Chapter 5

HIGHWAYS, PAVEMENT and BRIDGES

Highways comprise the vast majority of the regional transportation infrastructure. Private automobiles and commercial vehicles continue to be the dominant mode of moving goods and people. Besides providing basic mobility, a reliable, predictable, and functional surface transportation system is directly linked to sustained and expanded economic development, tourism and recreation, safety and emergency response, and quality of life. This section includes a description of federal-aid eligible roadways, a summary of existing conditions and recent condition history, and generalized traffic conditions and trends.

The total centerline mileage (340.12) of regional streets and highways that are eligible to receive federal aid is less than 7.30% of the overall mileage total of the entire two-county roadway network (~4,000 miles). As a result, federal funds are a comparatively small element of the transportation funding equation. Cities, villages, towns and counties also contribute considerable resources to maintaining their respective highway systems while working to preserve local and regional mobility.

5.1 EXISTING ASSETS

Highway Infrastructure

There are 1,748 miles of highways in Herkimer County and 3,262 miles of highways in Oneida County. The chart below provides additional details regarding ownership by mileage for both counties.

Figure 5.1, Highway Ownership by Mileage

County	Municipal and Private	County	NYSDOT
Oneida County	2187	593	482
Herkimer County	920	574	254
Total	**3107**	**1167**	**736**

Source: DOT Portable Framework StreetsSimple.gbd release date May 5, 2009

Functional Classification and the federal aid - eligible network

Functional Classification is the grouping of streets and highways into classes or systems according to the nature of service they provide. The classification also defines the role that a road or street plays in the network. Ultimately, the functional classification of a road also determines whether or not it is eligible for federal funding. The criteria listed below are some of the more relevant considerations utilized when determining the functional class of a road.

General functional class criteria considered:

1) Lane width
2) Number of Lanes
3) AADT (Annual Average Daily Traffic)
4) Heavy vehicle percentage
5) Network Connectivity
6) Surrounding land uses
7) Travel Patterns
8) Population centers

The charts below illustrate the interrelation of the Functional Classification and Federal Aid Eligibility, and the amount of corresponding mileage classification each County has as per MAP-21 regulations.

Figure 5.2, FHWA Functional Classification

FHWA Functional Classification Chart		
Rural		***Urban***
Principal Arterial		
Interstate	NHS	Interstate
Other Freeway & Expressway		Other Freeway & Expressway
Other Principal Arterial		Other Principal Arterial
Minor Arterial		
Minor Arterial		Minor Arterial
Collector		
Major Collector		Major Collector
Minor Collector		Minor Collector
Local		Local

= Federal-Aid Eligible

- Federal Highway Administration's Highway Functional Classification Concepts, Criteria, and Procedures, 2013 Edition.

Figure 5.3, FHWA Functional Classification of Road Mileage by County

Federal-Aid Eligible Road Mileage					
Oneida County			**Herkimer County**		
Functional Class	**Numeric Code**	**Mileage**	**Functional Class**	**Numeric Code**	**Mileage**
Minor Arterial	6	0.3	Minor Arterial	6	0
Major Collector	7	43	Major Collector	7	43.6
Principal Arterial	14	12.4	Principal Arterial	14	0
Minor Arterial	16	50.3	Minor Arterial	16	12
Collector	17	160	Collector	17	17.3
Total		**266**	**Total**		**72.9**

Source: Herkimer -Oneida County Transportation Study Local Functional Class Roads v. 2013

The following maps depict the functional class of the roads in Herkimer and Oneida Counties. All roads are shown on the map, but those that have been elevated to a functional classification that is federal-aid eligible are colored. The functional classification network is contiguous and utilizes a well-defined hierarchy of roads that start with the local roads that distribute traffic and slowly build to larger, higher functional classifications that allow traffic to flow between nodes. Ultimately this classification system builds a network that allows regional and statewide transportation connections to occur seamlessly.

Figure 5.4, Map of the Functional Classification of Roads: Herkimer County

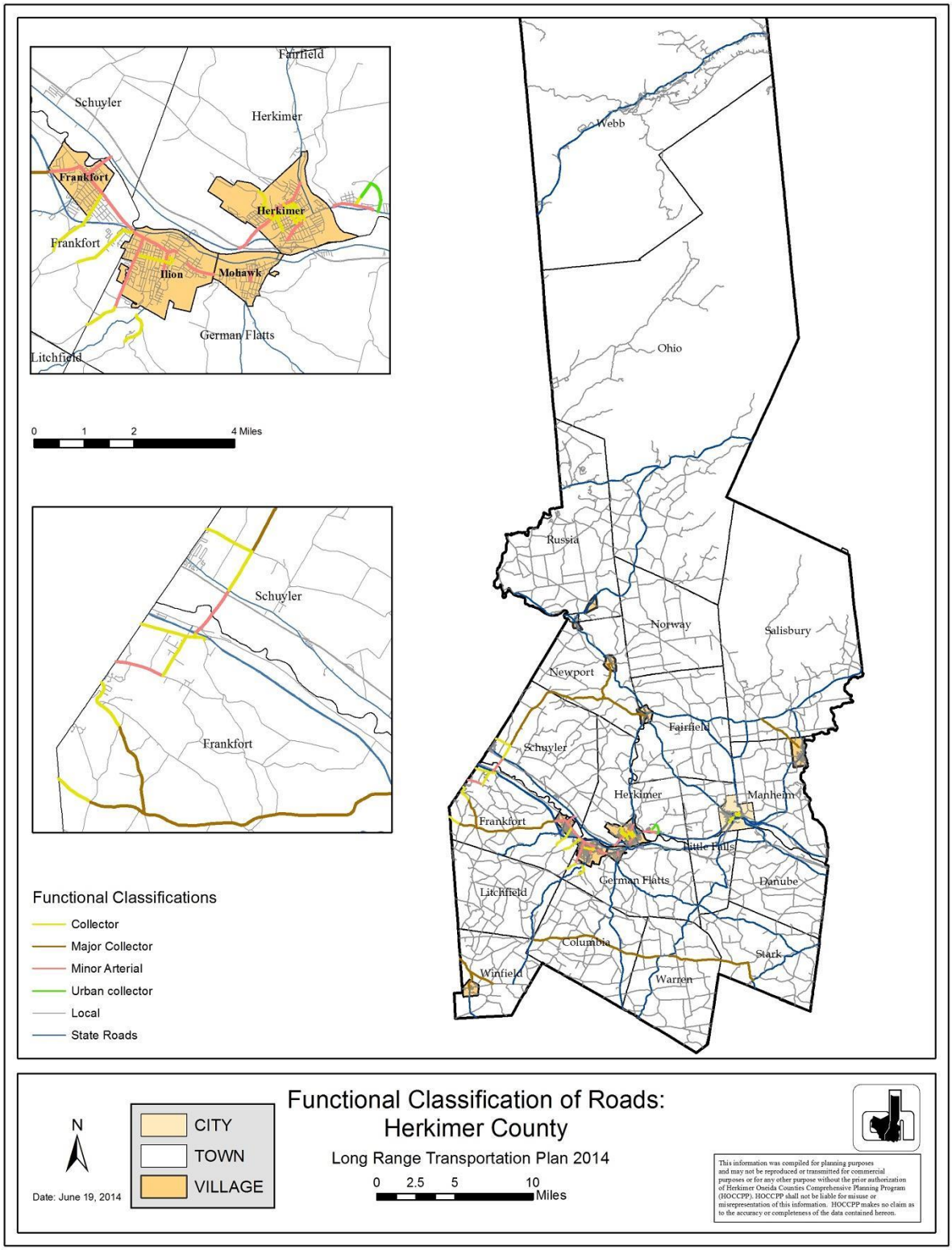
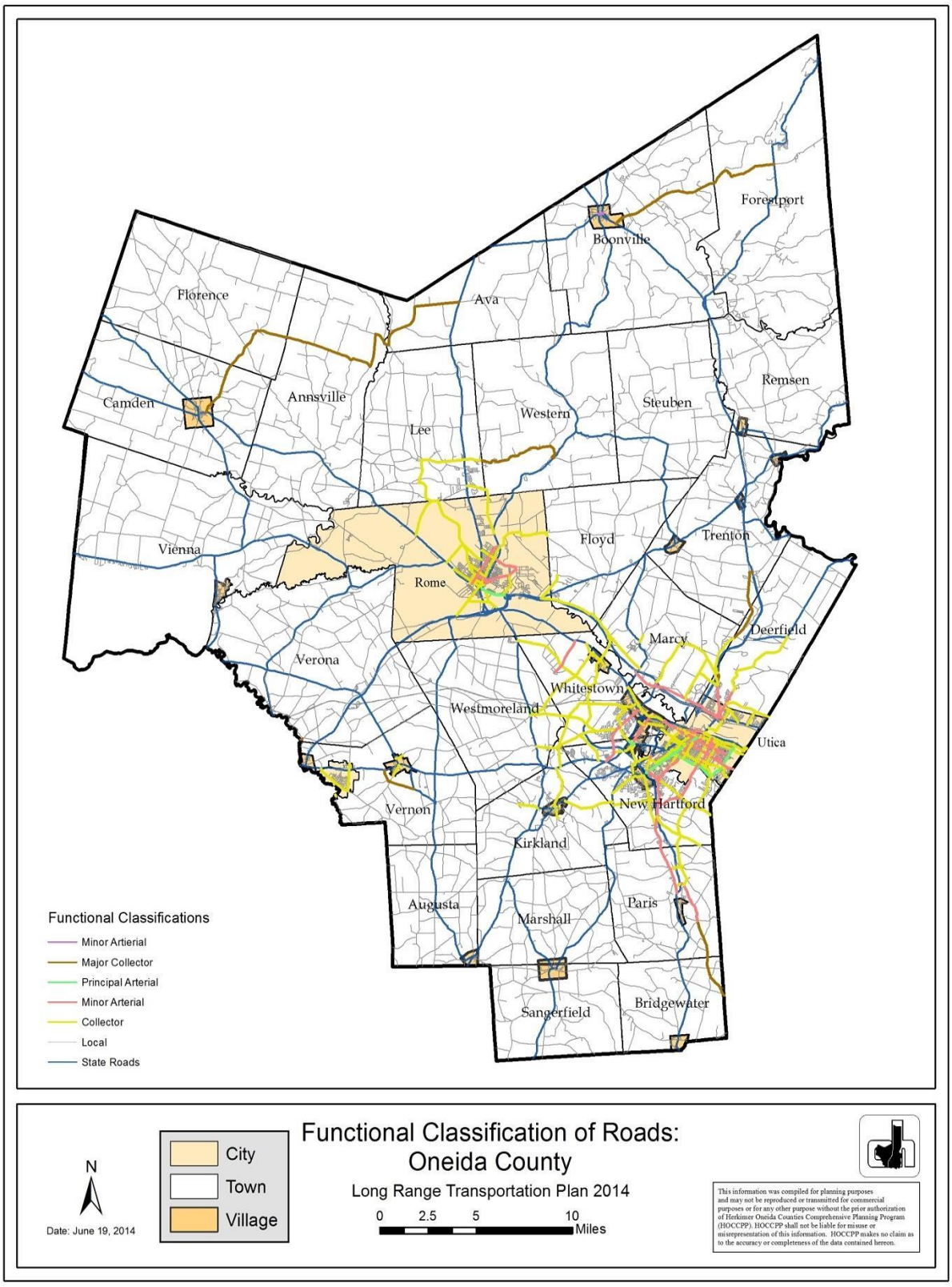


Figure 5.5, Map of the Functional Classification of Roads: Oneida County



Regionally Significant Highway & Bridge Corridors

HOCTS and NYSDOT Region 2 have established a priority network of the most important travel corridors for the Region. Use patterns, detour lengths, trade routes, commuting routes and tourism considerations, as well as traffic volumes, were used to recognize the varying needs of different highway segments. The only designated statewide corridor in the Region is the *Mohawk-Erie Multi-Modal Transportation Corridor (I-90 Corridor)*, which includes I-90/Thruway and its support arteries, CSX rail lines and the Erie Canal. However, the Region does have a number of routes which are identified in the Statewide Support Network for Trade Corridors.

To complement I-90 and the Statewide corridor system, the Region has been working to establish program priorities that support mobility along these corridors. These corridors are intended to provide east-west and north-south connections between Interstates 90, 81 and 88, as well as a regional route between Thruway interchange 31 in Utica, the City of Rome, and interchange 33 in Verona.

In addition, tourism is a vital component of the Mohawk Valley economy, as evidenced by its statewide Tourism Gateway designation. In addition to several gateway routes into the Adirondack Park, the area is home to the Turning Stone Casino & Resort as well as numerous significant historic sites, tourist attractions and community events. These types of activities create different user needs on the roadway system as their traffic volumes fluctuate based on seasonal demand, weather conditions, planned events, etc. In addition, for tourism purposes, connectivity between Thruway interchanges and the urban centers and gateways; Utica, Rome, Little Falls and Oneida/Verona becomes of importance when considering potential capital investments. The Region's Statewide Support Network and Other Regionally Identified Corridors are as follows:

Statewide Trade Corridor Support Network

- Route 12 [Binghamton to Utica (I-790)];
- Route 12 [Utica (I-790) to Watertown];
- Routes 49/365 (Thruway Exit 31 to Thruway Exit 33);
- Route 69 [Route 365 (City of Rome) into Madison County];
- U.S. Route 20 through southern Herkimer and Oneida Counties;
- North Genesee Street (Route 5S to Thruway Exit 31);
- Route 5S (East-West Arterial) between Route 5/8/12 and North Genesee Street.

Other Regionally Identified Corridors

- Route 5 through southern Herkimer and central Oneida Counties;
- Route 8 (Utica into Madison and Otsego Counties);
- Route 12B (Route 20 to Route 5);
- Route 233 (Route 12B to Route 365);
- Route 365 (Route 5 to Thruway Exit 33);
- Route 13 (Route 5 to Thruway Exit 34);
- Route 46 (Black River Boulevard-Rome);
- Route 5A/5B (Route 5 to Route 5S);
- Route 5S (North Genesee Street to Herkimer)

Freight Truck Traffic

The U.S. Federal Highway Administration projects a doubling of truck traffic in the next 20 years. The State of New York is projected to follow that trend with expected increases occurring in urbanized areas and the interstate highway system. Currently, 90% of freight flowing in and out of New York moves by truck. A significant increase in truck traffic will have a negative impact on highway/bridge infrastructure, air quality, mobility and safety.

A projection analysis using 2002 baseline data obtained from the Highway Performance Monitoring System for truck networks within Herkimer-Oneida Counties indicates that certain routes or highways within that network will see a significant increase in truck traffic by 2035. In particular, the number of light, service type trucks is expected to increase significantly due to more e-commerce and customers' need for "just in time" delivery.

Figure 5.6, Anticipated Freight Truck Increases, 2002 - 2035

Anticipated Freight Truck Increases, 2002-2035		
Route or Highway	**Heavy Trucks**	**Light Trucks**
I - 90 (Thruway)	56%	20%
I-790	18%	242%
Route 365	20%	93%
Route 12	30%	181%
Route 20	12%	117%
Routes 46\49	37%	121%
Routes 5A\5S	39%	98%

Source: Highway Performance Monitoring System Data for Herkimer and Oneida Counties

Highway Pavement Conditions

The HOCTS road condition data compliments road condition data collected by NYSDOT. Together they comprise a complete report on the condition of the Federal-Aid Highway System in Herkimer and Oneida Counties, as well as aid in the production of functional-class mapping of the statewide Federal-Aid Highway System. Additionally, the annual NYSDOT Local Highway Inventory (LHI) provides an inventory of data on locally-owned roads that includes traffic volume, pavement condition, functional class, lane mileage and other information. Both processes use the same rating scale ranging from 1 (poor, surface distress is frequent and severe) to 10 (excellent, no surface distress).

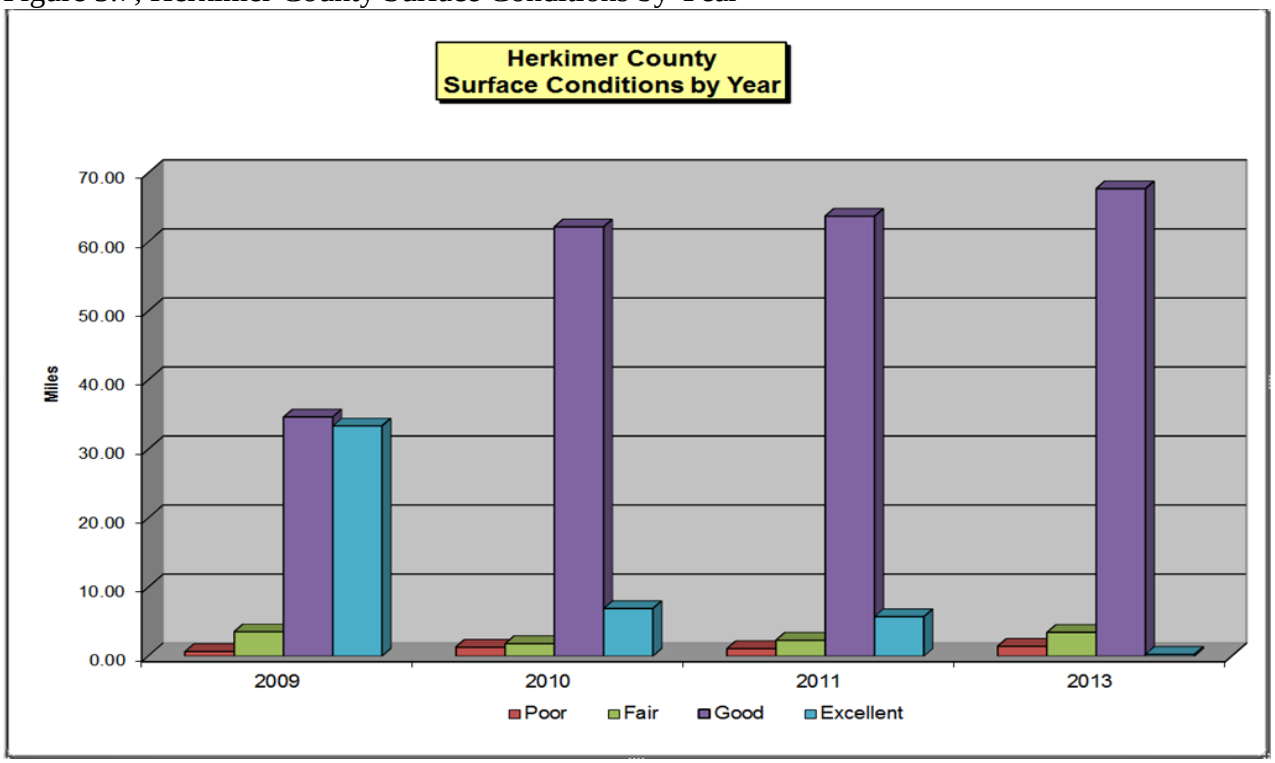
The LHI data is incorporated into a formula that sets funding levels for the Consolidated Local Streets and Highways Improvement Program (CHIPS). This information can assist municipalities in planning maintenance and capital needs. A municipal Pavement Management System (PMS) should minimally consist of a pavement condition survey and a needs estimating process. This information will also assist NYSDOT in the preparation of project reports, and will aid HOCTS in the understanding of the financial needs that will be required to maintain the federal system. The information is also used by the municipalities to help determine which roads need resurfacing.

System Details

There were 340.12 miles of Non-State Federal Aid roads scored in Herkimer and Oneida Counties for 2013. Of the 340.12 miles, 72.88 miles are located in Herkimer County and 267.24 miles are located in Oneida County.

- 84.89% of the total non-state system for 2013 was in good to excellent condition.
- The percentage of roads in good condition increased to 78.54% in 2013 from 73.17% in 2011.
- Roads in excellent condition decreased from 14.33% in 2011 to 6.34% in 2013.
- Roads in fair condition increased from 8.40% in 2011 to 9.93% for 2013.
- Poor roads increased from 4.11% in 2011 to 5.18% in 2013.

Figure 5.7, Herkimer County Surface Conditions by Year



Source: 2013 Pavement Condition Ratings for the Non-State Federal Aid Highway System in Herkimer and Oneida Counties

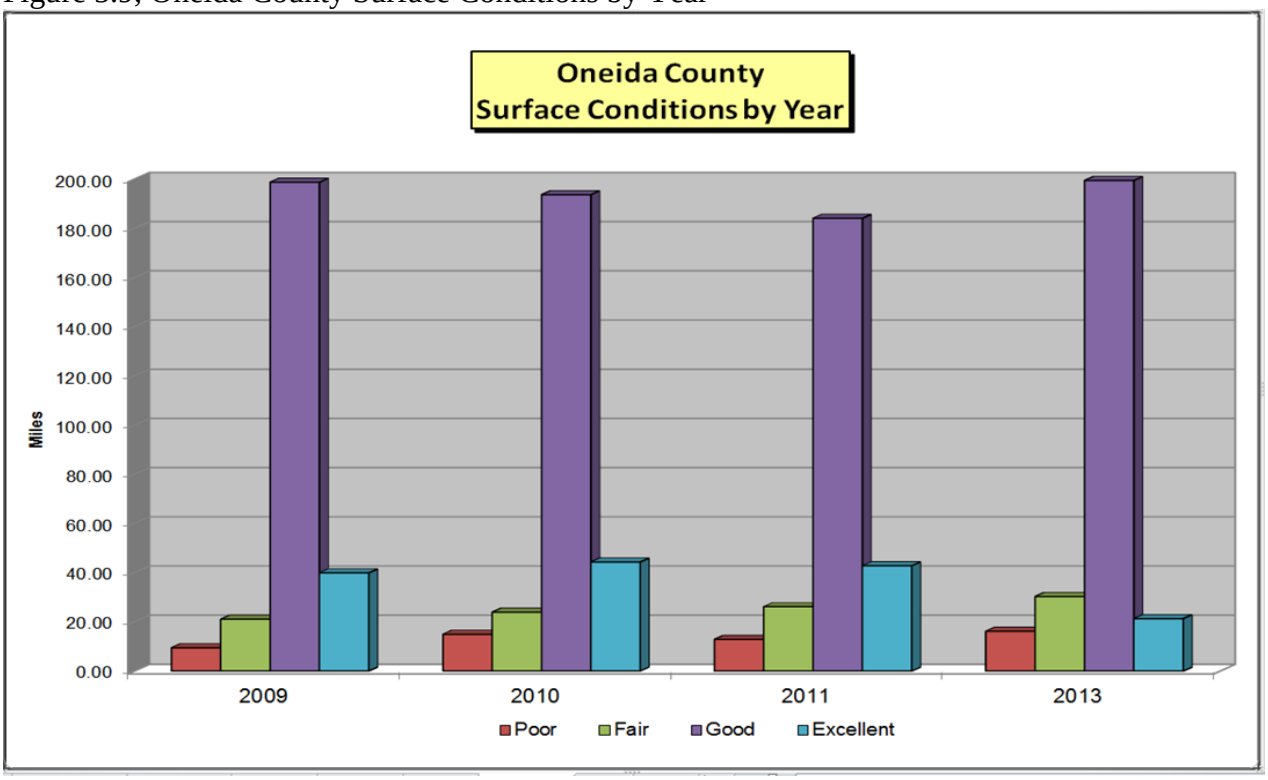
Figure 5.8, Surface Condition by Miles

Surface Condition by Miles

Year	Poor	Fair	Good	Excellent
2009	0.67	3.54	34.65	33.35
2010	1.31	1.81	62.19	6.90
2011	1.09	2.31	63.74	5.73
2013	**1.44**	**3.45**	**67.72**	**0.27**

Source: 2013 Pavement Condition Ratings for the Non-State Federal Aid Highway System in Herkimer and Oneida Counties

Figure 5.9, Oneida County Surface Conditions by Year



Source: 2013 Pavement Condition Ratings for the Non-State Federal Aid Highway System in Herkimer and Oneida Counties

Figure 5.10, Surface Condition by Miles

Surface Condition by Miles

Year	Poor	Fair	Good	Excellent
2009	9.47	21.05	198.72	39.91
2010	14.94	23.91	193.68	44.33
2011	12.82	184.09	26.13	42.81
2013	**16.17**	**30.33**	**199.43**	**21.31**

Source: 2013 Pavement Condition Ratings for the Non-State Federal Aid Highway System in Herkimer and Oneida Counties

Figure 5.11, Map of Road Scores 2013: Herkimer County

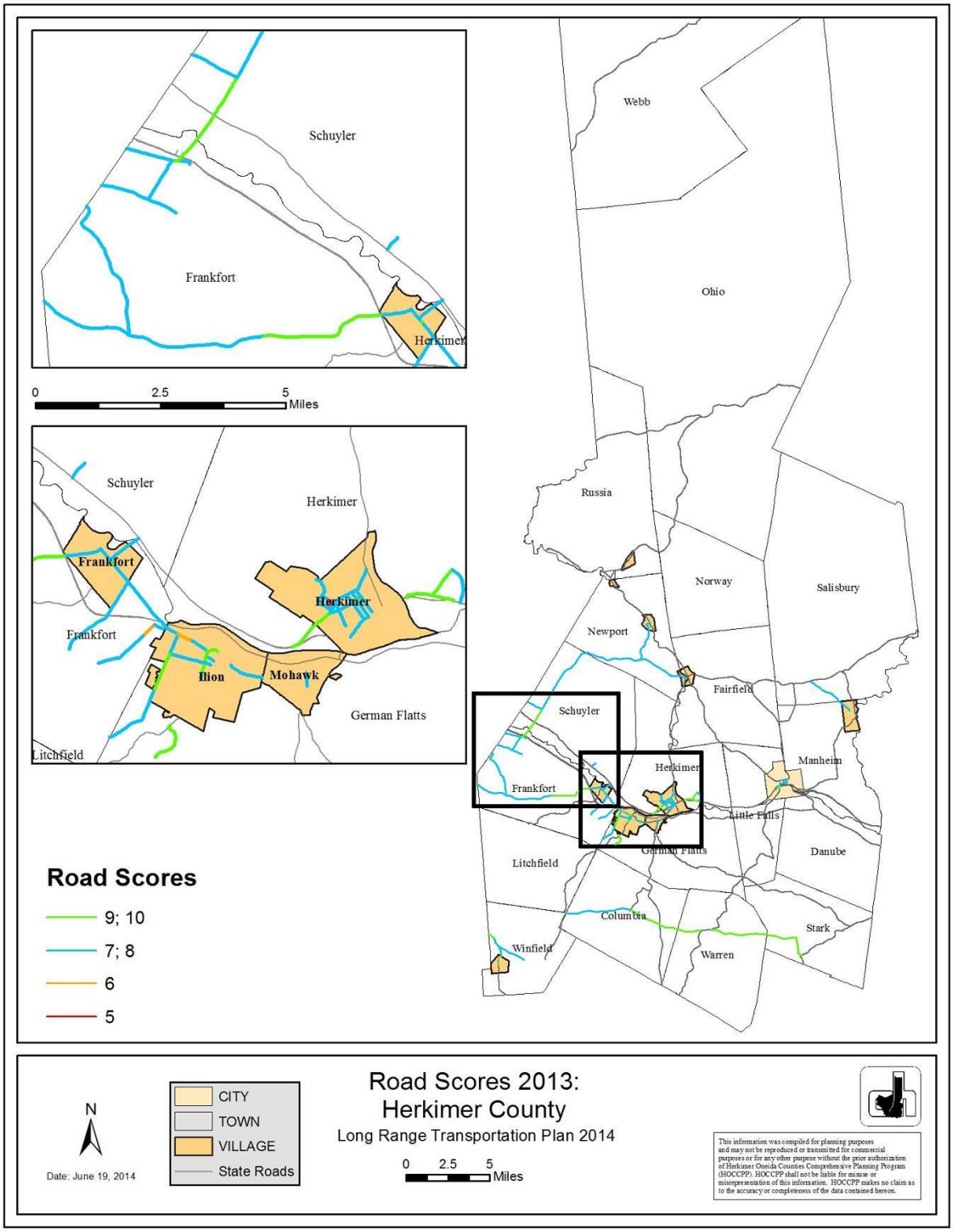
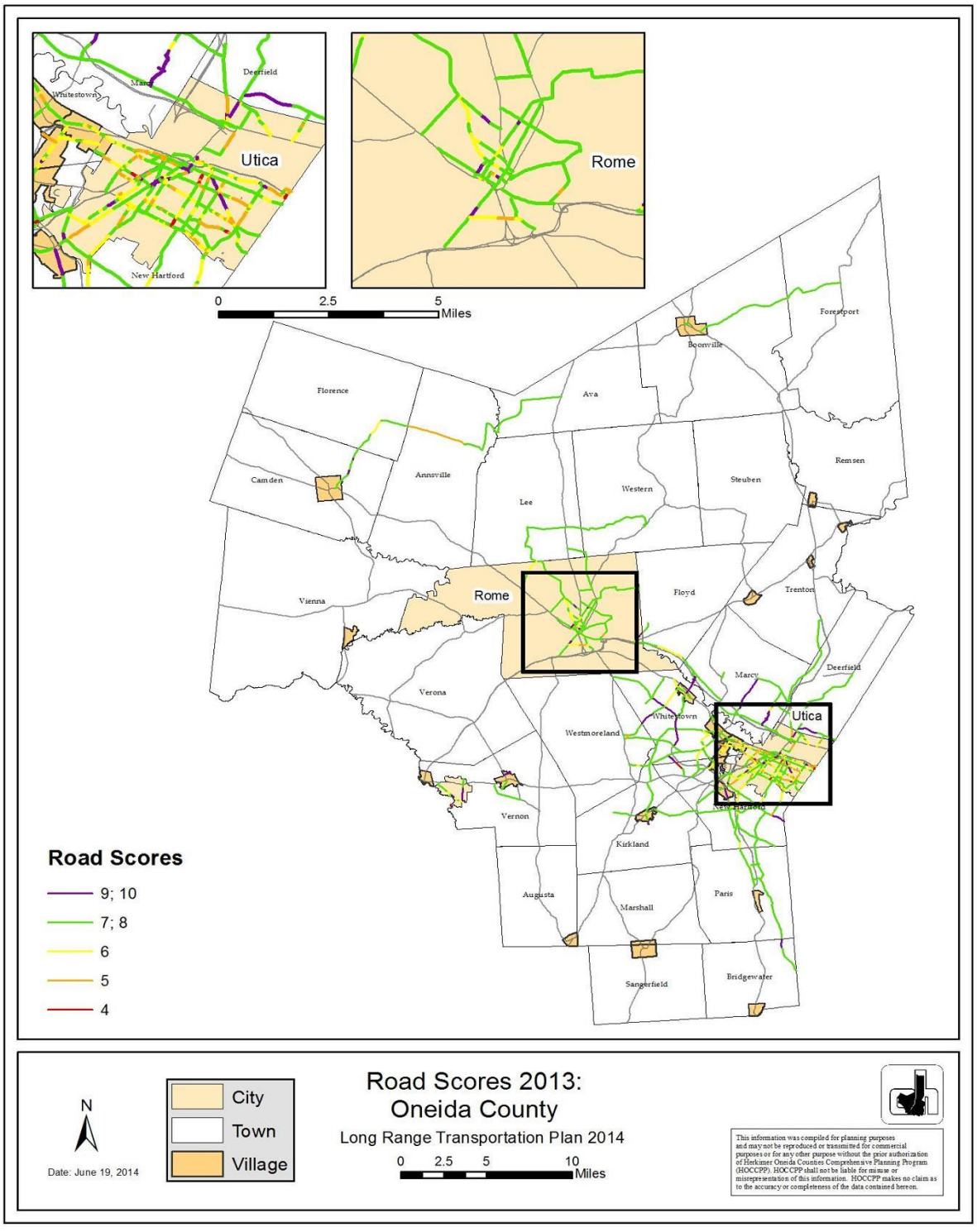


Figure 5.12, Map of Road Scores 2013: Oneida County



Bridge System
The geography of Herkimer and Oneida Counties create a situation where bridge infrastructure is critical for the functionality of the transportation network. Within the two counties there are a total of 420 bridges over 20 feet in length, of those, 144 bridges are located in Herkimer County and 276 bridges are located in Oneida County.

5.2 HIGHLIGHTS SINCE LAST LRTP

Notable Highway Network Projects
Routes 5/8/12 (North-South Arterial) Corridor
This project involves the replacement of the viaduct (the elevated portion) of State Routes 5, 8, and 12 over Columbia and Lafayette Streets and Oriskany Boulevard (intersection of State Routes 5A and 5S) in the City of Utica, Oneida County. The need for this project was identified through the New York State Department of Transportation Bridge Inspection Program. Replacement of the viaduct was also reflected in the Utica North-South Arterial Corridor Study that was initiated in 2006 by the Herkimer Oneida Counties Transportation Studies (HOCTS) in cooperation with the City of Utica, Oneida County and the New York State Department of Transportation.

The primary purpose of this project is to maintain the structural integrity of the viaduct. To that end, several interchange and bridge configurations are being considered which replace the viaduct and are consistent with the vision identified in the study. As the Department progresses through the project development process, there will be several opportunities for public involvement and comment. The end product of this process is the selection of a feasible preferred alternative which will be progressed through design and constructed. The first contract was let for this project in early 2013, over the course of two contracts; it is expected for construction to be complete in 2017.

Figure 5.13, North-South Arterial Schedule Table

Project PIN	Project Description
2134.51 (D262149)	Route 5-8-12 North-South Arterial Viaduct Replacement Demolition Contract
	Contractor: Peak Environmental, Oswego, NY • Low Bid Cost $1.4M • Fifty-seven (57) structures are slated for demolition. Asbestos assessments and abatement will be followed by demolition. Air monitoring and necessary precautions will be taken. • Weekly meetings will be held to determine upcoming schedule. Neighbors and community officials will be notified. • Fay St. Warehouse demolition is tentatively scheduled for 2014 under separate contract.

2134.50 (D262237)	Route 5-8-12 North-South Arterial Viaduct Replacement Contract 1
	• The bid opening was held on March 28, 2013 • Construction is expected to begin in late June 2013 • Construction is expected to be complete in August 2014 Reconstruction Areas: **Construction began late Spring 2013** • Frontage Rd. – Sunset Ave. to Court St. • Pedestrian bridge • Multi-use trail - pedestrian bridge north to Court St. **Mitigation Sites** • Lincoln Ave. extension to Burrstone Rd. – remove ramp onto Rt. 12 • Oriskany Blvd./Champlin Ave.: allow left turns for emergency vehicles • Provide access to Varick St. from Oriskany Blvd. Build cul-de-sac on Whitesboro St. • Cornelia Street at the intersection of Oriskany Blvd. • Extension of the ramp onto Oriskany Blvd. westbound from mainline southbound. • Reconstruction of the ramps between Route 5/8/12 and Oriskany Blvd. • Construction of a new city street connecting Spring St. to Columbia St. • Completion of the multi-use trail from State St. to Utica Auditorium • Milling and resurfacing of Lincoln Ave. between Sunset Ave. and Roberts St. • Reconstruction of Utica Cutlery and Holy Trinity Church driveways to mitigate for closure of Sunset Ave. **Traffic impacts will be minimal on mainline (Routes 5/8/12)** • Minor disruptions on city streets • Major utility work in project areas (National Grid, Verizon, Time Warner, Northland Comm.)
2134.41	Route 5-8-12 North-South Arterial Viaduct Replacement Contract 2
	• The current status of the project is in "Final Design." • The bid opening is expected to be in Spring 2014. • Construction is expected to begin in late Spring 2014. • Construction is expected to be completed in August 2016. **Spring 2014 (2 year contract)** • Replacement of viaduct bridges • Construction of Court St. interchange • Paving of Lincoln Ave. • Landscaping • Expansion of parking area where existing viaduct stands **Traffic impacts on mainline major** • Minor disruptions city streets (Major disruption on Court St.) • Minor private utility work in project areas. (National Grid, Verizon, Time Warner)

Route 5S/ Oriskany Boulevard Safety Project - Utica Auditorium to Broad Street

In conjunction with sewer separation work that is required within the City of Utica and underneath or within the right-of-way of Oriskany Blvd., a large scale study and redesign of the roadway network will occur. This project will essentially run from Broadway (near the Utica Auditorium) to Broad Street and include the intersections of Genesee and John Street. This entire corridor has been identified as a high accident area and shows overall very poor safety statistics. This project will improve safety in this the corridor and intersections to develop a true boulevard for the City of Utica. The redesign of this roadway will utilize safety funds to aid in improving safety of the entire network. Presently this corridor has limited access and inhibits pedestrian and traffic cross-flow in the corridor. Given, the development that has recently happened within this area (Bagg's Square District) of Utica the project will complement other efforts. Also, it will tie into the eastern edge limits of the North-South Arterial project; thus truly creating an upgraded transportation network for the region. The project will ultimately seek to provide a boulevard with enhance safety features and smoother movement of traffic.

Bridge System – Current Status

Bridge Inspection - The Oneida County Department of Public Works and the Herkimer County Department of Highways conduct biannual structure inventories to assess the condition of bridges less than 20 feet in length; NYSDOT inventories local structures over 20 feet long. At least once every two years each structure is inspected to identify any safety deficiencies. NYSDOT also relies on its Bridge Management System (BMS) to organize and implement activities to plan, design, construct, maintain, rehabilitate and replace bridges which are vital to the highway network.

Figure 5.14, Herkimer County Bridge Status and Ownership

HERKIMER COUNTY BRIDGE STATUS AND OWNERSHIP				
RATING	**STATUS**	**OWNER**	**COUNT**	**% COUNTY TOTAL**
<50	REPLACE	STATE*	6	3
<50		COUNTY	6	3
<50		LOCAL	16	7
50-80	REHAB	STATE*	35	15
50-80		COUNTY	17	7
50-80		LOCAL	23	10
80-100	LEAVE	STATE*	82	34
80-100		COUNTY	41	17
80-100		LOCAL	13	5
		TOTAL^	239	100
^Per NYS DOT rating, HC has 261 bridges but 8 are unused railroads and 15 are not rated.				
*State includes NYS DOT, NYS Thruway Authority and other State Departments				

Figure 5.15, Oneida County Bridge Status and Ownership

ONEIDA COUNTY BRIDGE STATUS AND OWNERSHIP				
RATING	**STATUS**	**OWNER**	**COUNT**	**% COUNTY TOTAL**
<50	REPLACE	STATE*	24	5
<50		COUNTY	4	1
<50		LOCAL	21	4
50-80	REHAB	STATE*	85	17
50-80		COUNTY	35	7
50-80		LOCAL	59	12
80-100	LEAVE	STATE*	158	32
80-100		COUNTY	66	13
80-100		LOCAL	39	8
		TOTAL^	491	100
^Per NYS DOT rating, OC has 523 bridges but 12 are unused railroads and 21 are not rated.				
*State includes NYS DOT, NYS Thruway Authority and other State Departments				

5.3 CHALLENGES AND OPPORTUNITIES

Herkimer and Oneida Counties, like the rest of New York State, are confronting the challenges of a mostly built out and aging transportation system, in which investments are not keeping pace with needs. The highway, bridge and pavement effort is centered on improving overall mobility through operational, safety, and infrastructure improvements on existing facilities. Since the last LRTP update, HOCTS and NYSDOT Region 2 has continued to deliver timely, cost effective investments in the two-County area. However, that being said, highway and bridge infrastructure has reached a critical state. Infrastructure preservation on a desired life cycle basis has become difficult trade-off decisions being made daily based on safety, risk, and vulnerability.

Essentially, the two Counties are at a point where numerous roadways are beyond maintenance treatments being effective, and deficiencies greatly affect the mobility and serviceability of the road. Many state and county routes represent "Main Street" to their municipality and the pavement condition creates both real and perceived adverse economic effects. These effects are further complicated by the overlapping, and relatively short, tourism and construction seasons of central New York. Peak tourism occurs between the 4th of July and Labor Day and construction activities during these eight weeks are sometimes the source of contentious debate.

Flood-Proofing Our Infrastructure

In June of 2013 an unprecedented amount of rainfall fell onto the Mohawk Valley, causing the Mohawk River and its tributaries to overflow its banks. The flooding was caused not only by the high volume of water but also because many creeks and tributaries that flow into the river have narrow, restrictive channels that don't respond well to excess water flow. Channel limits include structural obstructions such as narrow culverts, underpasses, dams and levees, and drainage structures.

The 2013 flood had affects throughout Herkimer and Oneida Counties (and most profoundly in neighboring Montgomery County); it particularly inflicted damage to Herkimer, Mohawk, Ilion, and Frankfort. All of these communities feature passing creeks that move briskly after descending several hundred feet from the hills outside of the valley. The combination of rapidly falling elevation with narrow channel limits catalyzed the flooding that occurred in these communities. Most notably, flooding destroyed the Maple Grove Ave Bridge over Bellinger Brook in Herkimer and the Phillip St Bridge over Steele Creek in Ilion.

Most matters in dealing with water flow are reserved to the New York State Department of Environmental Conservation (NYSDEC). However, a post flood assessment report issued jointly by NYSDOT/NYSDEC (compiled by the consulting firm Milone & MacBroom, Inc.) noted that the widening and/or rebuilding of existing bridges to allow for increased flow capacity would potentially reduce the risk of creek overflow. The assessment cited the following bridges as being undersized and recommended bridge widening/replacements:

- *Bellinger Brook*
  Maple Grove Ave, W German St, and Church St bridges, and Herkimer High School pedestrian bridge in Herkimer
- *Big Creek*
  Route 315, Bogan Rd, Gridley Paige Rd, Shanley Rd, and California Rd bridges in Marshall
- *Maltanner Creek*
  Route 28 and Route 29 bridges in Middleville
- *Mud Creek*
  Seneca Turnpike culvert in New Hartford
- *Nowadaga Creek*
  Creek Rd and Rail-Trail bridges in Danube
- *Oriskany Creek*
  Route 315 and Van Hyning Rd bridges in Marshall, Norton Ave, Lumbard Rd, Route 12B, College St, and Main St bridges in Kirkland, Peckville Rd and Stone Rd bridges in Whitestown, and Utica St, Erie Blvd, and CSX bridges in Oriskany
- *Otsquago Creek*
  Wiltse Hill Rd, Route 168, and Moyer Rd bridges in Stark
- *Sauquoit Creek*
  Bleachery Ave and NYSW bridges in New Hartford, Commercial Dr bridge in New York Mills, and CSX, Main St, Oriskany Blvd, and Route 5A on-ramp bridges in Whitesboro
- *Steele Creek*
  Richfield St, Frederick St, Otsego St, 3rd St, 2nd St, and W Main St bridges in Ilion

Many of these bridges are functionally obsolete and/or structurally deficient per NYSDOT standards. Some bridges are less likely to be given consideration due to their relatively young

age: the Commercial Dr. Bridge over Oriskany Creek is not even a decade old and the Frederick St. Bridge over Steele Creek is a brand-new bridge installed after the Phillip St. Bridge was destroyed. With flooding occurring more frequently in recent years than compared to the past (the Mohawk Valley also had instances of flooding in 2006 and 2011). It is becoming more important than ever to ensure that communities located along streams and in valleys are as flood-proofed as they can be. Building bridge infrastructure that is flood proof will take years of cooperative effort to complete however, the improvements will significantly upgrade the roadway and infrastructure system in the two counties.

Highway Funding – Federal Priorities and Local Needs

The challenges facing transportation planning today go beyond the reduction of available federal and state funds. Just as equally challenging is dealing with the how the funds are allocated to projects throughout the region. Every segment of infrastructure is critical to traffic flow; and ensuring that goods and people can be transported.

A balance is needed to ensure that all roads, regardless of functional classification, are repaired sooner than later not only to reduce hazards but also to reduce cost. This is particularly essential considering the uncertainty that surrounds transportation funding. Collectors are not federal-aid highways, and as such receive little-to-no federal funding. With the NYSDOT allocating funding to its state highway network, this leaves counties and individual municipalities to be primarily responsible for overseeing their roadways. Budgets typically allow for basic maintenance, but they do not have the funds to perform complete road repair. It is recommended that counties and communities explore other potential means of funding including, but not limited to, public-private partnerships, loan programs, vehicle-miles traveled charges (VMT), dedicated tax revenue funding or cooperative agreements with other entities.

Each of these approaches has its own pros and cons, and none of them have been implemented yet on a widespread basis in the United States. Public-private partnerships (or "P3s") have been implemented for select toll highways, but there is no example yet of one that manages local streets. Loan programs would rely on eventual repayment and VMTs would be a direct proportional cost to the road user, which could discourage driving and also be potentially burdensome to lower-income residents. Regardless, the current funding system is unsustainable on a national level therefore unsustainable for state and most local systems. An increase in federal and state funds is highly unlikely for the time being. It is imperative to explore, support, and aid developing the implementation for alternate funding solutions to ensure that local road systems do not decay further.

Pavement Conditions – Network maintenance and Funding Concerns

While pavement conditions have improved, 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. Additionally a projected increase in truck traffic will cause highways and trade corridors to wear out at a faster rate, putting even more strain on the NYSDOT and local public works departments. While the NYSDOT is the primary evaluator of road conditions in the state, it is encouraged that local governments conduct their own supplemental pavement reports, and start exploring funding alternatives to proactively address repairs and anticipated funding shortfalls. HOCTS has already undertaken the process of rating non-state/federal aid highways throughout

Herkimer and Oneida counties. This provides municipalities with recent statistics to better identify problematic roads and therefore plan ahead and prioritize where to focus reconstruction efforts. Compiling and analyzing statistical data is of greater essence in the midst of reduced funds, as it will not only provide accurate conditions but also allow governments and planning organizations to extrapolate timelines for when roads and highways will need future repairs.

Pavement condition is one of the single most important factors in determining the maintenance cost of roadways within the network. Pavement that is continually maintained in a fair to good condition has been proven to have a longer life span than pavement that goes to poor condition then is repaired to good condition. This simple fact creates a situation where monitoring pavement condition becomes a very cost effective tool.

The Pavement Condition Ratings report for the Non-State Federal Aid Highway System in Herkimer and Oneida Counties is a resource that is a huge opportunity for maintaining the transportation network. The report provides information that should assist municipalities in planning maintenance and capital needs. A local municipality Pavement Management System (PMS) should minimally consist of a pavement condition survey and needs estimating process. This is the opportunity that exists.

Development of a pavement conditions report for roads beyond the Non-State Federal Aid Highway System would bring invaluable data to local municipalities. In-turn the limited dollars that are available to fund roadway repairs could be allocated at the correct intervals and most in-need locations. Long-term utilization of this system would lead to a continuous and sustaining PMS, with the long-term effect of enhancing the transportation network through long term, planned investment. The key to all this would be to bring the pavement conditions rating to all member municipalities.

Bridge System – Cooperation and a local bridge program

NYSDOT is responsible not only for bridge inspections but also for approving and implementing bridge replacements. In Herkimer and Oneida counties, NYSDOT inspects the vast majority of highway bridges which can range from major highway viaducts to rural creek overpasses which are over 20 feet in length. Exceptions include bridges along the NYS Thruway, which are inspected by the NYS Thruway Authority, and bridges less than 20 feet in length, which are inspected biannually by the Oneida County Department of Public Works and the Herkimer County Department of Highways. Many of the rural and town road bridges that carry non-state highways are considerably older than their state highway counterparts. Despite this, they are still critically important links for local residents and the economy, as disruptions or closures could potentially cause miles-long detours and increase traffic density at other strained bridges. When a bridge's structure becomes compromised, many non-state highway bridges are down posted to reduce load carry weight, or reduced to single-lane traffic with signal control. However, due to their road hierarchy rating and typically lower traffic volume they often are waitlisted until rehab or reconstruction funds can be allocated. In the most extreme cases the bridge structure is permanently closed, impacting the entire transportation network.

The importance of these bridges to the flow of traffic within its communities cannot be overstated. HOCTS in conjunction with its member counties are in favor of the creation of a local bridge program which would direct responsibility of bridge replacements for these critical

highway system bridges to the county level. The NYSDOT would be able to allocate appropriate funding to the county governments, who would then become the primary responsible party for determining a priority list of bridge repair and replacements of non-state highway structures. The NYSDOT would still be responsible for bridge inspections and maintaining state highway and trade corridor over bridges.

Congestion & Access Management

The HOCTS MPA does not have the congestion volumes which plague other areas of the state. Herkimer and Oneida Counties are within an EPA-designated attainment area for air quality. Therefore, HOCTS does not access Congestion Mitigation and Air Quality (CMAQ) funds to address congestion.

This Updated LRTP conforms with the current State Implementation Plan (SIP) and supports its objectives. The Utica Urbanized Area is currently an attainment area for Federal air quality standards. Under proposed new EPA standards for particulate matter and ozone, Herkimer and Oneida Counties would remain an attainment area.

The Updated Long Range Transportation Plan is intended to serve the Utica Urbanized Area and its surrounding counties through the year 2030. The LRTP is a multi modal plan including sections on highways, transit, aviation, railroads, canal and bicycle and pedestrian trails. This regional transportation plan conforms with the SIP and will foster the improvement of air quality by reducing congestion, encouraging ridesharing, supporting transit, minimizing adverse impacts on the natural environment, and promoting energy conservation.

However, mobility is still an important issue with spot congestion occurring at specific locations along critical corridors at peak travel times. Commercial and residential development along the suburban and rural highway network continues to create traffic, access, mobility, and maintenance challenges. Continued emphasis on system safety and reliability, proactive coordination with municipalities, investment in transit, alternative modes, as well as implementation of ITS strategies will maintain and improve system-wide performance. The MPO planning process promotes cost-effective strategies which reduce congestion in identified locations while improving access, mobility and economic development opportunities.

5.4 PRIORITIES AND PROJECTS

Throughout the HOCTS MPA issues pertaining to highways, pavement and bridges are addressed through a need based prioritized system. In the current preservation first, top down model of transportation planning, issues such as safety, infrastructure deterioration, congestion mitigation, and infrastructure development must be carefully managed in order to maintain a highly functional transportation network despite the current funding shortfalls.

The priorities of HOCTS for the two county area include maintaining the current network, preventing further bridge closures and system deterioration. Along with addressing safety issues that are developing due to the area's diversifying population and increasing non-motorized mobility in an effort to support the movement towards healthier and more active communities.

In an effort to improve mobility, a major theme is to incorporate transportation planning and access management concepts into the local land use planning process. HOCTS has utilized the municipal review process to assist member municipalities with this effort. Land use planning at the local level provides the basis for community development and infrastructure investment decisions.

Highways

Highways of all levels are prevalent throughout Herkimer and Oneida Counties due to numerous types of environments and population densities. This expansive highway network is necessary to effectively transport people and goods throughout the area and to other parts of the state. For much of the system, the route alignment and functional classification hierarchy is set, thereby dictating the funding that this area is allocated to maintain the roadways. To best utilize funding, cooperative and creative solutions need to be developed to address the issue of supporting a large highway system with limited funding and increasing expenses. Within New York State, a cooperative effort is seen primarily in the relationship between the NYSDOT and the state's fourteen MPOs. This cooperation enables; the sharing of data, mutual staff support for shared planning efforts, coordination of federal transportation dollars and involvement with the planning of each other's projects. These relationships enable all parties involved to better develop a more efficient and more effective transportation system.

Pavements

HOCTS continues to work to improve the data that is available regarding the transportation system. Utilizing statistical data as well as advanced geographic information systems HOCTS is able to better understand the transportation issues in the area, and with this knowledge it is possible to generate more efficient and effective solutions. Due to the importance of this information the priorities of HOCTS for the duration of the LRTP Update 2035 will be to continue to develop advanced data for the two county transportation network. This data will serve as a resource for all roadway owners and drive a capital program based on absolute need within the system.

Bridges

The bridge system throughout the two county area has seen increased wear and tear due to several severe weather events that have occurred in recent years. Due to these conditions the bridge system in this region has rapidly deteriorated to the point that several bridges have become closed indefinitely. With the current insufficient funding levels it is extremely important to maximize every dollar available in an effort to prevent further closures and reopen the bridges that are currently shutdown. Maintaining bridge infrastructure is one of the most critical elements for maintaining mobility within the entire transportation network.

Priorities

- Rebuild existing infrastructure in a manner which extends the life-span of the entire transportation network.
- Environmental impacts and energy impacts will need to be addressed.
- Identify and plan for weather related impacts on the transportation network.
- Identify flood-prone locations and implement infrastructure improvements which will

address concerns at these locations.

- Continue to monitor pavement conditions.
- Continue traffic count program for the non-state federal-aid road system

CONCLUSION

Even with the increased national emphasis on alternative transportation, the automobile and highways will likely remain the predominant mode of travel for quite some time, especially in an MPO with significant rural areas like HOCTS. The number of lane miles that are deteriorating annually coupled with the aging bridge infrastructure are reason to justify a steady funding source. As Federal and State governments seek to find a long-term solution to transportation funding, we must seek creative methods that allow transportation projects to be funded through alternative ways.