describes the Outreach efforts to engage external stakeholders and members of the public.

9.2 STAKEHOLDER OUTREACH

Using HOCTS' Outreach assets (databases, contact lists, etc.) and input from the Technical Committee, potentially interested Stakeholders were identified and subsequently contacted via written correspondence. A total of 56 letters were sent to Stakeholders during Summer 2019 as part of this LRTP update.

The set of stakeholders contacted is (in alphabetical order):

- Adirondack Scenic Railroad
- Air Force Research Lab (AFRL) Rome NY
- American Association of State Highway & Transportation Officials (AASHTO)
- Amtrak
- Bagg's Square Association
- Boilermaker Committee

¹ <https://www.ocgov.net/oneida/sites/default/files/hoctsmop/PublicNotices/HOCTS%20PPP%20update%202016%20v1.4.2%20FINAL.pdf>

This new LRTP is in a more conversational format than HOCTS' previous LRTP, to make HOCTS' planning activities as engaging and accessible as possible for Stakeholders and members of the public.

- The Community Foundation of Herkimer and Oneida Counties
- Cornell Local Roads
- CSX
- Department of Environmental Conservation
- Department of Social Services (DSS)
- Defense Finance and Accounting Services (DFAS)
- Federal Aviation Administration (FAA)
- Federal Rail Administration (FRA)
- Federal Transit Administration (FTA)
- Fort Stanwix National Monument
- Governors' Traffic Safety Committee (GTSC)
- Greater Utica Chamber of Commerce
- Griffiss Local Development Corporation (GLDC)
- Hamilton College
- Harbor Point Local Development Corporation
- Herkimer County Chamber of Commerce
- Herkimer County Community College
- Herkimer County Industrial Development Agency (IDA)
- Herkimer County office of the Aging
- Herkimer-Fulton-Hamilton-Otsego BOCES
- Mohawk Valley Community College
- Mohawk Valley Economic Development Growth Enterprises (EDGE)
- Mohawk Valley Resource Center for Refugees (MVRRCR)
- National Highway Traffic Safety Administration (NHTSA)
- New York State Department of Labor
- New York State Office of Homeland Security (NYSOHS)
- New York State Police
- NYS Association of MPOs
- NYS Canal Corporation
- NYS Office of Parks, Recreation & Historic Preservation
- Oneida County Industrial Development Agency (IDA)
- Oneida County office of the Aging
- Oneida County Sheriff
- Oneida County Tourism
- Oneida County Traffic Safety Advisory Board
- Oneida Indian Nation of New York
- Oneida-Herkimer-Madison BOCES
- Pratt at MWPAI
- Public Transportation Safety Board (PTSB)
- Resource Center for Independent Living (RCIL)
- Standing Committee on Performance Management (SCOPM)
- SUNY Polytechnic
- Transportation Research Board of the National Academies
- Transportation Security Administration (TSA)
- U.S. Department of Homeland Security
- U.S. Fish and Wildlife Services
- United States Environmental Protection Agency (USEPA)
- Utica College
- Utica Zoo
- Workforce Investment Board (WIB)

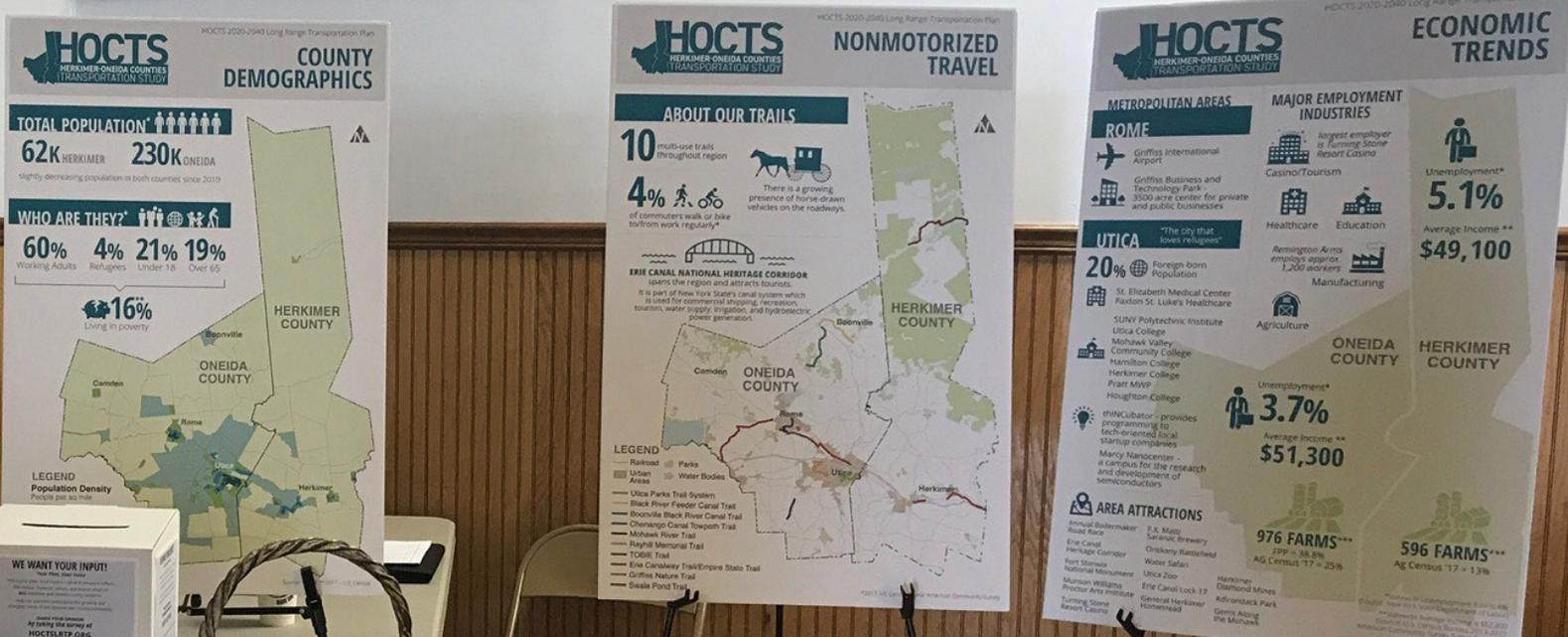


FIGURE 9.1: Sample materials used at outreach events

9.3 OUTREACH EVENTS

In-person Outreach events have traditionally been stand-alone Open Houses, where members of the public are invited to attend an event focused only on the project.

For Going Places, HOCTS selected a hybrid approach involving a combination of project Open Houses focused on Going Places, and “pop-up” booths at which HOCTS staff brought posters, survey materials, and brochures, and participated in community events hosted by other groups or agencies.

In the interest of maximizing accessibility, the outreach events were held at varied locations across the two-county region, as well as at different times of day and days of the week.

Three project Open Houses took place as follows:

- **Open House #1**, held 9/17/19: Herkimer College, Robert McLoughlin Center, Room 282-283, Herkimer, NY. 5:00 – 7:00 PM.
- **Open House #2**, held 9/19/19: Mohawk Valley Community College - Rome Campus, Alumni College Center, Room 116, 1101 Floyd Avenue, Rome, NY. 5:00 – 7:00 PM.

- **Open House #3**, held 9/21/19: Boehlert Center at Union Station, Main Lobby, 321 Main Street, Utica, NY. 4:30 – 6:30 PM.

Four pop-up outreach booths were held at the following events:

- **Herkimer County Office for the Aging/ NY Connects 2019 Senior Expo**, held 8/23/2019: Herkimer VFW, 129 Mohawk St, Herkimer, NY. 10:00 AM – 2:00 PM.
- **Utica Zoo: Public Free Admission Evening**, held 8/26/2019: Utica Zoo, 100 Steele Hill, Utica, NY. 3:30 – 5:30 PM.
- **Clinton Farmers Market**, held 8/29/2019: Village Green, Clinton, NY. 10:00 AM – 2:00 PM.
- **2019 Festival - Bluegrass, Bikes & BBQ**, held 9/7/2019: Historic Canal Place, 590 Garden St, Little Falls, NY. 2:00 – 5:00 PM.

In the development of Going Places, the Pop-Up Events were found to provide greater opportunities to engage with the community.

HOCTS staff interacted with a combined total of 13 members of the public at the three Open Houses, and approximately 115 members of the public at the four pop-up outreach events.



Old HOCTS logo



New HOCTS logo

FIGURE 9.2: HOCTS logo redesign/update

9.4 REDESIGNED HOCTS LOGO

As part of the development of Going Places, the HOCTS logo was updated with a fresh, contemporary, modern look and feel.



FIGURE 9.3: Home page of www.hoctslrtp.org website, which hosted the LRTP survey questionnaire

9.5 PROJECT WEBSITE

A project website for Going Places was designed and launched at www.hoctslrtp.org (see Figure 9.3).



FIGURE 9.4: Stakeholder engagement during development of Going Places

A total of 244 responses were received to the 2019 survey.

In 2014, 362 responses were received.

9.6 SURVEY

HOCTS routinely surveys members of the public as part of the Public Outreach aspect of LRTP update processes. In 2019, the LRTP's survey questionnaire² was updated from the questionnaire used in HOCTS' 2014 LRTP update, for general comparability with past editions. Innovations in the 2019 survey were:

- The online survey questionnaire was available in English as previously, and also translated into the five most commonly spoken languages among the region's Low English Proficiency (LEP) population (Arabic, Russian, Serbo-Croatian, Spanish, and Vietnamese). For speakers of languages other than these five, a note was available on the survey questionnaire to click to receive information describing how to request the questionnaire in their preferred language.

- Questions were added about interest in bike sharing, inter-city bus services, and autonomous vehicles.

The survey was made available both via an online questionnaire on the project website and in hard copy at all public outreach events.

A compilation of comments received from members of the public is available on the HOCTS website.

For questions that were comparable with prior editions of the HOCTS survey, patterns of responses in 2019 were compared with historical responses from 2014. The overall agreement between the two set of responses was high, with all questions having a correlation of greater than 0.80. This suggests that there were not large shifts in public priorities in the HOCTS region in the past 5 years.

Highlights of the survey responses are presented in the remainder of this section. The survey questionnaire and a detailed summary of responses can be found on the HOCTS website.

² www.hoctslrtp.org/get-involved

1. RATINGS OF THE TRANSPORTATION SYSTEM (percent rating “good” or “very good”)

Respondents ranked Highways (63%) and the Erie Canal (60%) most positively, and Sidewalks (19%), Air travel (25%), and Transit (25%) least positively.

2. PRIORITIES FOR IMPROVEMENTS (percent rating “very” or “somewhat” important)

Sidewalks (97%), Bridges (96%), Transit (95%) and Highways (94%) were identified as the highest priorities to be improved. The Erie Canal (71%) and Air Travel (77%) were the lowest priorities for improvement.

3. PRIORITY PROBLEMS (percent rating “very” or “somewhat” important)

The top problems to be addressed were found to be Pavement condition (99%), Pedestrian safety (98%), Access to businesses (96%), and High accident locations (95%).

Traffic congestion (75%), Travel time between destinations (83%), and Bicycle lanes (85%) were identified by survey respondents as the lowest priority problems, from the list presented to respondents.

4. IMPORTANCE OF PUBLIC TRANSPORTATION FACTORS (percent rating “very” or “somewhat” important)

Safety at bus stops and on buses (97%), Accessibility for the Elderly and the Disabled (97%), and Connections to other modes of travel (97%) were ranked as the most important public transportation factors.

Bicycle racks on buses (74%) was ranked as the least important of the factors presented to survey respondents.

5. IMPORTANCE OF PASSENGER RAIL FACTORS (percent rating “very” or “somewhat” important)

For passenger rail (i.e. Amtrak), Service reliability (98%) was ranked as the most important factor, and High-speed rail (82%) and Improved parking at stations (85%) were ranked as least important.

6. IMPORTANCE OF INTER-CITY BUS FACTORS (percent rating “very” or “somewhat” important)

This was the first edition of HOCTS survey that included a question about inter-city bus travel.

Service reliability (97%) and Frequency (97%) were identified as the most important factors for inter-city bus travel.

High-speed inter-city bus service (74%) and Improved parking at stations (79%) were identified as least important.

7. IMPORTANCE OF RAIL FREIGHT FACTORS (percent rating “very” or “somewhat” important)

Improving access to industrial facilities (84%) and Upgrading tracks to expand freight capacity (83%) were ranked highly, and Expanding local freight yard capacity (75%) was identified as a lower priority.

8. IMPORTANCE OF PEDESTRIAN FACTORS (percent rating “very” or “somewhat” important)

For pedestrian travel, Reducing conflicts with motor vehicles (82%) and Keeping sidewalks clear (80%) were survey respondents' most important factors.

Motorist education (61%) and Pedestrian education (63%) were the least important factors.

9. IMPORTANCE OF BICYCLIST FACTORS (percent rating “very” or “somewhat” important)

Road maintenance (98%) was ranked most highly as a factor affecting bicyclists, whereas Providing on-road bike lanes and Providing bike parking/bike racks (both 88%) were ranked as the lowest factors.

10. IMPORTANCE OF AIR TRAVEL FACTORS (percent rating “very” or “somewhat” important)

Low fares (95%) were identified as the most important factor, with Travel distance to airport (90%) ranked as the least important.

11. IMPORTANCE OF USES OF THE ERIE CANAL (percent rating “very” or “somewhat” important)

The Erie Canal performs a number of functions in the HOCTS region.

Flood control (97%) was ranked as the most important function of the Canal, with Freight/shipping (77%) as the least important function.

12. PRIORITIES FOR SYSTEM INVESTMENT (percent rating “very” or “somewhat” important)

Survey respondents were presented a set of elements of the transportation system, and asked to choose their priorities for investment.

The top priorities were Bridges (98%), Local Roads (98%), and Roads with the most crashes (98%).

The lowest priorities were Canal facilities (70%), Freight rail facilities (75%), Airports (77%), and Bicycle facilities/bike lanes (78%).

13. WILLINGNESS TO USE ALTERNATIVE MODES FOR COMMUTING (percent saying they would use)

A strong majority of respondents (72%) said that they would consider taking an alternative to the automobile to travel to work.

The most frequently identified alternative mode to work was Transit (45%), with Bike share (5%) selected the least frequently.

Respondents were presented a set of reasons for traveling by personal automobile. The top reasons were Convenience (22%) and the Ability to get to a destination (16%)

14. WILLINGNESS TO PURCHASE OR RIDE IN AN AUTONOMOUS CAR (percent saying they would be willing)

Most respondents to the HOCTS survey were not positively inclined towards buying an Autonomous Car or riding in one. This finding of relatively high rates of concern about advanced vehicle technology is consistent with findings from other studies nationally.

Only 22% said that they would Definitely or Probably do so.

27% said Maybe, and 51% indicated that they Definitely or Probably would not buy or ride in an Autonomous Car.

“Increasing familiarity with and/or exposure to [Autonomous Car] technologies seems like one of the best ways to reduce concerns and increase positive attitudes toward vehicle automation.

A deployment of a low-speed driverless shuttle in Minnesota in early 2018 found that 84% of passengers were apprehensive about AV prior to their ride, but 95% of passengers reported feeling safe during their experience.”

-- Predictors of Attitudes towards Automated Vehicles: The Roles of Age, Gender, Prior Knowledge, and Personality.

Article published Dec. 2018 in *Frontiers in Psychology*.

ACCESSIBLE AT: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6315114/pdf/fpsyg-09-02589.pdf>

BUILDING ON THE GOING PLACES INITIATIVE:

- HOCTS will maintain its focus on Performance Based Planning.
- HOCTS will publish a Transportation Atlas in 2020 for the first time.
- HOCTS will regularly update the region's UPWP and TIP documents, on the federally mandated timescales.
- HOCTS will adopt a new/updated Long-Range Transportation Plan no later than 5 years from the adoption of Going Places.



