Proposed Final Master Travel Corridor Unit Management Plan for State Highway Travel Corridors in the Adirondack Park

Final Generic Environmental Impact Statement

Volume I
May 2019

Lead Agencies:
New York State Department of Transportation
50 Wolf Road
Albany, NY 12232

New York State Department of Conservation
625 Broadway, 5th Floor
Albany, NY 12233-4254

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New York State

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PROPOSED FINAL MASTER TRAVEL CORRIDOR UNIT MANAGEMENT PLAN – VOLUME I AND SEQR ENVIRONMENTAL DOCUMENTATION

Adirondack Park state highway travel corridors unit management plans are contained in two (2) volumes.

Volume I is a proposed final master plan. It contains an overview and describes the environmental setting, goals, policies, and management criteria that are universally applied and characteristic to all Adirondack Park state highway travel corridors. Volume II will be composed of individual state highway travel corridor unit management plans. These plans will include specific management objectives and inventories of physical, biological, and manmade features unique to each state highway travel corridor. Attachments, including references and supporting data are included in Volume I.

State highway Travel Corridor Unit Management Plans (TCUMP) are prepared by the New York State Department of Transportation (DOT). Individual corridor unit management plans (Volume II) cover a five (5) year management period. TCUMPs are completed in accordance with management guidelines and criteria set forth in the Adirondack Park State Land Master Plan (APSLMP). This process includes consultation with the Adirondack Park Agency (APA).

Contributors to the Master TCUMP and SEQR Environmental Documentation include: the Department of Environmental Conservation (DEC),_____. Consultation, review, and suggestions were received from the Adirondack Park Agency.

Public hearings of the draft unit management plan and draft SEQR Environmental Documentation were held _____.

ENVIRONMENTAL FINDING DOCUMENT

RESERVED

EXECUTIVE SUMMARY

The *Adirondack Park State Land Master Plan* (APSLMP) has identified twenty-eight (28) state highway travel corridors within the Adirondack Park. Travel corridors are one of nine basic state land classifications laid out in the APSLMP. State highway travel corridors (within the Park) are described in the APSLMP as,

> "*...that strip of land constituting the roadbed and right-of-way for state and interstate highways in the Adirondack Park, the Remsen to Lake Placid railroad right-of-way, and those state lands immediately adjacent to and visible from these facilities.*"

And while this definition focuses on state lands (which are *both* immediately adjacent to and visible from these facilities) the TCUMPs will also consider but not be limited to:

- Transportation activities which could affect adjacent non-state properties
- Development of partnerships with adjacent property owners that would facilitate the realization of the intent of the APSLMP (maintenance of a park-like[1] character, etc.)
- Physical characteristics of the Park setting
- Carrying capacity and management objectives for adjacent lands open to the public
- Characteristics or considerations that do not easily correlate with jurisdictional boundaries (e.g. invasive species)

In keeping with the above referenced state land master plan and charge under Environmental Conservation Law, NYS Department of Transportation (DOT) and NYS Department of Environmental Conservation (DEC) with the assistance of Adirondack Park Agency (APA) have established objectives for the projected management of the state highway travel corridors. The primary goal of state highway travel corridor planning is to coordinate and integrate the planning and programming responsibilities of the state agencies who share statutory responsibility for state highway travel corridors within the Adirondack Park.

Adirondack Park travel corridor unit management plans are contained in two (2) volumes. Volume I is a proposed final master plan. It contains an overview and describes the environmental setting, goals, policies, and management criteria that are universally applied and characteristic to all Adirondack Park travel corridors. Volume II will be composed of individual travel corridor unit management plans. These plans will include specific management objectives and inventories of physical, biological, and manmade features unique to each travel corridor. The Master TCUMP lays out a plan to address issues and potential obstacles, from an integrated Transportation point of view. Travel corridor planning employs a "park-wide approach" to define each corridor's unique and relevant attributes; builds a common dialogue; provides continuity; focuses resources and sets priorities to achieve contextually appropriate solutions to transportation infrastructure needs.

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[1] Adirondack Park State Land Master Plan (APSLMP, 2016).

The Master TCUMP (Volume I) summarizes not only the history and background of Travel Corridors in the Park, but more important, provides concepts, guidelines and directives that achieve and maintain the park-like atmosphere that compliments the total Adirondack experience on state lands within the state highway travel corridors.

No physical construction projects are included in the Master TCUMP. Federal and state regulations require DOT to addresses transportation needs in both a Comprehensive Statewide Transportation Master Plan and in a State Transportation Improvement Program (STIP). The Comprehensive Statewide Transportation Master Plan serves as the federally recognized, long range transportation plan for the State of New York pursuant to federal law and in accordance with state transportation law.

This proposed final Master plan outlines park-wide goals, strategies, objectives, policies, guidelines and best management practices to enable the development of route-specific corridor plans. In addition the Master TCUMP identifies gaps in knowledge and recommends that training programs be developed for state agencies personnel. The recommendations also identify gaps in asset management, specific Adirondack Park guidance, and Best Management Practices. Topics in the Master plan are discussed on a park-wide basis. Where appropriate, implications for individual TCUMPs are presented. The goal is a consistent planning approach, with strategic implementation based on a sound understanding of the depth and breadth of the issues.

Section 7 *Implementation* proposes specific SEQR actions which are the outcome of this unit management planning process. These specific SEQR actions were selected from the corridor management actions identified across numerous topics, and are contingent upon sufficient resources and available funding.

The Master TCUMP is an overall presentation of what a TCUMP is relative to the APSLMP and defines the elements to be included. It also provides a template for individual state highways's TCUMP development.

The following provides a context as to how the TCUMP interacts with other state agencies policies, guidelines and standards.

- Master TCUMP for state highways is a multi-corridor planning document (10,000 foot level)
- Individual TCUMP's based upon a variety of functional transportation needs and environmental ecosystems for a specific state highway corridor. (1,000 foot level)
- The "Green book" [2] standards and details for work within the Adirondack Park (100 foot level)
- Operations plans and handbook, Highway Design Manual, Construction handbook and manual and other Agency guidance or instructional documents (10 foot level)

[2] New York State Guidelines for the Adirondack Park

There are many components to a transportation system; this section discusses those components relevant to the TCUMP process (transportation programs, infrastructure and elements). For each component, an overview is given and park-wide corridor management objectives and actions are presented. The intent is to limit redundancy and address "global" applications. This allows individual TCUMPs to implement global objectives and strategies in specific corridors as well as to address unique aspects of those corridors.

In contrast to Unit Management Plans for predominantly natural areas, state highway travel corridors are primarily working landscapes with substantial built components. They require more intense management practices to support a safe, modern, well-functioning transportation system. The linear nature of state highway travel corridors creates unique challenges including:

- Widely varied landscapes (both natural and socio-economic)
- Direct and indirect relationships to surrounding land uses
- A patchwork of public and private lands
- Several federal, state and local agencies with jurisdiction and mandates
- The complexity of inventory/assessment of the natural and physical resources, which may be different than non-transportation UMPs
- Relationship/interaction with the eight previously described classifications (see Section 1.3.5 in this document)
- Program-level considerations that influence the state highway travel corridors (e.g.: CARDS – Centerline Audible Roadway Detection Systems)

In this document, "components" are analogous to "resources" in "traditional" Unit Management Plans. "Components" include transportation programs and design elements which affect the overall corridor management planning process. Programs are important, as they set policy, standards and guidance for application park-wide.

DOT policy is that public involvement is an integral part of the project development process. Obtaining input from the full range of stakeholders affected by actions and using that input in the transportation decision-making process is fundamental to the way DOT operates.[3] As a result, all travel corridor unit management plans include a public comment period and meaningful public involvement. However, some topics require a focused effort and a collaborative problem-solving approach because they are complex, multi-jurisdictional and/or have dedicated stakeholder groups (e.g. New York Bicycling Coalition, ANCA, Adirondack Recreational Trail Advocates, etc.). The recommendations summary table indicates which topics are earmarked for targeted public involvement.

A full Environmental Assessment Form has been completed, indicating that no proposed action will have an adverse environmental impact. All management activities will comply with state policies, Environmental Conservation Law, rules and regulations and guidelines and will be consistent with Article XIV of the New York State Constitution.

[3] NYSDOT Public Involvement Manual.

The preferred alternative is comprised of the specific Corridor Management Actions plus the information provided in Table 6.1 - List of Actions.

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VISION

New York State Agencies, through their collaborative efforts, will strive to sustain the integrity of the Adirondack Park as a world class natural resource. Understanding that transportation is a key component of the park experience, NYS Agencies will demonstrate leadership and ensure the incorporation of sustainable practices that benefit stakeholders, while satisfying safety and functional requirements. From conception to completion, all transportation activities will consider the direct and indirect influences on the Adirondack Park's natural, built and social environment.

The vision statement was informed by:

- Missions and policies of the APA, DOT, DEC and other state and local agencies
- View points of stakeholders, such as travelers, residents, and communities
- Historic and contemporary Park guidance, including:
    - *Adirondack Park State Land Master Plan, 2016 version (APSLMP)*
    - *Development in the Adirondack Park: An Advisory Publication for the Design and Review of Projects in the Adirondack Park, revised 2013 (DAP)*
    - *Development in the Adirondack Park: Objectives and Guidelines for Planning and Review, 1977-1991* (hereafter referred to as the "Development in the AP")
    - *Memorandum of Understanding Between the Department of Transportation, The Department of Environmental Conservation and the Adirondack Park Agency Concerning the Development and Implementation of Travel Corridor Unit Management Plans Pursuant to The Adirondack Park State Land Master Plan, 2009 (MOU)*
    - *New York State Department of Transportation Guidelines for the Adirondack Park, 2009 (Green Book)*
    - *The Adirondack Park Agency Act (Article 27, NYS Executive Law (the Act).*

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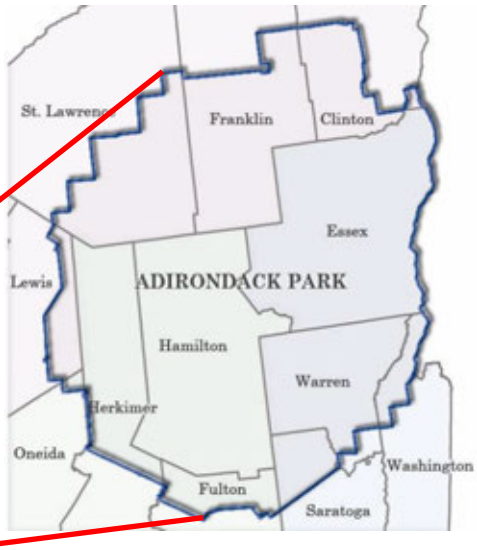
SECTION 1 – INTRODUCTION

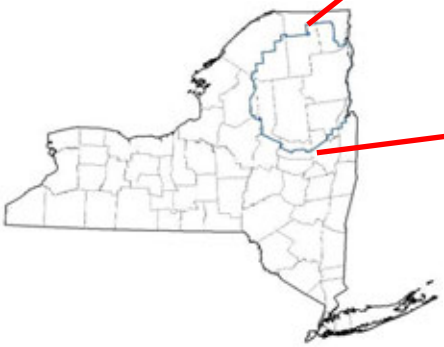
1.1 THE ADIRONDACK PARK

The Adirondack Park (Park, or "the Park") represents one-fifth of the area of New York State, yet two-thirds of all state-owned lands (by acres) are located in the Adirondack Park.

The Adirondack Park in is a unique state, national and global treasure, with a mix of public and privately held land (approximately 50% of land within the Park boundaries is privately owned). This mix of property ownership creates complex relationships between the wild landscape, human environment, protected wilderness, abundant natural resources, scenic character and recreational opportunities that support the Park's tourism based economy.

Figure 1.1 Location of Adirondack Park in NYS





It is by far the largest state park in the nation, covering over 6 million acres. The Park includes all or portions of twelve counties, and more than 1,000 miles (2,400 lane miles) of state highway. Within the Park's boundaries, there are more than 40 state-operated campgrounds, 2,000 miles of hiking trails, hundreds of miles of canoe routes, 46 high peaks (Attachment A). The Park is also home to Lake Placid, host to both the 1932 and 1980 Winter Olympics.

Transportation has played a large role in the Adirondack's bold and colorful history. Trails, waterways, rail and roads have helped shape the Park, and will continue to do so long into the future.

It is not overstated to say that a safe and efficient transportation network is the lifeblood of the Park's economy. That economy is tourism based (to a very large degree). Adirondack travel corridors may be low volume roads but are of major statewide and regional recreational importance. The Park has an estimated year-round population of over 130,000 people. But each year an estimated 3.5 million travelers visit the Adirondack Park. Travel and tourism support over 25,000 jobs. Park visitors contribute $1.25 billion annually to local economies. To underscore the potential strength of this tourist based economy, it has been determined that 83.8 million people reside within a one-day drive of the Adirondack Park, representing approximately 25% of the combined US and Canadian population.

1.2 PURPOSE OF TRAVEL CORRIDOR PLANNING

Travel corridor planning coordinates and integrates the planning and programming responsibilities of the state agencies who share statutory responsibility for state highway travel corridors within the Adirondack Park. The TCUMPs will conform, but are not limited, to the guidelines and criteria in the Adirondack Park State Land Master Plan (APSLMP) for the management and use of travel corridors. When it is in the best interest of New York State residents, additional elements, consistent with the APSLMP criteria, will be incorporated into TCUMPs. The goal of all TCUMPs is to develop concepts, guidelines and directives that achieve and maintain the park-like[4] atmosphere that complements the total Adirondack experience, on state lands within the travel corridors. Travel corridor planning employs a "park-wide approach"; builds a common dialogue; provides continuity; defines each corridor's unique and relevant attributes; focuses resources and sets priorities to achieve contextually appropriate solutions to transportation infrastructure needs.

1.3 LEGAL FRAMEWORK

1.3.1 Adirondack Forest Preserve

In 1894, a State Constitutional Convention approved a new Article VII (now XIV), bringing New York's Forest Preserve lands under the State's highest level of protection. This proposal, combined with other amendments from the Convention, was approved by the people at the 1894 General Election and became effective on January 1, 1895. Article XIV states:

"*The lands of the State, now owned or hereafter acquired, constituting the Forest Preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold, or exchanged, or be taken by any corporation, public, or private, nor should the timber thereon be sold, removed, or destroyed. Nothing herein contained shall prevent the State from constructing, completing and maintaining any highway heretofore specifically authorized by constitutional amendment, nor from constructing and maintaining to federal standards federal aid interstate highway…"*

Protected by Article XIV of the New York State Constitution, the Adirondack Park Forest Preserve lands are defined as public lands in the Adirondack Park within "forest preserve counties" as defined by the New York State Legislature.

[4] Adirondack Park State Land Master Plan (APSLMP, 2016).

1.3.1.1 Transportation-Related Constitutional Amendments

- State Highway 1100 Indian Lake-County Line County Line Highway (right to build a road) (1915). Amendment to Article VII Section 7 of the NY Constitution. The language of this amendment was not incorporated into Article XIV. The work including widening and straightening of the existing road.

- Route 28 (and others) Old Forge to Saranac Lake (right to build a road) (1920). A constitutional amendment (Article VII, Section 7) that authorized the construction of a state highway through the Adirondack Forest Preserve from Old Forge to Saranac Lake. State lands affected by the improvements included a widened section at the State Fish Hatchery on Beaver Creek. The roadway, completed in 1929, was constructed between Saranac Lake and Old Forge and ran through Blue Mountain and Raquette Lake. It extended an existing road that ended at Seventh Lake. The current roadway footprint circles around Seventh and Eighth Lakes.

- Chapter 18, Laws of 1921. Approval of the Hewitt Commission map, which called for the completion of eight continuous east-west routes and 21 north-south routes across the State, including the eventual courses of Route 28, Route 30 and Route 3, which passed through the Adirondack Park.

- Chapter 401, Laws of 1921. Authorized the Commission of Highways to occupy a right-of-way over state lands in the Forest Preserve to make the Forest Preserve more accessible for recreation and to control forest fires.

- Chapter 275, Laws of 1924. Authorized the Commission of Highways to occupy a right-of-way over state lands in the Forest Preserve, to construct, maintain or reconstruct state and county highways which have heretofore been improved, or which may hereafter be designated by law.

- Highway Land Bank (1957). A 1956 constitutional amendment to Article XIV permitting small changes to accommodate roadway improvements to "*eliminate the hazards of dangerous curves and grades…"*. The initial "bank" included "*no more than…*" 400 acres of Forest Preserve land and restricted roadway re-alignment to "*no single relocated portion of any highway shall exceed one mile in length*."

  To use the bank, DOT must first propose a specific change to the roadway infrastructure along with the needed "withdrawals" (acreage) from the Land Bank. DEC can accept, reject or revise DOT's proposal. Currently, the Land Bank contains 143 acres. The amendment is limited because it doesn't allow for the reconfiguration of existing roadside utilities (electric, water, telephone, etc), which is often required when roadway footprints are adjusted.

- Land bank for Adirondack Northway (I-87) (1960). Modeled on the 1957 Highway Land Bank, a 1960 Land Bank was established for the construction of the Adirondack Northway (I-87). The amendment allowed a federal aid interstate highway to be constructed and maintained to federal standards. The total land allotment for the Adirondack Northway was three hundred acres of state forest preserve land; currently, the Adirondack Northway Land Bank contains 7 acres.

1.3.2 **Adirondack Park Agency Act**

The basic purpose of New York State Executive Law, Article 27 (1971), known as the Adirondack Park Agency Act, is to insure optimum overall conservation, protection, preservation, development and use of the unique scenic aesthetic, wildlife, recreational, open space, historic, ecological and natural resources of the Adirondack Park and to focus the responsibility for developing long-range Park policy in a forum reflecting statewide concern.

Section 803 of the Act created the APA. Subsequent sections of the Act (§804.9) gave the APA authority to adopt, amend and repeal rules and regulations necessary to administer the article. The APA Act also authorized (§805) the creation of the Adirondack Park Land Use and Development Plan to guide private land use planning and development throughout the entire area of the Adirondack Park.

Section 814 - State agencies intending to undertake any new land use or development within the Park shall give due regard to the provisions of the plan and the shoreline restrictions and shall file a notice of such intent with APA. Such notice shall be filed at the earliest time practicable in the planning of such project.

Section 816, formerly Section 807 of the Act directed APA to submit, for approval by the Governor, a master plan for the management of state lands in the Park. The master plan, was developed by APA in consultation with the DEC and classified the [state] lands according to the capacity to withstand use and provided guidelines and criteria for their management. The Adirondack Park State Land Master Plan (APSLMP) has the force and effect of law.

Section 816 also authorized DEC, in consultation with APA, to develop individual unit management plans (UMPs) for state-owned lands of the Park. Individual unit plans cannot amend the APSLMP, but instead provide a level of detail that cannot be addressed in a master planning document. The administration and management of the UMPs are conducted with input and coordination from both APA and DEC.

1.3.3 **Executive Order 150**

Executive Order 150, first issued in 1991, states any new land use and development by State agencies within the Adirondack Park pursuant to section 814 of the Executive Law 27 will be consistent with the Adirondack Park Land Use and Development Plan, and will not have an undue adverse impact upon the resources of the Adirondack Park or the shorelines pursuant to Section 806. Adirondack Park Agency 814 review is advisory. However, Executive Order 150 further states that state agencies within the Park have no less an obligation to protect the resources of the Park than do private persons and should undergo the same level of APA review as is demanded of private developers. Executive Order 150 has been in effect continuously since its adoption in 1991 and was continued by Governor Andrew M. Cuomo in 2011 as part of Executive Order No. 2.

1.3.4 **Environmental Conservation Law (ECL)**

New York State's environmental policy law was created to conserve, improve and protect the state's natural resources and environment. Its provisions include the creation of the DEC (Article 3), the State's smart growth policy (Article 6), the State's Environmental Quality Review Act (Article 8), lands and forest provisions (Article 9), fish and wildlife protection (Article 11), protection of (fresh and salt) water resources (Articles 13 – 15), flood control (Article 16), water pollution control (Article 17), air pollution control (Article 19), wetland, both freshwater and tidal, protection (Articles 24 and 25), waste management (Article 27), hazardous substances (Article 37), Lake George Park Commission (Article 43), conservation easements (Article 49), tree conservation and urban forestry (Article 53), environmental protection act (Article 54) and sole source aquifer protection (Article 55). The following is a brief description of some key sections from the NYS ECL.

1.3.4.1 ECL Article 6 - State Smart Growth Public Infrastructure Policy Act

The purpose of the act is to segment the state's environmental policy by declaring a fiscally prudent state policy of maximizing the social, economic and environmental benefits from public infrastructure development through minimizing the unnecessary costs of sprawl development.

1.3.4.2 ECL Article 9 Lands and Forests

ECL Article 9 gives the DEC broad authority to establish, acquire, control and manage property within the State, including the Adirondack Park (§9-0105). The law also forever reserves and maintains all state-owned land in the Adirondack Park for the free use of all people (§9-0301) and restricts the use of advertising signs within Park boundaries (§9-0305). Other significant sections in ELC Article 9 include Title 17 New York Invasive Species Council (§9-1701 – 1709) which restricts the sale, purchase, possession, propagation, introduction, importation, transport and disposal of invasive species.

1.3.5 Travel Corridor Unit Management Memorandum of Understanding

The Travel Corridor Unit Management Memorandum of Understanding (MOU) is a 2009 joint agreement, between the DOT, DEC and APA regarding the development and implementation of TCUMPs in the Adirondack Park. The document calls for a "coordinated state government program for the Adirondack Park", outlines five (5) goals and eleven (11) commitments for TCUMPs. The MOU makes the DOT the lead agency in the development of TCUMPs and directs the document's content. The MOU guidance contains the principle components of a TCUMP (as described in Appendix I, "Travel Corridor Unit Management Plan" of the MOU), including the development of a vision, goals and objectives, and is used when developing individual corridor plans, as well as during the development of the Master TCUMP document.

1.3.6 Other Related Laws and Regulations

A. **National Environmental Policy Act of 1969 (NEPA) (42 USC §4321 through §4370(f))**

NEPA is a United States environmental law that established national policy promoting the enhancement of the environment and also established the President's Council on Environmental Quality (CEQ). NEPA sets up procedural requirements for all federal government agencies to prepare environmental assessments (EAs) and environmental impact statements (EISs). NEPA's procedural requirements apply to all federal agencies in the executive branch.

B. **State Environmental Quality Review Act (SEQRA) ECL Article 8)**
New York's State Environmental Quality Review Act (SEQRA) requires all state and local government agencies to consider environmental impacts equally with social and economic factors during discretionary decision-making. This means these agencies must assess the environmental significance of all actions they have discretion to approve, fund or directly undertake. SEQRA requires the agencies to balance the environmental impacts with social and economic factors when deciding to approve or undertake an "Action".

The regulations for implementing SEQRA, applicable statewide, are found in 6 NYCRR Part 617 ("SEQR" or "the statewide regulations"). Implementing regulations necessary for DOT to implement SEQRA were subsequently issued under 17 NYCRR Part 15. These DOT regulations are no less protective of environmental values, public participation and agency and judicial review than the regulations under the statewide regulations. The Master TCUMP, however, is being progressed under the statewide regulations.

C. **The New York State Freshwater Wetlands Act (ECL Article 24 and 6 NYCRR Parts 662-665)**
Under Article 24, permits are required for certain regulated activities within mapped freshwater wetlands and their 100-foot adjacent areas. Those activities include dredging, filling or draining wetlands; erecting structures; building roads; and clear-cutting vegetation on more than 3 acres.

D. **The New York State Wild, Scenic, and Recreational Rivers System Act (Title 27 of Article 15 of the Environmental Conservation Law and implementing regulations 6 NYCRR Part 666)**
This law regulates the use of the rivers and their immediate environs to preserve their free-flowing condition and protect them for the benefit and enjoyment of present and future generations. DEC regulates land use and development within all designated river areas in New York State and within state-owned/public lands in the Adirondack Park. APA administers the WSRRA for designated river areas involving private lands. River areas designated as "Study" pursuant to the WSRRA are also designated as Critical Environmental Areas according to the APA Act.

E. **Coastal Zone Mangement Act (16 USC §§ 1451-1464)**
The Coastal Zone Management Act (CZMA) established the national policy to preserve, protect, develop and, where possible, to restore or enhance the resources of the Nation's coastal zone. The CZMA requires that Federal agency activities affecting any land or water use of the coastal zone must be consistent to the maximum extent practicable with approved state managementprograms. In New York State, Coastal Zones are managed by the Department of State (DOS).

F. **Waterfront Revitalization of Coastal Areas (NYS Executive Law, Arcticle 42, §§910 – 922)**
State law that protects coastal areas and inland waterways by requiring a corrdinated and comprehensive policy and planning for preservation, enhancement, protection, development and use of the state's coastal and inland waterway resources. Under the law, local governments are able to submit a local waterfront revitalization program (LWRP) for the purpose of revitalizing waterfronts within their jurisdiction. Actions undertaken by state agencies are required to be consistent with the policies of the coastal area, inland waterways and accepted LWRP(s).

G. **New York State Scenic By-way Program (NYS Highway Law, Article 12-C §§349-AA- 349-DD)**
This law designates portions of the state highway system notable for their scenic, historic, recreational, cultural and archieological value as scenic byways. The scenic byway program was created to enhance recreation, preserve and protect scenic, historic, recreational cultural and archeological resources, encourage economic development through tourism, improve the transportation system and education residents and visitors of the history and culture of New York State. Roadways designated as scenic byways are managed according to a Corridor Mangement Plan (CMP). to protect their intrinsic qualities and to encourage economic development. Toward that end, the scenic byway program is eligible for additional funding to make a number of improvements that include the construction of pedestrian, bicycle, rest area, highway shoulder, overlooks and interpretative facilities.

H. **NYS Snowmobiling Laws**
New York State has a variety of snowmobiling laws that include user regulations and trail development and maintenance. The following is a list of NYS snowmobile regulations:

- State Finance Law Article 6 – Snowmobile trail development and maintenance fund
- Railroad Law §83-A – Operation of motor vehicles, snowmobiles, recreational vehicles and riding of animals on railroad property
- Vehicle and Traffic Law Article 47 – Registration of Snowmobiles
- Environmental Conservation Law §9-0105 (7-a)
- Parks, Recreation and Historic Preservation Articles 21, 25 and 27
- Insurance Law §2336-a

I. **NYS Invasive Species Laws and Regulations (ECL, AGM, PBH and SWC; 6NYCRR)**
NYS laws regarding invasive species are contained in the ECL (Articles 3, 9 and 11), NY Agriculture and Markets Law (Articles 9, 11 and 14), NY Public Health Law (Article 32) and Soil and Water Conservation Law (Articles 1 – 3). NYS regulations regarding invasive species are found in 1 NYCRR, 10 NYCRR and throughout 6 NYCRR, with the main regulations found in Subchapter C Invasive Species Parts 575 Prohibited and Regulated Invasive Species and 576 Aquatic Invasive Species Spread Prevention.

J. **Miscellaneous Federal and State Regulations**

The following federal (Code of Federal Regulations – CFR) and state (New York State Rules and Regulations – NYCRR) regulations are referenced in the text:

- 29 CFR Part 1910 - Occupational Safety and Health Standards (OSHA)
- 29 CFR Part 1926 - Safety and Health Regulations for Construction
- 12 NYCRR Part 56 - Asbestos
- 40 CFR – Protection of the Environment; Chapter I Environmental Protection Agency
    - Subchapter C Air Programs; Part 61; Subpart M - National Emission Standards for Asbestos
    - Subchapter I Solid Waste; Parts 239 – 283
    - Subchapter J Superfund, Emergency Planning and Community Right to Know Programs (CERCLA)
    - Subchapter R – Toxic Substances Control Act (TSCA)
- 42 CFR 6901 – Resource Conservation and Recovery Act (RCRA) (Subtitle I includes bulk storage regulations)
- 6 NYCRR Parts 612, 613, 614 and Parts 596 through 599

K. **MOU between NYSDOT and the Lake George Park Commission**
A 1997 agreement between DOT and the Lake George Park Commission implementing improved storm-water management objectives for the watershed.

L. **MOA – Establishing Lake George Watershed Conference**
A 2001 agreement between local goverments and state agencies for furthering protection to water quality in the Lake George watershed, including Warren, Essex and Washington counties.

1.4 GENERAL DESCRIPTION OF TRAVEL CORRIDORS WITHIN THE ADIRONDACK PARK

1.4.1 Adirondack Park Travel Corridors

Travel corridors are one of nine basic state land classifications. The Act mandated the development of state land classification categories, which are classified according to *"their characteristics and capacity to withstand use*."
The APSLMP describes travel corridors (within the Park) as,

> "*...that strip of land constituting the roadbed and right-of-way for state and interstate highways in the Adirondack Park, the Remsen to Lake Placid railroad right-of-way, and those state lands immediately adjacent to and visible from these facilities."*

And while this definition focuses on state lands (which are *both* immediately adjacent to and visible from these facilities) the TCUMPs will also consider but not be limited to:

- Transportation activities which could affect adjacent non-state properties
- Development of partnerships with adjacent property owners that would facilitate the realization of the intent of the APSLMP (maintenance of a park-like character, etc.)
- Physical characteristics of the Park setting
- Carrying capacity and management objectives for adjacent lands open to the public
- Characteristics or considerations that do not easily correlate with jurisdictional boundaries (e.g. invasive species)

The APSLMP has identified twenty-eight (28) travel corridors within the Adirondack Park;

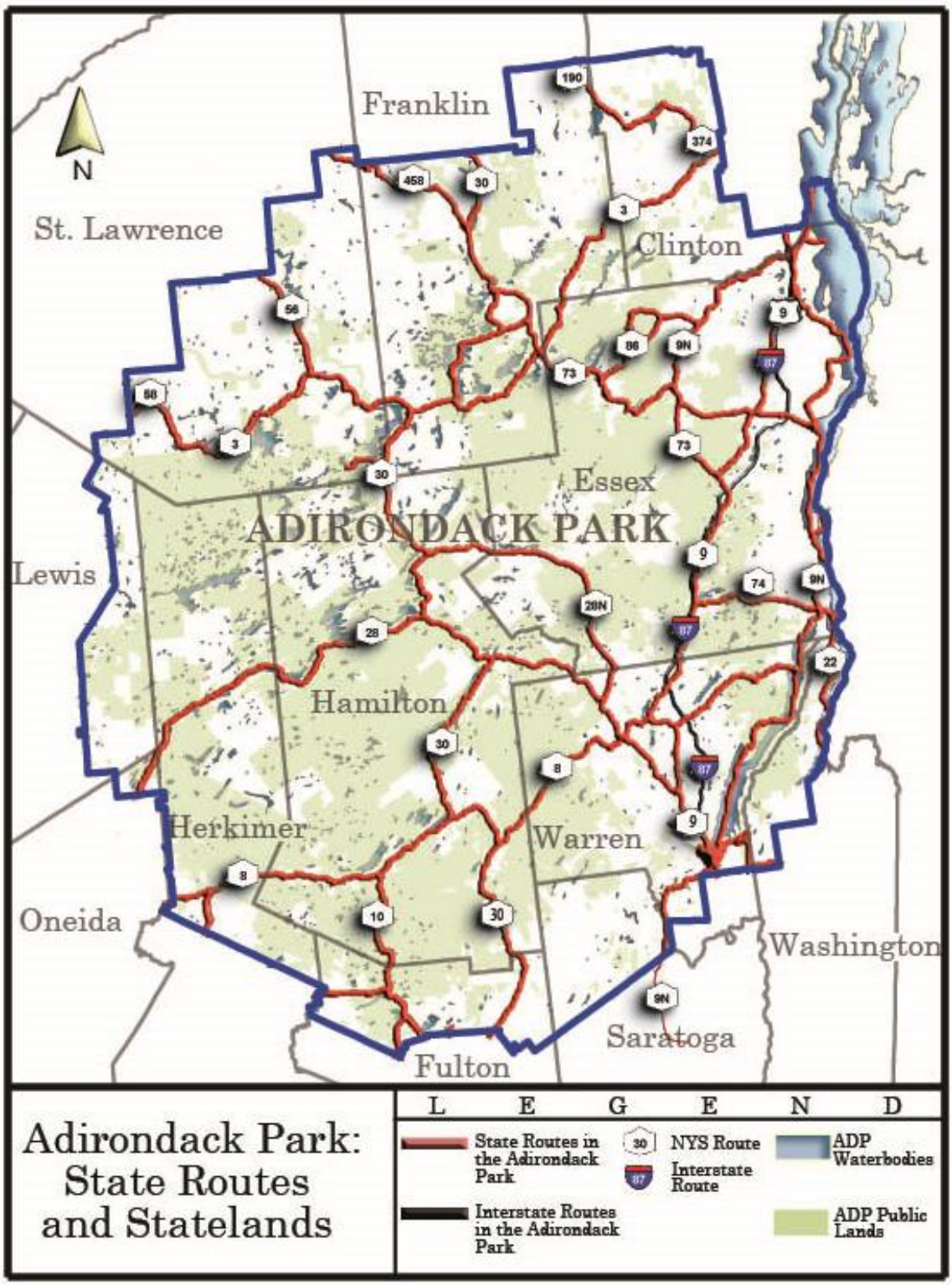
Table 1.1 Highway Travel Corridors in the Adirondack Park

Route	Terminal	Approx. Mileage
I-87	Northern Park Boundary to Southern Park Boundary	91
3	Western Park Boundary to Northeastern Park Boundary	107(a)
8	Southwest Park Boundary to Hague	109
9	Northern Park Boundary to Southern Park Boundary	92(b)
9L	Southeastern Park Boundary to Route 9	13
9N	Southern Park Boundary to Keesville	124
10	Southern Park Boundary to Route 8	23
22	Northern Park Boundary to Southern Park Boundary	76(c)
28	Southwestern Park Boundary to Route 9	100(d)
28N	Blue Mountain Lake to North Creek	47(e)
29A	Southern Park Boundary to Southwestern Park Boundary	18(f)
30	Northern Park Boundary to Southern Park Boundary	151(g)

Table 1.1 Highway Travel Corridors in the Adirondack Park

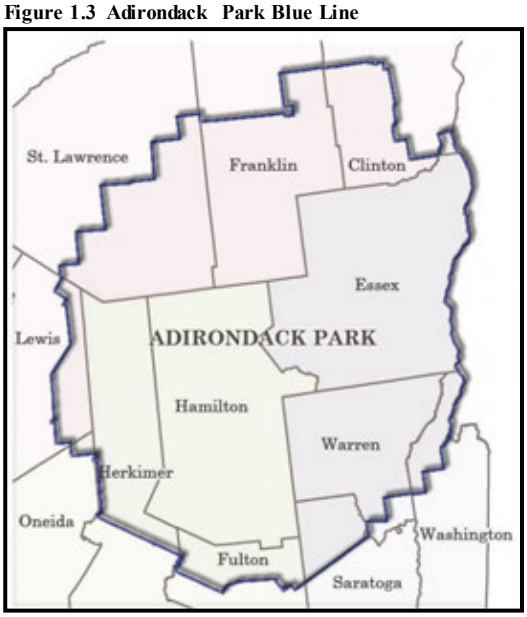
Route	Terminal	Approx. Mileage
56	Northern Park Boundary to Sevey	15
58	Western Park Boundary to Fine	5
458	Northern Park Boundary to Route 30	20
73	Route 9 to Route 86	26(h)
74	Route 9 to Lake Champlain	30
86	Jay to Route 30	34
149	Southern Park Boundary to Southeastern Park Boundary	5
186	Route 86 to Route 30 at Lake Clear	4
192A	Route 192 to Route 86	2
287	Western Park Boundary to Route 8	6
373	Port Kent to Route 9	3
374	Northern Park Boundary to Dannemora	27
418	Warrensburg to Thurman	3
421	Horseshoe Lake to Route 30	6
431	Wilmington to Whiteface Summit	8
185	Crown Point Bridge to Route 22	4
	Subtotal	1165
	Minus dual designations	87
	Total	1078

Figure 1.2 Adirondack Park: State Routes and Statelands



1.4.2 Blue Line

Figure 1.3 Adirondack Park Blue Line



The **Blue Line** is the term used in New York State to describe the boundaries of the Adirondack and Catskill Parks. The two Parks were designated by the New York State legislature in 1892, and originally included only the state-owned Forest Preserve land. The description of each Park was revised in 1912 to include *all* lands, both public and private, within the "Blue Line". This term is commonly used today, and blue is the color used on state maps to delineate the two Parks. State statutes require that any property owned or acquired by the State in the Parks "be forever kept as wild forest lands" and prohibits it from selling or transferring them in any way (save amending that section of the constitution to allow specific transactions). It takes a simple majority vote of the legislature to add land to either Park by amending their respective Blue Lines; however, any diminution of land within either Park requires the approval of two successive legislative sessions (the process for amending the constitution without the public vote).

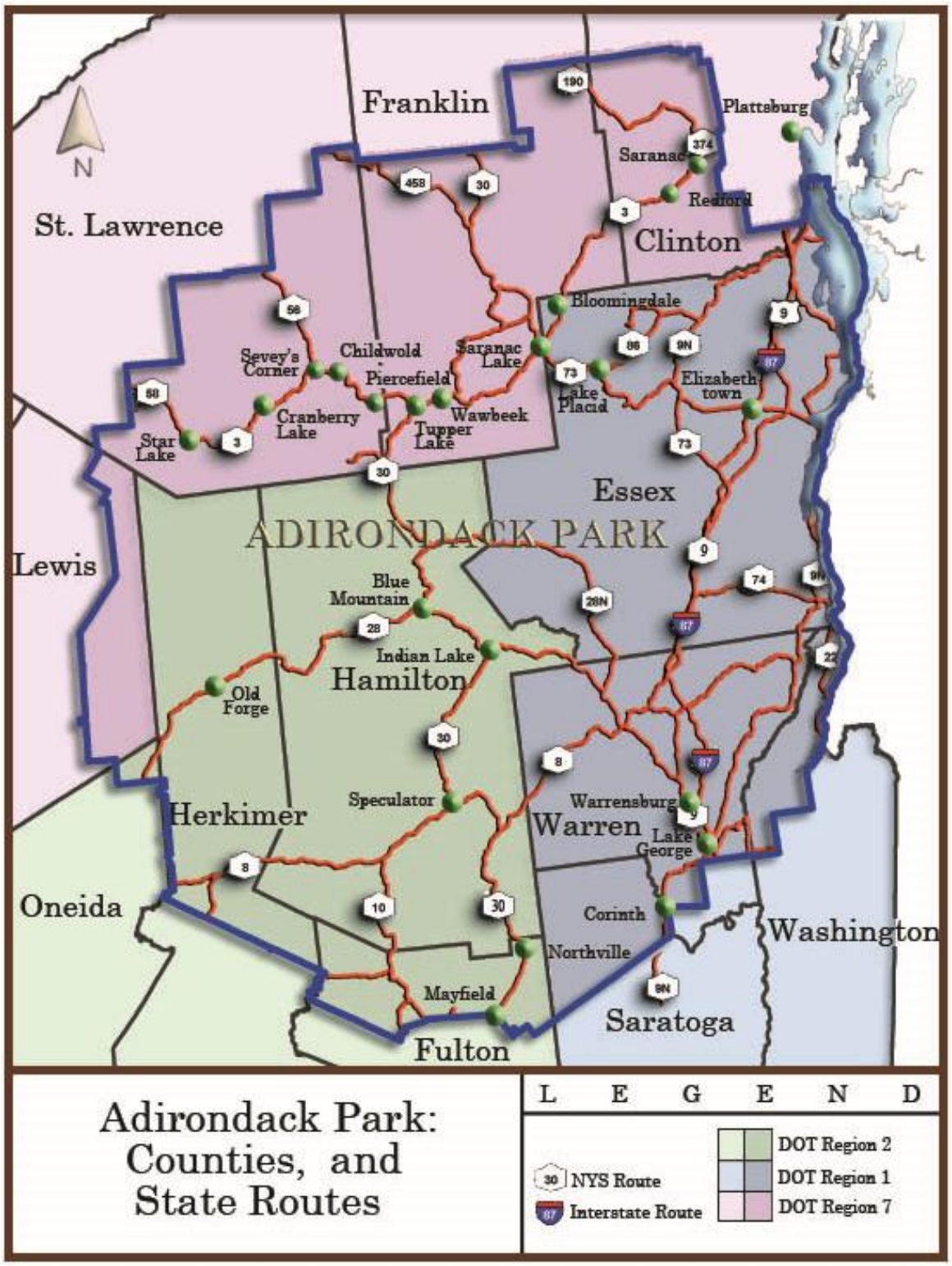
While the Blue Lines were originally meant to guide the acquisition of future Forest Preserve land, over time they have come to define the Park(s) and have legal implications for all lands, public and private, within them.

1.4.3 Counties and Local Jurisdictions

The Adirondack Park contains or crosses twelve (12) counties and one hundred and two (102) municipalities. Attachment B contains a comprehensive listing of counties and municipalities (towns and villages) within the Park.

The 102 communities in the Adirondack region are comprised of 69 municipalities (61 towns and 8 villages) that are “wholly” within the Park, occupying more than 4.8 million acres or 83 percent of the Park’s total area (See Figure 1-4). The remaining 33 communities (31 towns and 2 villages), which comprise 17% of the Park’s area, have lands both inside and outside of the Blue Line and are classified as “partially” within the Park (See Attachment B).

Figure 1.4 Adirondack Park: Counties and State Routes



The differences between communities wholly within and partially within the Blue Line extend beyond geographic considerations. Those communities wholly within the Park are unified by the same set of regulatory controls administered by the APA. Administering the TCUMP in the Adirondack communities intersected by the Blue Line poses different challenges, due the diversity of regulatory controls.

1.4.4 State-Private Land Relationships

The character of the landscape adjacent to the Park's state highway travel corridors is critical. It influences public perception of the Park and its economy. Landscape character is impacted by land ownership which is a mix of state and private. Land ownership, in turn, dictates land uses which are controlled by regulations and ordinances enacted by the NYS Legislature and local authorities. These laws are administered by the APA, DEC, DOT, other state agencies and local governments.

Table 1.2 Land Use Statistics in the Adirondack Park

ORPS Parcel Identification Code	Acres	% of Total Acres
Wild, Forested, Conservation Lands & Public Parks	4,270,586	76.0%
Publicly Owned	2,508,116	44.6%
Privately Owned	1,762,470	31.4%
Residential	642,995	11.4%
Owner with Zip Code in Park	355,182	6.3%
Owner with Zip Code out of the Park	287,813	5.1%
Vacant Land	438,863	7.8%
Unknown	71,776	1.3%
Agricultural	52,177	0.9%
Community Services	39,576	0.7%
Publicly Owned	21,913	0.4%
Privately Owned	17,663	0.3%
Recreation & Entertainment	37,726	0.7%
Public Services	34,710	0.6%
Publicly Owned	17,258	0.3%
Privately Owned	17,452	0.3%
Commercial	19,277	0.3%
Industrial	11,452	0.2%
Totals	5,619,139	100%

Source: Adirondack Association of Towns and Villages

The individual corridor plans should consider land use and ownership relationships when setting priorities for management actions. Further, these plans should acknowledge the potential those priorities and management actions have to influence land use change. Some travel corridors are heavily bordered by state land; others are surrounded by private property. Ninety percent of state-owned lands and conservation easements are within 42 towns. New York State owns more than 75 percent of the land area in six Park towns (Arietta – 94 percent; Benson – 90 percent; Inlet 88

percent; St. Armand – 80 percent; Wells – 79 percent; Lake Pleasant – 78 percent). Parcels with "residential" land use designations are clustered in the towns, villages and hamlets. To further complicate matters, more than 40 percent of all parcels in the Park currently classified as "residential" are owned by non-Park residents, or seasonal property owners.

DEC-managed state lands within the Adirondack Park are ecologically significant. They consist of Forest Preserve, Conservation Easements and Wildlife Management Areas (see Table 1.3). Depending on classification, specific unit management plans and easement allowances, they also offer many recreational opportunities, including hiking, camping, canoeing, hunting, fishing, trapping, snowmobiling, skiing, mountain biking, and rock climbing.

1.4.4.1 APA Land Use Area Classifications

The Adirondack Park Agency is responsible for the development of long-range land use plans for both the state-owned and private lands of the Park. To this end, the APA classifies these lands and produces the Adirondack Park Land Use and Development Plan Map and State Land Map to document these classifications.

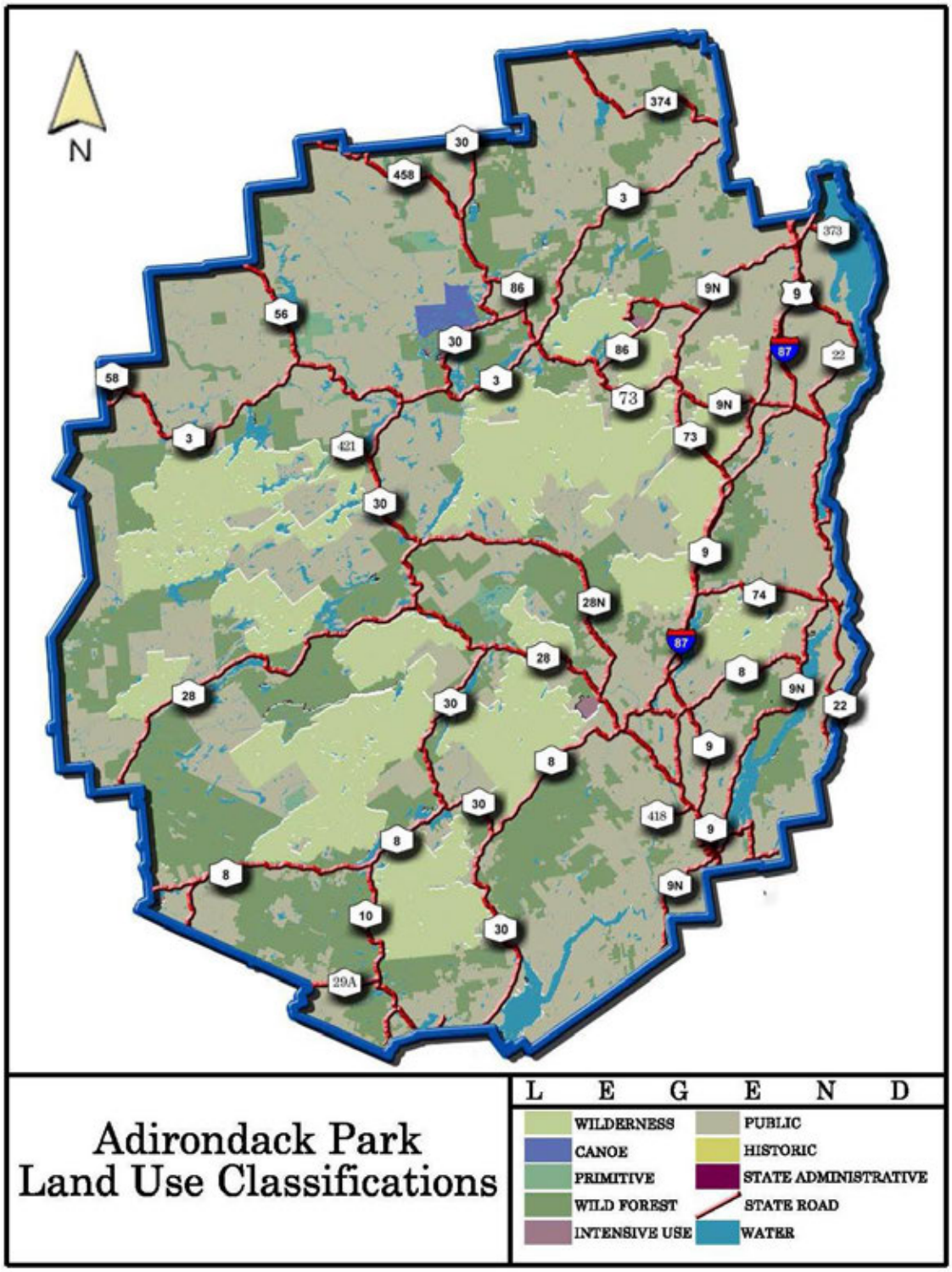
The APA mandated the development of state land classification categories to be organized according to "*their characteristics and capacity to withstand use*." The outcome is a nine category classification system outlined in the ASLMP. The ASLMP also describes the factors taken into account when formulating the classification system, including abiotic, biotic, social and psychological considerations. Refer to the latest APSLMP for additional information.

Attachment C includes a table of Adirondack Park land use classifications (from APA website dated May 2014) by total acreage and overall percent of land within the Park. Figure 1.5 maps the land use classifications.

The classification of state owned lands adjacent to a travel corridor has management implications for that corridor. DOT must take into account potential impacts to these lands and how an activity may positively or negatively affect access and roadside aesthetics. For example, the APSLMP directs that in no instance will the management of travel corridors be less restrictive than that of the major land classification in which they lie, but more restrictive measures may be employed where desirable. The detailed management guidelines for each state land use area are found in the APSLMP and in formally adopted unit management plans (UMPs).

The Adirondack Park Land Use and Development Plan also categorizes private land in the Park. The intent of the Plan is to conserve the Park's natural resources and open-space character by directing and clustering development, thus minimizing its impacts. Under the Plan, all private lands are mapped into six land use classifications (see below and Attachment C). Guidelines are specified for the intensity of development within each category and the APA administers any associated permitting.

Figure 1.5 Adirondack Park Land Use Classifications



Private Land Classification

The following are the land use area classifications of the APLUDP, and a general description of their purposes:

- Hamlet**:** These are the growth and service centers of the Park where the Agency encourages development. Intentionally, the Agency has very limited permit requirements in hamlet areas. Hamlet boundaries usually go well beyond established settlements to provide room for future expansion.
- Moderate Intensity Use**:** Most uses are permitted; relatively concentrated residential development is most appropriate.

Figure 1.6 Adirondack Hamlet

- Low Intensity Use**:** Most uses are permitted; residential development at a lower intensity than Hamlet or Moderate Intensity is appropriate.
- Rural Use**:** Most uses are permitted; residential uses and reduced intensity development that preserves rural character is most suitable.
- Resource Management**:** Most development activities in resource management areas will require an Agency permit; compatible uses include residential uses, agriculture, and forestry. Special care is taken to protect the natural open space character of these lands.
- Industrial Use**:** This is where industrial uses exist or have existed, and areas which may be suitable for future industrial development. Industrial and commercial uses are also allowed in other land use area classifications.

1.4.4.2 DEC Land Use Area Classification

DEC is responsible for over 4.5 millions acres of public land and conservation easements in New York State. These lands and easements are managed according to the following classifications:

- Forest Preserve
- State Forests
- Wildlife Management Areas
- Conservation Easements (private lands)

Table 1.3 State Lands within the Adirondack Park (March 2014)[5]

Land Classifications		Acres in Adirondack Park
State Forest		15,087**
Forest Preserve	Wilderness	1,187,925
	Wild Forest	1,316,295
	Primitive	40,163
	Primitive Bicycle Corridor	
	Canoe	18,964
	Intensive Use	23,543
	Administrative	353
	Historic	508
	Pending	10,237
	Under Water (unclassified)	23,357
	Detached Parcel	
	Total Forest Preserve	2,621,345
Wildlife Management Area		2,956 **
Conservation Easement		777,206
Totals		3,401,507

** Where State Forests and Wildlife Management Areas exist within the Adirondack Park; the Adirondack Park State Land Master Plan also classifies these lands as Wild Forest. However, since these lands are not Forest Preserve, State Forest and Wildlife Management Area acreages within the Adirondack Park were NOT included in the Wild Forest category of this table.

Within the Adirondack Park Blue Line, Forest Preserve lands are further broken down into categories based on their capacity to withstand use. These classifications are:

- Wilderness - A wilderness area, in contrast with those areas where man and his own works dominate the landscape, is an area where the earth and its community of life are untrammeled by man - where man himself is a visitor who does not remain. A wilderness area is further defined to mean an area of state land or water having a primeval character, without significant improvement or protected and managed so as to preserve, enhance and restore, where necessary, its natural conditions, and which:
    - Generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable
    - Has outstanding opportunities for solitude or a primitive and unconfined type of recreation
    - Has at least ten thousand acres of contiguous land and water or is of sufficient size and character as to make practicable its preservation and use in an unimpaired condition
    - May also contain ecological, geological or other features of scientific, educational, scenic or historical value

[5] DEC State Land Acreage by Classification, March, 2014 (http://www.dec.ny.gov/lands/59645.html).

Figure 1.7 Wilderness Area Adjacent to a State Highway

- Wild Forest - A wild forest area is an area where the resources permit a somewhat higher degree of human use than in wilderness, primitive or canoe areas, while retaining an essentially wild character. A wild forest area is further defined as an area that frequently lacks the sense of remoteness of wilderness, primitive or canoe areas and that permits a wide variety of outdoor recreation

- Canoe - A canoe area is an area where the watercourses or the number and proximity of lakes and ponds make possible a remote and unconfined type of water-oriented recreation in an essentially wilderness setting. The terrain associated with parcels meeting the above definition is generally ideally suited to ski touring and snowshoeing in the winter months.

Figure 1.8 Canoe Crossing on Route 3

- Primitive - A primitive area of land or water that is either:
  - Essentially wilderness in character, but
    - Contains structures, improvements, or uses that are inconsistent with wilderness, as defined, and whose removal, though a long term objective, cannot be provided for by a fixed deadline and/or
    - Contains, or is contiguous to, private lands that are of a size and influence to prevent wilderness designation or
  - Of a size and character not meeting wilderness standards, but where the fragility of the resource or other factors requires wilderness management

- Intensive Use - An intensive use area is an area where the State provides facilities for intensive forms of outdoor recreation by the public. Two types of intensive use areas are defined by this plan: campground and day use areas. These areas provide overnight accommodations or day use facilities for a significant number of visitors to the Park and often function as a base for use of wild forest, wilderness, primitive and canoe areas.

- Wild, Scenic and Recreational Rivers - A wild river is a river or section of river that is free of diversions and impoundments, inaccessible to the general public except by water, foot or horse trail, and with a river area primitive in nature and free of any man-made development except foot bridges.

  A scenic river is a river or section of river that is free of diversions or impoundments except for log jams, with limited road access and with a river area largely primitive and undeveloped, or that is partially or predominantly used for agriculture, forest management and other dispersed human activities that do not substantially interfere with public use and enjoyment of the river and its shore.

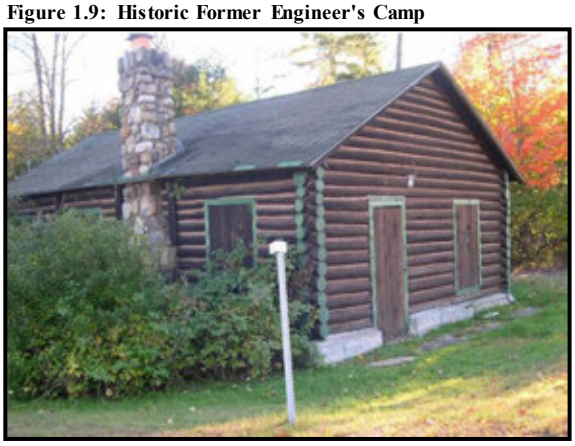
  A recreational river is a river or section of river that is readily accessible by road or railroad that may have development in the river area that may have undergone some diversion or impoundment in the past.

- Travel Corridors - A travel corridor is that strip of land constituting the roadbed and right-of-way for state and interstate highways in the Adirondack Park, the Remsen to Lake Placid railroad right of way, and those state lands immediately adjacent to and visible from these facilities.

- Historic - Historic areas are locations of buildings, structures or sites owned by the State (other than the Adirondack Forest Preserve itself) that are significant in the history, architecture, archaeology or culture of the Adirondack Park, the State or the Nation; that fall into one of the following categories:

  - State historic sites
  - Properties listed on the National Register of Historic Places
  - Properties recommended for nomination by the New York State Board for Historic Preservation (aka the State Review Board)
  - and that are of a scale, character and location appropriate for designation as an historic area under this Master Plan and the State has committed resources to manage such areas primarily for historic objectives

Figure 1.9: Historic Former Engineer's Camp



- State Administrative - State administrative areas are areas where the State provides facilities for a variety of specific State purposes that are not primarily designed to accommodate visitors to the Park.

  This category, like the travel corridor category with which it is closely associated, contains a wide variety of developed areas related directly to the activities of many state agencies. It includes the administrative offices of the DEC, Division of State Police and APA itself as well as the Department of Environmental Conservation fish hatcheries, Department of Transportation offices and maintenance and storage sites, the Atmospheric Science and Research Center at Whiteface Mountain, the Sunmount Developmental Center, the Adirondack Correctional Facility, the Dannemora Correctional Facility, Lyon Mountain Correctional Facility, Camp Gabriels and several sewage treatment plants operated by the Environmental Facilities Corporation. All of these facilities are in close proximity to public highways and are generally in developed areas of the Park.

- Detached Forest Preserve - Detached Forest Preserve parcels are classified as Forest Preserve but located outside the Adirondack Park boundaries. These properties range in size from 0.5 to 739 acres.

1.4.4.3 Conservation Easements

Conservation Easements are a land conservation tool used to protect a variety of important natural resources on privately owned land, while limiting future development, but allowing for continued private ownership and management. Lands of this type are managed by the DEC and, pursuant to a DEC/APA MOU, recreational activities on these lands are reviewed by APA and, if required, under §814 of the Agency Act. Lands now protected by conservation easements consist of large tracts of commercial timberland in the Adirondack and Tug Hill regions. The State has acquired some level of public recreation rights on most large, working-forest easement properties. Public hunting may be restricted or prohibited while public access may be suspended or relocated due to forest management activities. Recreation Management Plans are available from DEC regional offices as they are developed for specific easement properties. People who plan to visit a conservation easement property that is open for public recreation are encouraged to contact the regional DEC office nearest to where the easement property is located for additional information.

Figure 1.10 Scenic View of the Adirondack Mountains from a State Road

1.5 HISTORY, RELATIONSHIPS AND GUIDING FACTORS

Travel Corridor Unit Management Planning (TCUMP) carries forward a strong tradition of "transportation awareness" that has characterized the Adirondack Park experience throughout its long history. Not every visitor will experience the High Peaks, but all will experience the Park through its state highway travel corridors. TCUMPs lead to well-informed decisions, identify opportunities and foster a better understanding of the closely related social, economic and environmental issues.

1.5.1 Travel Corridor Development

Most state highway travel corridors (generically referred to as travel corridors) are composed of varying segments that have experienced differing levels of improvements over time. These corridor segments evolved from old foot trails and wagon roads to become local roads and eventually state highways. Automobiles were nonexistent at the creation of the park and early cars, when introduced, could use the same type of road as a horse-drawn carriage. Modern cars can safely carry drivers and passengers at significantly higher speeds, drastically changing mobility and public expectation of travel time and road conditions. Individual state highway travel corridor plans will include contextual historical studies that will chronicle each corridor's history of development.

The layout and configuration of the travel corridors are influenced by a range of factors such as steepness of terrain, soils/bed rock conditions, and water features. These elements constrained initial and subsequent constructions. Original travel corridors were foot trails that followed the least difficult terrain such as around mountains and adjacent to water ways. The road builders that followed were practical and resourceful; they used alignments similar to the original trails. They

also managed and constructed without modern equipment. These roads remain much the same, which has led to the challenge of maintaining a functional transportation system meeting today's needs while minimizing impacts to natural and scenic resources. The benefit, however, is the close proximity to recreational resources (e.g. water proximity and access) and the scenic qualities of most of the travel corridors. This development history provides important context for the management objectives and Corridor Management Actions (such as safety considerations) in this and subsequent TCUMPs.

Figure 1.11 Recreation Areas in Close Proximity to a State Highway

1.5.2 **Adirondack Highway Council**

The APSLMP and the 1980 Winter Olympics both factored into the decision to establish the Adirondack Highway Council (AHC), through a shared belief that the state highway system was an integral component of the Adirondack Park's character, communities, and visitor experience. Members included DOT (Commissioner, chair) APA, DEC, the Public Service Commission (PSC) and a citizen member. The level of agency involvement and commitment was significant. Executive level staff from each agency participated in most meetings. Stakeholder groups participated in Council meetings and the media was also encouraged to attend.

Now defunct, but operating from 1975 through 1985, the AHC simultaneously analyzed transportation needs along with social, economic and environmental considerations. The AHC's approach was visionary and is now commonly referred to as "sustainability". The travel corridor

planning process currently being progressed continues to build on the groundwork established by the AHC.

Several hundred pages of AHC meeting notes clarify the decisions that were being made at that time in the Park, the results of which are evident today, including:

- Trademark Adirondack Park brown and yellow signage
- Development of design standards for entrance gateway signs
- Use of "rustic rail"

These meeting notes also identified issues that continue to challenge the Park, such as:

- Placement of utilities (underground vs. above ground)
- Use of forest preserve
- Development of land banks
- Travel corridor planning (a 1980s recommendation that was never fulfilled)

The development of the AHC, along with its accomplishments, is notable and should not be understated. On-going initiatives in the Adirondack Park, including present and future actions, will continue to benefit from the work completed by this historic Council.

Figure 1.12 Adirondack Park Travel Corridor with Unique Brown and Yellow Signs.

APA staff shared Highway Council meeting notes with the Travel Corridor Planning team in 2010. The notes express that the number one task to be undertaken to further the shared Park vision was the development of travel corridor plans. The Council's meeting minutes chronicle the development of their recommendations along with a proposed outline for travel corridor plans.

SECTION 2 – TRAVEL CORRIDOR PLANNING PROCESS

2.1 AGENCIES

Figure 2.1: Field Coordination among Agency Representatives.

Per the 2009 MOU, DOT has the lead in developing TCUMPs for state highways; DEC and APA participate in the documents' development, final review, approval and implementation. Information and resources are shared among agencies.

The process does not exclude other agencies from providing input into TCUMPs. As an example, the Department of State (DOS) is progressing several community-level projects that occur along travel corridors. PSC and Development Authority of the North Country (DANC) are examples of other potentially interested agencies/authorities. The TCUMP process will include outreach to these and all interested agencies as part of SEQR.

2.1.1 Missions and Policies of the APA, DOT and DEC

DOT

It is the mission of the New York State Department of Transportation to ensure our customers – those who live, work and travel in New York State - have a safe, efficient, balanced and environmentally sound transportation system.

DOT's goal is to achieve its mission while maintaining environmental soundness within the Park by incorporating sustainability principles into our activities; complying with all environmental regulatory requirements, and looking beyond regulatory compliance to proactively incorporate additional environmental considerations into Department activities.

DEC

The New York State Department of Environmental Conservation (DEC) mission is to conserve, improve and protect New York's natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the State and their overall economic and social well-being.

DEC's goal is to achieve its mission through the concurrent pursuits of environmental quality, public health, economic prosperity and social well-being, including environmental justice and the empowerment of individuals to participate in environmental decisions that affect their lives.

APA
The mission of the APA is to protect the public and private resources of the Park through the exercise of the powers and duties provided by law.

APA's policy recognizes the major state interest in the conservation, use and development of the park's resources and the preservation of its open space character, and at the same time, provides a continuing role for local government.

2.1.2 **Agency Programs, Guidelines and Policies**

The primary agencies involved have programs, guidelines and policies that align with travel corridor management principles and implementation. The following is a brief description of selected programs, guidelines and policies. Additional information can be found on the corresponding agencies' websites (linked below).

2.1.2.1 Multi Agency

Guidelines for the Adirondack Park
The latest revision of the "*New York State Guidelines for the Adirondack Park*" (the "*Green Book*") were jointly adopted by the Commissioners of DOT, DEC and APA in 2008. The Green Book is an interagency guide used for designing, constructing and maintaining highways and maintenance facilities in the Adirondack Park. Created through the combined efforts (started in the early 1980's) of the DOT, DEC and APA, the document's list of guidelines include roadway design, pedestrian and bicycle facility design, guiderail, lighting, signs and more. The document helps to establish communication and resolutions, and is periodically reviewed and updated. Stakeholder (including public) input is regularly sought when developing updates and during document reviews.

The purpose is to ensure the preservation and enhancement of the unique character of the Adirondack Park. The Green Book includes topics, such as: Geometric Design, Habitat Connectivity, Rock Faces, Retaining Walls and Slope Protection, Utilities, Disposal of Waste Material, Signs, etc.

The policies and standards presented in the document pertain to all DOT projects and activities within the Park. As an example, Chapter V of the Green Book focuses on Highway Maintenance Guidelines for the Park. The chapter's text sets DOT policy for maintenance operations in the Adirondack Park and on Forest Preserve lands. The Department supports an on-going training program for maintenance staff. See Attachment D for additional details. The Green Book is also fully integrated into the DOT capital planning and design processes.

2.1.2.2 New York State Department of Transportation (DOT)

The responsibilities, functions and duties of the Department of Transportation include:

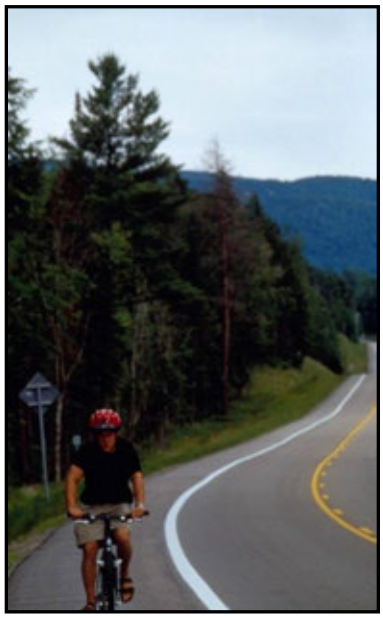
- Coordinating and developing comprehensive transportation policy for the State; coordinating and assisting in the development and operation of transportation facilities and services for highways, railroads, mass transit systems, ports, waterways and aviation facilities; and, formulating and keeping current a long-range, comprehensive statewide master plan for the balanced development of public and private commuter and general transportation facilities.
- Administering a public safety program for railroads and motor carriers engaged in intrastate commerce; directing state regulation of such carriers in matters of rates and service; and, providing oversight in matters relative to the safe operation of bus lines, commuter railroads and subway systems that are publicly subsidized through the Public Transportation Safety Board.

Decision-making at the Department is based on a series of programs, guidance and policies. These may be specific to a particular topic or can be broadly applicable. Decision-making supports DOTs Mission Statement, including the "Five Priority Results"[6].

DOT customers:

1. Want to enhance their mobility and have reliable, predictable trips for themselves or in the movement of their goods;
2. Expect both the infrastructure and its users to contribute to the physical safety of people and their goods while in transit;
3. Recognize the critical relationship between a mature, multi-modal transportation system and the State's economic vitality. They see viable transportation options as essential to both economic sustainability and livability of their communities, both Upstate and Downstate;
4. Expect the transportation infrastructure to be secure from external threat or potential abuse; and
5. See the impact of transportation-related decisions at both macro and micro levels affecting the environment and expect the system to more than mitigate transportation's impact.

Figure 2.2 Adirondack Travel Corridors serving Multiple Users



The Master TCUMP will be integrated into DOT's decisionmaking process.

Within this document, sub-sections identified as "B. Guidance" list specific programs, policies and guidance documents that support DOT's decision-making process.

[6] https://www.dot.ny.gov/about-nysdot/mission

A. Programs

Context Sensitive Solutions

Context Sensitive Solutions (CSS) is a collaborative, interdisciplinary approach that involves all stakeholders in providing a transportation facility that fits its setting. It is an approach that leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources, while improving or maintaining safety, mobility, and infrastructure conditions.

At DOT, CSS is fully integrated into the planning and design processes. This includes early, effective and continuous public involvement resulting in safe transportation solutions designed in harmony with the community. Community issues are identified through a structured format, (Citizens' workshops, Advisory Committees, etc.), and active partnership with municipal or federal/state/local agencies.

GreenLITES Program

This program was developed as a sustainability rating program to recognize transportation project designs, operations and maintenance practices that incorporate a high level of environmental sustainability. "Sustainability" is commonly understood to describe any human use of resources that does not exhaust those resources.[7] As safety and mobility are improved in New York State, transportation sustainability at DOT is a philosophy that ensures:

- Protection and enhancement of the environment
- Conservation of energy and natural resources
- Preservation or enhancement of the historic, scenic, and aesthetic project setting characteristics
- Increased public involvement in the transportation planning process
- Integration of smart growth and other sound land-use practices
- Encouragement of new and innovative approaches to sustainable design, and how we operate and maintain our facilities

[7] https://www.dot.ny.gov/programs/greenlites/sustainability

Smart Growth

Smart Growth is sensible, planned, efficient growth that integrates economic development and job creation with community quality-of-life by preserving and enhancing the built and natural environments.

Complete Streets

Governor Andrew M. Cuomo signed the Complete Streets Act (Chapter 398, Law of New York) on August 15, 2011, requiring state, county and local agencies to consider the convenience and mobility of all users when developing transportation projects that receive state and federal funding. A Complete Street is a roadway planned and designed to consider the safe, convenient access and mobility of all roadway users of all ages and abilities. This includes pedestrians, bicyclists, public transportation riders, and motorists; it includes children, the elderly, and persons with disabilities.

Ingredients that may be found on a complete street include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible public transportation stops, frequent crossing opportunities, median islands, accessible pedestrian signals, curb extensions, and more. A complete street in a rural area of the Park will look quite different from one in a more developed area; however, both are designed to balance safety and convenience for all users.[8]

Adopt-a-Highway Program

New York State's Adopt-A-Highway Program was created in 1990 to encourage individuals or groups to clean up highway roadsides and to recognize those volunteers who do. DOT administers the Adopt-A-Highway and Sponsor-A-Highway programs, through its regional offices. NYSDOT provides the training, gear and collection bags. Participating organizations provide the muscle. Participation in the program fosters a sense of community ownership of the roadway as well as a sense of pride in its appearance. Any business or organization may adopt a highway. On occasion, individuals or families adopt highways. DOT welcomes civic, fraternal, service, youth, senior citizen, scout, school, church, synagogue and neighborhood organizations. There are approximately 2,400 active Adopt-A-Highway agreements in place across the State.

Adopters are asked to commit to picking up litter along the section of state highway, which is usually two miles long, at least four times a year for two years. Adopters may mow the roadside or plant flowers and other NYSDOT-approved vegetation. The goal? To keep New York State clean and green.

For additional information regarding Adopt-A-Highway see DOT's web site at https://www.dot.ny.gov/programs/adopt-highway.

[8] National Complete Streets Coalition, 2005-2009 http://www.completestreets.org/complete-streets-fundamentals/,

National and State Scenic Byways

The State Legislature created the New York State Scenic Byways program in 1992 to include byways designated at both the national and state level. The program encourages economic development and resource conservation. The relationship of Scenic Byways to TCUMPs can be found in Section 5.4.4. Several types of corridors fall under the NYS Scenic Byways Program.

Figure 2.3: Lakes to Locks Scenic Byway on Route 22

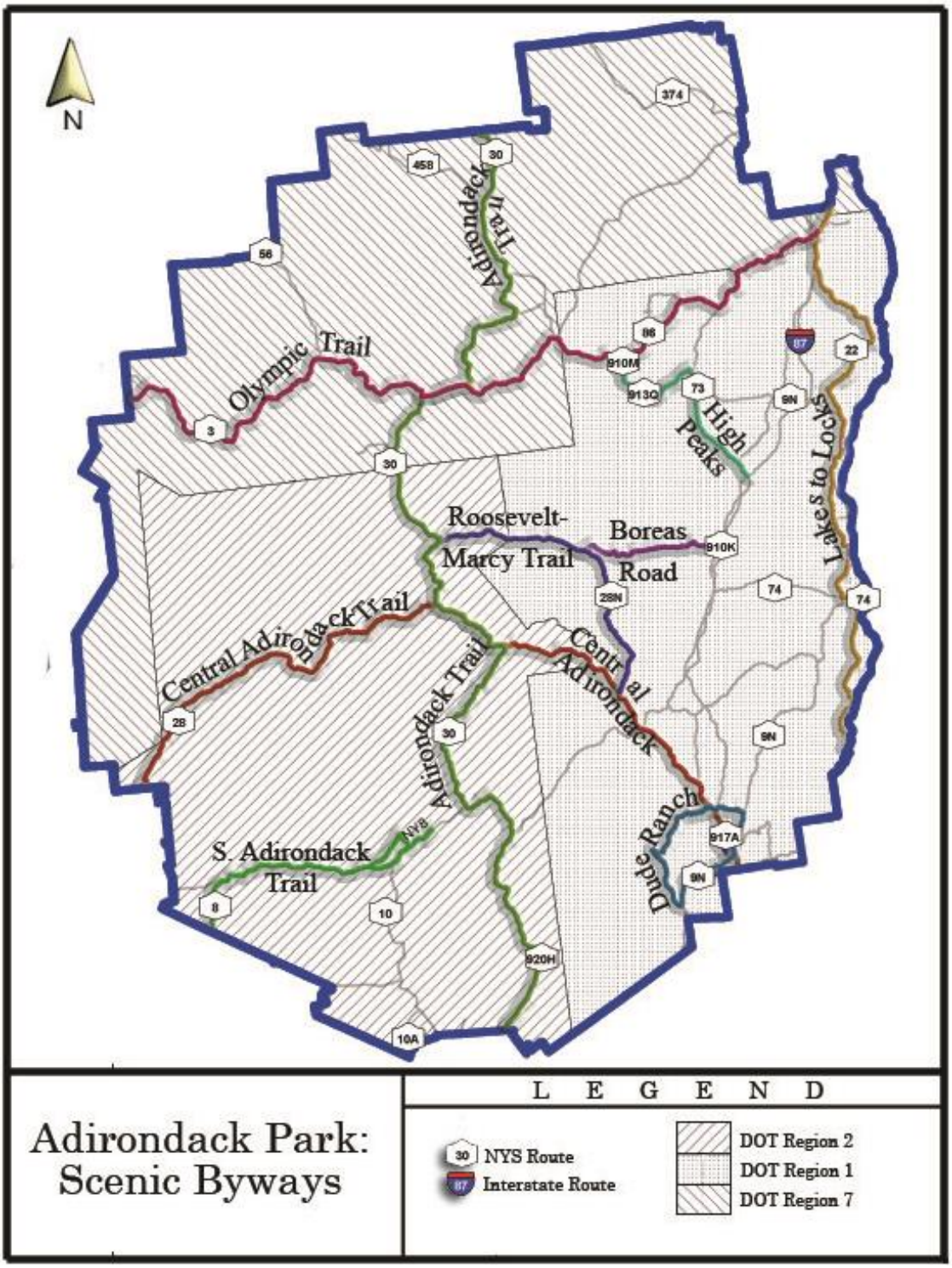
State designated scenic byways are travel corridors of particular statewide interest. They are representative of a region's scenic, recreational, cultural, natural, historic or archaeological significance. The scenic byways within the Blue Line of the Adirondack Park are found in Table 2.1 and shown in Figure 2-4.

National designated scenic byways are recognized by the Federal Highway Administration (FHWA) and are considered to be nationally significant. Within the Adirondack Park the "Lakes to Locks" Scenic Byway Trail has been designated as an All-American Roads, the highest category of national scenic byway.

Table 2.1 Scenic Byways within the Adirondack Park

	Adirondack Trail		Olympic Trail		Central Adirondack Trail
No Logo	Blue Ridge Road (Boreas)		Roosevelt-Marcy Trail		Dude Ranch Trail (First Wilderness Byway)
LAKES TO LOCKS PASSAGE	Lakes to Locks Passage		Southern Adirondack Trail	HIGH PEAKS	High Peaks Byway

Figure 2.4 Adirondack Park: Scenic Byways



Sustainability

Sustainability as a concept has widespread applicability and support, and is being integrated into institutional policies, programs and practices. In sections 4 and 5 of this document, specific sustainability applications are discussed.

DOT has adopted the following definitions:

A sustainable society manages resources in a way that fulfills the social (community), economic and environmental needs of the present without compromising the needs and opportunities of future generations.

A transportation system which supports a sustainable society is one that:

1. *Allows individuals and societal transportation needs to be met in a manner consistent with human and ecosystem health with equity within and between generations.*
2. *Is safe, affordable, and accessible, operates efficiently, offers choice of transport mode and supports a vibrant economy.*
3. *Protects and preserves the environment by limiting transportation emissions and wastes minimizes the consumption of resources and enhances the existing environment as practicable.*

Following the path of the AHC, comprehensive and strategic planning approaches to travel corridor management should identify needs, opportunities and actions that contribute to and promote sustainable activities. The concepts of sustainability have been incorporated into the TCUMP process.

B. Selected Guidelines and Standards

MUTCD (Manual of Uniform Traffic Control Devices)

The Manual of Uniform Traffic Control Devices contains the standards used to install and maintain traffic control devices on all public streets, highways, bikeways and private roads open to public travel. Examples of traffic control devices include road markings, highway signs and traffic signals. It is published, administered and regularly updated by the FHWA.

A Policy on Geometric Design of Highways (AASHTO)

AASHTO's Policy on the Geometric Design of Highways is a reference document for state and federal highway engineers that contains current design research and practices for highway and street geometric design. The guidance in the document allows designers to create unique highway design solutions that are mindful of the environment. The document can also be used to assist in the administration and planning of state and federal highway projects. Design guidelines are included for urban and rural freeways, arterials, collectors and local roads.

Flexibility in Highway Design (FHWA)

The Federal Guide that introduced the concept of Context Sensitive Solutions (CSS). It encourages a transportation infrastructure design process that incorporates community values and expands traditional transportation infrastructure considerations when applying the AASHTO Green Book criteria. This includes full and equitable consideration of scenic, historic, aesthetic and other cultural values along with safety and mobility needs. Techniques such as public involvement are emphasized as a tool to help guide project decision-making.

A Guide for Achieving Flexibility in Highway Design (AASHTO)

AASHTO's interpretation of FHWA's document Flexibility in Highway Design that provides transportation infrastructure Designers with methods to achieve Context-Sensitive Solutions (CSS). The document instructs Designers on flexible thinking, how to incorporate stakeholders into the design process and emphasizes the integration of flexible design into the "existing transportation culture". The intent of the document is to help Designers produce a highway project that meets transportation needs while improving or enhancing the community.

HDM (Highway Design Manual)
The primary functions of the Highway Design Manual (HDM) are to: (1) provide requirements and guidance on highway design methods and policies which are as current as practicable, and (2) assure uniformity of design practice throughout the New York State Department of Transportation consistent with the collective experience of the Department of Transportation, the American Association of State Highway and Transportation Officials, and the Federal Highway Administration. The objective of our process is the design of attractive highways which provide adequate safety and convenience to all highway users while maintaining proper balance among highway functional classifications, environmental concerns and fiscal restraints.

PDM (Project Development Manual)

The Project Development Manual (PDM) contains DOT's policy and procedures for progressing capital projects from project scoping to letting. The manual outlines:

- The project scoping process and procedures
- The project design process and procedures
- The format and content of project scoping and design approval documents
- The roles and responsibilities of the participants

TEM (Transportation Environmental Manual)

A manual that is the comprehensive source for DOT's policy, procedure and technical guidance on environmental matters relating to the planning, design, construction and maintenance of transportation facilities. It is the basis for most of DOT"s environmental quality assurance, training and continuous improvement processes.

Transportation Environmental Manual
The Transportation Environmental Manual is a comprehensive source for DOT's policy, procedure and technical guidance on environmental matters relating to the planning, design, construction and maintenance of transportation facilities. As such, it is the basis for most of DOT's environmental quality assurance, training and continuous improvement processes.

DOT's Official Issuance System

Official issuances (Instructions, Directives and Bulletins) are DOT's method of communicating officially-approved policies, procedures, directives and other guidance to employees and entities contracting with the Department for services (e.g. Consultants and Contractors).

Engineering Bulletins (EB)

Engineering Bulletins are engineering-related Official Issuances used when an announcement is needed about the availability of a new manual/document or a revision to an existing manual/document.

Engineering Directives (ED)

Engineering Directives are engineering-related Official Issuances used when it is deemed necessary to provide urgent, emergency or temporary information to ensure continuity of essential engineering activities.

Engineering Instructions (EI)

Engineering Instructions are a specialized engineering-related Official Issuances that contain specific administrative information and often have extensive supporting or related materials attached, referenced or distributed by other means. EIs are used for:

- The timely issuance of new or revised standard or special specifications, direction, guidance or explanation of policy or procedure with multi-region application for an interim time until the material is incorporated into an Independent Official Issuance specifically authorized as part of the Department's Official Issuance Systme (e.g. HDM, Standard Specifications, MURK, etc), or
- In rare instances, the issuance of direction, guidance, or explanation of policy or procedure that will not be incorporated elsewhere.

Office of Operations Management Instructions (OOMI)

Office of Operations Management Instructions (OOMI) are official issuances that facilitate accomplishment of the Department's mission regarding Operations.

Traffic Engineering Directives (TED)

Traffic Engineering Directives (TED) are official issuances that facilitate accomplishment of the Department's mission regarding Traffic Engineering.

Traffic Safety and Mobility Instructions (TSMI)

Traffic Safety and Mobility Instructions (TSMI) are official issuances that facilitate accomplishment of the Department's mission regarding Traffic Safety and Mobility.

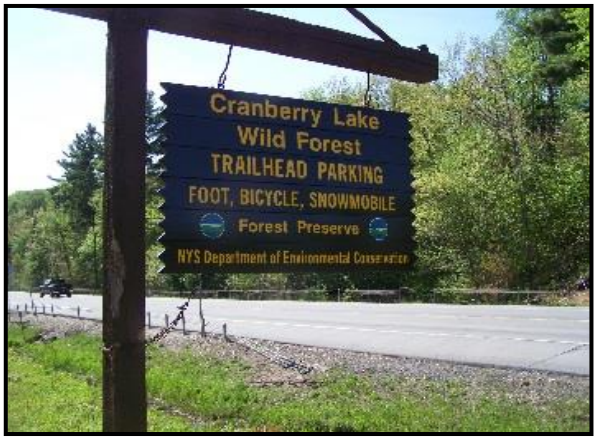
Transportation Maintenance Instructions (TMI)

Transportation Maintenance Instructions (TMI) are are official issuances that facilitate accomplishment of the Department's mission regarding Transportation Maintenance.

DOT Bridge Manual

The DOT Bridge Manual provides guidance for decisions in the bridge project process, documents or references policies, standards and procedures that need to be considered and provides a commentary discussing good bridge engineering practice. The primary goal of the manual is to provide assistance to designers to ensure that durable, economical, aesthetically pleasing, safe and environmentally sound bridges are built.

Figure 2.5 DEC Sign at Campgrounds



2.1.2.3 New York State Department of Environmental Conservation (DEC)

Open Space Conservation Plan

The Open Space Conservation Plan (OSP) is a comprehensive statewide plan that describes current open space conservation goals, actions, tools, resources and programs administered by state and federal agencies and conservation nonprofits. OSP goals include ensuring clean water; greening New York's economy; protecting natural resources and promoting outdoor recreation; increasing, deepening and improving the visitor experience; creating a 21st century parks system that is aesthetically compelling, energy and operationally efficient, and built to last. It also makes recommendations

on how open space conservation programs can make the state better prepared and more resilient following future storms and climate change.

Unit Management Planning

Unit Management Plans (UMPs) assess the natural and physical resources present within a land unit. They also identify opportunities for public use which are consistent with the classifications of these lands, and consider the ability of the resources and ecosystems to accommodate such use.

UMPs are written by DEC planners for public lands managed by the Department. These public lands include Adirondack Forest Preserve, Catskill Forest Preserve, State Forests, Wildlife Management Areas (WMAs), Environmental Education Centers, Campgrounds (Intensive Use Areas).

In the Adirondacks, UMPs are developed by DEC planners in consultation with Adirondack Park Agency (APA) staff. The APA has responsibility for assuring plans are in compliance with Adirondack Park State Land Master Plan (APSLMP) guidelines for management of forest preserve lands inside the Adirondack Park.

Recreation Management Planning

Public recreation on easement lands is guided by either RMPs that are developed for each major easement tract, or by UMPs prepared for adjacent state lands. RMPs and UMPs address existing natural resources, land uses, laws and policies, and describe plans for future recreational development, including an implementation schedule. DEC considers landowner and public input while developing RMPs and UMPs. Public access on an easement property is generally limited until a final RMP or UMP is adopted, and may also be temporarily suspended or relocated in certain areas due to forest management activities taking place on the property.

Smart Growth Grants

DEC has made a special effort to support smart growth planning activity within the Adirondack and Catskill parks. Smart growth is a renewal of land use patterns that once came naturally in the parks. Hamlets and villages developed as close knit forest communities, clustered around strong commercial centers, surrounded by vast wilderness. These communities were home to working people in the local mining and forestry industries and doubled as service centers for tourists, who were drawn to the regions' pristine natural beauty.

In the 21st century, park communities retain their heritage, a strong sense of place and a powerful connection with nature. Today's challenges, whether economic loss or development pressure, can threaten the sustainability and unique character of these communities. Located within a patchwork of public and private lands, park communities are presented with challenges and opportunities that can greatly benefit from smart growth.

2.1.2.4 Adirondack Park Agency

The Agency was established to insure optimum overall conservation, protection, preservation, development and use of the unique scenic, aesthetic, wildlife, recreational, open space, historic,

ecological and natural resources of the Adirondack Park. A further purpose was to focus the responsibility for developing long-range park policy in a forum reflecting statewide concern.

On private lands the Agency administers the land use and development plan and provides for the plan's maintenance, administration and enforcement in a continuing planning process that recognizes matters of local concern and those of regional and state. The Agency has a similar role in long-term planning and policy development for the State lands in the Park, described below.

Within the Agency, the Planning Division has the primary role for long-term planning and policy development initiatives on both private and public lands. Key Planning Division activities that have an important relationship with travel corridor planning include:

Agency-approved Local Land Use Programs (ALLUPs)
The Agency Act provides the opportunity for all local governments within the Park to develop an Agency-approved local program including a shared regulatory scheme in which the community and the agency work from the same set of rules and zoning map. Municipalities with an approved program may review and act on the Class B regional projects and shoreline variances instead of the Agency. Eighteen communities currently administer Agency-approved programs and more are working on developing an approved program. APA Planning staff is available to work with local officials and boards that may be interested establishing a 'two-tiered system' in a community.

General Planning Assistance
Agency Planning Division staff can assist putting together a work schedule, citizen surveys and other elements to help get a community started with a local comprehensive planning process. In addition to the assistance that is provided by the Department of State, Agency Planning staff have expertise and resources to assist a community including: access to a resource library of other local plans and codes; the provision of basic GIS mapping services; research on permit review history by the Agency which is often useful in the selection and development of land use planning tools; and, to provide Agency led workshops on site plan review, visual impact assessments, project analysis and other subjects, in conjunction with the Department of State and other partners.

Local Government Day
The Agency in collaboration with the Adirondack Park Local Government Review Board, Adirondack Association of Towns and Villages, Departments of State and Environmental Conservation, and Empire State Development hold an annual event in April to create the opportunity for communities to come together to share ideas and a vision for the future.

Hamlet Economic Planning Initiative
The Agency's Hamlet Economic Planning and Assistance (HEPA) Initiative is a community-driven process, led by a local stakeholder workgroup with assistance from the Adirondack Park Agency that develops and implements a plan for economic improvement of the community's commercial center. All 102 of the Park's municipalities are eligible to participate in the initiative. HEPA provides the client community with: An economic plan for the revitalization of the community's commercial center; development of local capacity for plan and project implementation; and, continued support for project development from the Agency's Economic Services and Planning Divisions.

Agency State Land Program
The Agency's Planning Division staff are responsible to consult with the DEC, ORDA and DOT involving proposed activities on State lands within the Park and to provide advice regarding a project's consistency with the guidelines and criteria of the Adirondack Park State Land Master Plan (APSLMP).

The primary activities frequently requiring advice from the State Land Program include:

- review of unit management plans prepared by the DEC (and the Olympic Regional Development Authority under the authority of the DEC);
- consultation with the DEC concerning proposed State land projects;
- classification of new State land acquisitions in the Adirondack Park;
- production of the Adirondack Park State Land Map and regular updates of it to reflect new acquisitions and technical corrections; and,
- interpretation and periodic revision of the APSLMP.

2.2 PUBLIC INVOLVEMENT AND STAKEHOLDER PARTNERING

Citizens, interest groups and stakeholders in the Park are highly active and diverse, with an interest in how DOT's activities affect quality of life and the character of the Park. The process of travel corridor planning relies on continuous feedback among these groups and DOT. The following subsections highlight some of these outreach opportunities.

2.2.1 Public Involvement Strategy

Following DOT's Public Involvement Manual, TCUMPs will use a combination of strategies to solicit public and stakeholder input. Some of the things to consider about travel corridors when developing strategies for TCUMPs are that they:

- Vary in length
- Involve multiple intersections, communities and jurisdictions

- Require consideration of many direct and indirect interests; no "one size fits all"
- Do not always have well-defined relationships; new stakeholder and public interest may arise

Figure 2.6: Public Involvement Meeting

Some of the approaches currently being used include:

- Public information and outreach meetings along travel corridors
- APA monthly agency meeting
- Meetings with local officials
- Meetings with interested individuals or groups such as NYS Snowmobile association, Clifton/Fine Economic Council or the Wildlife Conservation Society
- Regional events, such as Local Government Day and the Common Ground Alliance
- Community events
- FPAC (Forest Preserve Advisory Committee) meetings
- Internet

2.2.2 Forest Preserve Advisory Committee

The Forest Preserve Advisory Committee (FPAC), an advisory group to DEC's Division of Lands and Forests, meets quarterly to deal with forest preserve issues. The members are appointed by the Director of the Division of Lands and Forests. The Committee is a forum representing a broad array of interests in the forest preserve. DEC, DOT and APA draw on FPAC's shared discussion to make informed decisions related to the forest preserve. The discussions also build support for addressing key management and policy issues. DEC, APA, DOT and Office of Parks, Recreation and Historic Preservation (OPRHP) are all Ex-Officio Members of the Committee.

2.2.3 Stakeholder Input

Stakeholder input, reflected in the TCUMP, originated from several venues including:

- Public meetings
- Topic specific forums
- One-on-one meetings
- Informal conversations
- E-mails

DOT staff participate in stakeholder events and meetings such as those held by Common Ground Alliance, Adirondack Snowmobile Conference and APIPP. Through these forums, DOT gains insight into interests outside the Department. Staff also interacts one-on-one with members of the

public, stakeholders and interest groups to gain greater insight into how their interests relate to travel corridors. The TCUMP process is informed by these interactions.

The Table 2.2 captures key concepts received through the public and stakeholders comments as part of the initial public outreach meeting on the development of the Route 3 TCUMP.

Table 2.2 Public Involvement Comments by Topic Category

CATEGORY	COMMENT
Transportation Functionality	ensure reliable and safe transportation
	improve pedestrian accommodations (adequate shoulder widths, and sidewalks)
	improve bicycling accommodations (bicycle lanes, bicycle routes (loops),challenges)
	increase opportunities for resource sharing
	understand that rest areas and public facilities are part of the transportation infrastructure
Access to Park Recreational Resources	improve access to the parks recreational resources
	provide interpretative signage along corridors
	consider long standing uses of the roadside (i.e. camping, parking for hunting season and ice fishing)
	consider and facilitate recreational facility access points
	recognize and attend to snowmobiling relationships
	communicate the importance (opportunities) of pedestrian (hiking) and bicycling facilities to the Park as recreational facilities and events (IronMan, Velo, Cycle the Adirondacks, mountain biking)
Relationship with Park Communities	attend to relationships between community travel corridors
	evaluate and coordinate with communities on utilities and infrastructure
	coordinate with communities to facilitate branding for main streets and gateways
Aesthetics	consider DOT's maintenance facility appearance
	attend to gateways (entrances to Park and Communities)
	consistent signage (layout and use),
	aesthetics of signage (branding)
	visual resource assessment (VRA) and mitigation opportunities
	utility influences as it relates to visual resources in the travel corridors
Environmental	look for water quality improvements opportunities
	identify opportunities for fish and wildlife connectivity
	improve habitat and ecosystem integrity
	integrate environmental considerations into vegetation management along corridors
	manage invasive species
	integrate environmental considerations into winter maintenance and use of salt

Table 2.2 Public Involvement Comments by Topic Category

CATEGORY	COMMENT
Tourism and Economic Considerations	recognize economic relationships
	provide visitor information and communication opportunities
	continue travel corridors branding
	consider and support local economic development relationships
	Wayfinding (signage)and promotional considerations for facilities (e.g. campgrounds, lodging, fuel, food), attractions (Wild Center), community parks, trails and beaches
Utilities	maintain and improve external relationships with utility providers

2.2.4 Local Government Events

DOT is involved in many local government events including annual meetings. Annual meetings provide opportunities for outreach, direct input from local government and a forum for ongoing coordination. The interactions have been incorporated in the TCUMP process.

2.3 STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQR)

The development and acceptance of this Proposed Final Master TCUMP is subject to the State Environmental Quality Review Act (SEQRA). All reasonable alternatives concerning the various recommendations found herein have been analyzed and the potential environmental impacts assessed.

2.3.1 Preferred Alternative - Defined

The preferred alternative is comprised of the specific Corridor Management Actions plus the information provided in Table 6.1 - List of Actions.

2.3.2 Null Alternative - Defined

The "Null Alternative" is a term commonly used by DOT and is equivalent to the "No action" alternative under NYCRR Part 617 (SEQRA) and, at the federal level, under 40 CFR 1502.14(d) of CEQ's implementing regulations for NEPA.

- Per SEQR, it is : "…a description of the likely circumstances…if the project does not proceed."
- Per CEQ, it is either:
  - (typically for management actions) - "'no change' from current management direction or level of management…' " i.e. "…continuing with the present course of action until that action is changed…"; or
  - (typically for specific proposals or projects) - "…the proposed activity would not take place."

For Purposes of this Final Generic EIS, since no specific projects will result, the null alternative is the continuation of current management in the Park without implementing any of the topic-specific Corridor Management Actions or those in Table 6.1 - List of Actions.

2.4 ORGANIZATION OF THE TRAVEL CORRIDOR PLANNING DOCUMENT

2.4.1 Proposed Final Master Travel Corridor Document

In 2009, DOT entered into a joint agreement, or Memorandum of Understanding (MOU), with DEC and the APA regarding the development and implementation of TCUMPs. As part of that MOU, it was determined that each corridor within the Park would have an individual corridor plan and that Route 3 would be the first plan developed. Early in the process, it became apparent to the agencies involved that a "master" TCUMP document that addressed park-wide goals, strategies, objectives, policies and guidelines was required prior to the development of route specific corridor plans. *As an example, the overall guidelines for gateways in the Park will be in the Master TCUMP. The specifics of how gateways are incorporated into each individual corridor will be addressed in the corridor appendix.* The individual plans may further recommendations in the context of the individual corridor, but this document should establish the greater direction for all topics.

Figure 2.7 Gateway Signage into the Adirondack Park

Decision and actions made on corridors that do not have individual corridor plan will adhere to the common guidelines and recommendations provided in a Master TCUMP. Individual corridor management plans, will be incorporated into the master document as appendices as they are developed.

A master document establishes common themes, guidelines and standards which will:

- Foster better outcomes
- Provide consistency
- Result in less duplication from plan to plan
- Provide in quicker turnaround for the development and updating of individual corridor plans
- Increase plan readability (reduction in individual plan size, provides more concise information and recommendations in individual plans)

The Master TCUMP will be periodically revised as needed. The document is intended to be a "living" document that reflects the learning and improvements gained during travel corridor planning process.

2.4.2 **Individual TCUMPs**

The individual TCUMP's will capture more route specific information discussed within the context of a Park-wide perspective. To further refine the example noted in Section 2.1, the "Gateways to the Park", the Route 3 corridor plan will provide corridor specific details and recommendations. These recommendations will identify a need to add a gateway entrance sign at the east end of Route 3 (current none exists), and vegetation management around the sign at the corridor's west end.

The individual TCUMPs provide an opportunity to clarify the master document or identify new issues as route specific recommendations develop. The process is iterative; the development of individual documents continues to inform the content of the Master TCUMP and vice versa.

Individual travel corridor unit management plans are identified by the corridor's route number. Travel corridors within the Adirondack Park vary in length (2 miles (Route 192 A) to 151 miles (Route 30)). Route 3 is the first individual corridor route plan to be developed. Individual Travel corridor management plans may be composed of a single route or multiple routes. The merging of individual routes into one management document will be based on varying factors, such as route length, community connections and DEC planning efforts.

2.4.3 **TCUMP's Key Elements of Format**

2.4.3.1 Overview

The APSLMP and the 2009 MOU provides a generic outline and the basic contents of TCUMPs. The generic outline provides the flexibility to incorporate new information received during the TCUMP development process including public outreach, internal and external dialog (within DOT and with other agencies and communities) and experience gained. The new information should be key to transportation and/or social, economic and environmental functions along with recommendations to address issues as they exist and to achieve a future desired state. And while the current Master TCUMP reflects this process, it is fully anticipated that this document will change over time as additional information is gleaned from the development of subsequent TCUMPs.

Individual TCUMPs will outline the planning context for the particular route including:

- What is unique about this particular route that should be accentuated?
- What specific problems and opportunities exist for the specific corridor?
- What is the unique geographic (landscape) setting?
- What makes one route different from another?

2.4.3.2 Format and Consolidation of Information by Topic

This document organizes relevant information (background, discussion of current and desired states, and recommendations) in one location by topic (e.g. snowmobiles, invasive species, parking areas, etc.). Stakeholders can easily review and print information that relates to their interest or responsibilities. process. Sub-sections identified as "B. Guidance" list specific programs, policies and guidance documents that support DOT's decision-making process. Sub-sections identified as "Alternatives Discussion" fulfill the regulatory requirements for alternative analyses under SEQR.

The reader should note that there is considerable interrelationship among topics. For example, Habitat Connectivity (Section 5.22.3) is related to both Bridges (Section 4.4.4) and Culverts (Section 4.4.5); Wetlands (Section 5.13) is related to both Drainage (Section 4.4.2) and Culverts (Section 4.4.5), etc. In many cases, corridor management objectives and actions reflect these interrelationships.

Individual TCUMPs will follow this format and expand on the information as necessary. Their primary focus will be on Sections 4 (Transportation Components of Travel Corridors) and 5 (Social, Economic and Environmental Components), in which the stakeholder will find corridor-specific information and recommendations.

Sections 1, 2 and 3
These sections are contained in this document only. They provide the information common to all individual TCUMPs.

Sections 4 and 5
The intent of separating the discussions of transportation functional needs from the social, environmental and economic context is to understand them individually and develop a good foundation to explore their interrelationships. Sections 4 and 5 identify needs, relationships, and opportunities to support the overall vision for the Park.

Figure 2.8 Interpretative Signage along Travel Corridors

Figure 2.9 Outline for the Content of Individual TCUMPs

Outline for Individual TCUMP's Content

(X)* Executive Summary
(X) 4.1 Introduction
(X) 4.2 Ownership and Control of the Travel Corridor
(X) 4.3 Transportation Programs
(X) 4.3.1 Highway Safety Program
(X) 4.3.1.1 Posted Speed Limits
(X) 4.3.1.2 Roadside Clearing Widths
(X) 4.3.1.3 Falling Rock and Slope Problem Areas
(X) 4.3.1.4 Audible Roadway Delineators
(X) 4.3.1.5 Traffic Calming
(X) 4.3.1.6 Lighting
(X) 4.3.2 Administration of Capitol Construction Program
(X) 4.3.3 Operations and Maintenance Program
(X) 4.3.3.1 DO T Operational Facilities
(X) 4.3.3.2 Winter Maintenance
(X) 4.3.3.3 Snow Plow Turn-a-Round
(X) 4.3.4 Highway Work Permit
(X) 4.3.5 Emergency Response Program
(X) 4.3.6 Vegetation Management Program
(X) 4.4 Transportation infrastructure in Trave Corridors
(X) 4.4.1 Pavement and Shoulders
(X) 4.4.2 Drainage System
(X) 4.4.2.1 Frost Heaving Areas
(X) 4.4.3 Rest Areas, Safety Parking Areas and Scenic Overlooks
(X) 4.4.4 Bridges
(X) 4.4.5 Culverts
(X) 4.4.6 Fences and Walls
(X) 4.4.7 Barriers (including Guide Rail)
(X) 4.4.8 Traffic Control Devices
(X) 4.4.8.1 Highway Signs
(X) 4.4.8.2 DEC Sign Regulation (Reserved)
(X) 4.4.9 Pedestrian Facilities
(X) 4.4.10 Bicycle Facilities
(X) 4.5 Corridor Transportation Supporting Elements
(X) 4.5.1 Surplus Material and Disposal
(X) 4.5.2 Gravel and Borrow Areas
(X) 4.5.3 Staging and Stockpiling
(X) Section 5: Social, Economic and Environmental Factors

Sections as appropriate for individual Corridor at a minimum the following are to be included:

(X) 5.4 Regional and Related Planning Efforts
(X) 5.5 DEC State Lands/Forest Preserve
(X) 5.14 Wetland Systems
(X) 5.21 Threatened and Endangered Speciesw
(X) 5.23 General Ecology and Wildlife Resources
(X) 5.25 Scenic and Aesthetic Resources
(X) 5.26 Historic and Archaeological Resources
(X) 5.27 Open Space and Recreational Resources
(X) 6.0 Recommendations
(X) 7.0 Implementation

*Represents Appendix Number

Section 4 describes DOT's core responsibilities and functions including:

- Safety
- Reliability & Travel Time
- Life-Cycle & Durability
- Operations & Maintenance Considerations
- Access
- Capacity
- Cost Benefit & Feasibility
- Low Life Cycle Costs And Economic Sustainability

DOT's transportation infrastructure (e.g.: roads, bridges, clear zone etc.) is a built environment that contrasts with the natural environment of much of the park. Managing the transportation infrastructure will have an influence on the natural environment.

Section 5 describes the social, environmental and economic functionality as it relates to travel corridors. Some examples include:

- People & User Groups
- Communities
- Education
- Utilities
- Tourism & Economics
- Aesthetics
- Habitat Integrity & Connectivity
- Water Quality
- Alternative transportation modes (bicyclists, snowmobilers, pedestrians, equestrians, etc.)

Section 5 describes opportunities for furthering Social, Economic, and Environmental considerations in the context of transportation. The corridor planning process will refocus our future actions to respond to the unique context of the Adirondacks.

Section 6 provides decision makers with a general starting point for allocating resources and establishing schedules and priorities. It summarizes management objectives and Corridor Management Actions in a table format. The following topics are indicated only as a checkmark in the table and don't appear in the main body of the text:

- Develop and deliver training
- Park-specific guidance
- Technical Work Groups
- Asset Management
- Apply and/or Develop BMPs
- Develop a Library of Treatments
- Develop a Decision Tree

This was done to avoid redundancy. The remaining topics will have additional information in the main text.

Section 7 proposes specific actions to realize management objectives and Corridor Management Actions based on priorities, resources, abilities and other factors.

Section 8 provides Definitions and Acronyms.

Section 9 provides selected references used in this document.

Section 10 includes Attachments.

2.4.3.3 Role of Geographic Information Systems (GIS)

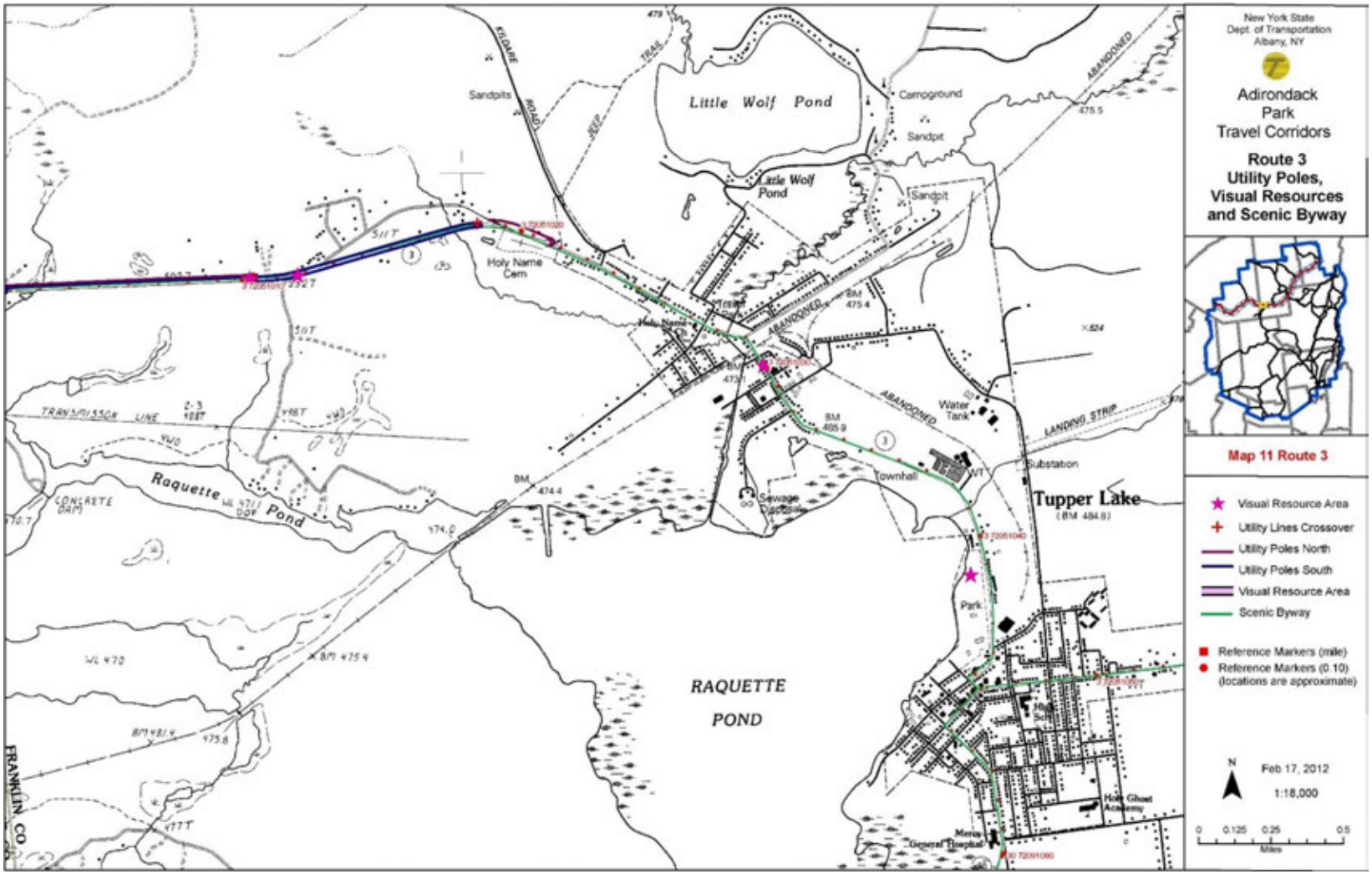
Geographic information system (GIS) allows the visualization, analysis, and interpretation of a wide range of Park and transportation related data in order to better understand relationships, patterns, and trends. The MOU requires the integration of GIS and other web-based information into the overall management of information in TCUMPs.

Mapping and Use of Map Books

Maps were prepared for this project using an ESRI ARCGIS utility called Map Books. Map Books produces multi page documents based on a dataset and an index grid representing the pages. The index grid represents how the dataset is divided for plotting at a workable scale. For instance, for Route 3, the highway was divided up into 21 "pages" so that the elements on the map were more readable at a 1:24 000 scale. Map Books creates .pdfs of each map, which is a readily-accessible and portable format. Figures 2-10 and 2-11 are from the Visual Resource Assessment of Route 3 near Tupper Lake.

Figure 2.10 Scenic Viewshed from Route 3 Near Tupper Lake

Figure 2.11 Sample MapBook page from Visual Resource Analysis of Rte. 3 near Tupper Lake.



2.4.3.4 Use of Reference Markers

Reference markers are an important component in TCUMPs. Reference markers are used to:

Figure 2.12 Turtle attempting to cross Route 3

- Convey a specific location
- Identify features along the travel corridor(s) (e.g. hiking trail, wildlife crossing areas, scenic areas, parking area needs and)
- Convey operational maintenance activities
- Report (by the public, external agencies, etc.) observations (e.g. invasive species and road kill locations) Break down the corridors into segments for public meetings

As the general public becomes more informed about reference markers, they can be used as a tool to transmit important information along the corridors. For more information on the reference marker system, go to Section 8 - Definitions.

2.4.3.5 Inventory and Asset Management

Asset management is "a strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively throughout their lifecycle…" as defined by *the American Association of State Highway and Transportation Officials* (AASHTO). An asset management system includes:

- An adequate inventory of existing assets.
- A standardized set of parameters (data dictionary) measuring the condition of assets.
- An assessment of how well actions are performing over time.
- The ability to perform cross asset allocation trade offs.
- A framework and strategy for decision-making – prioritizing needs and selecting treatments.

Effective asset management begins with targeted inventories, which are usually required early in the Unit Management Plan (UMP) process. A complete inventory, with quality information supports better decision-making including during emergency situations, with expedited schedules. DOT inventory efforts to date have focused mainly on "hard" infrastructure assets (ones that inform the Capital Program) such as:

- Pavements, pavement markings, and road signs
- Bridges, and tunnels
- Structures such as retaining walls, culverts, sign structures, etc.
- Curbs, sidewalks

- channels, dams, and drainage facilities
- Barriers, railings, and medians
- Traffic signals and control equipment, and Intelligent transportation systems (ITS)
- Street lighting
- Bicycle lanes and paths on the right of way
- Parking facilities such as pay and display machines, parking meters
- Rest areas
- Maintenance buildings and equipment

Part of this TCUMP process will be to recommend new inventories needed for future decision-making. Selected examples are included in Attachment E. Some of these inventories have already been initiated and will be completed via individual TCUMPs. Others will need to be newly generated, however, relevant information may already exist within DOT, other agencies or entities.

In addition to the inventories themselves, data dictionaries for Park assets need to be updated or created. Selected examples are included in Attachment E. The data collected will reflect the unique concerns of the Park, such as the maintenance of park-like character.

Corridor Management Objectives

- Improve Asset Management for Travel Corridors in the Adirondack Park

Corridor Management Actions

- Define asset management needs, opportunities, recommendations and strategies for the various topic areas
  - Develop data dictionaries for Park topic areas that include information such as scenic qualities, access needs, snowmobiling considerations, signage recommendations, habitat connectivity, and other areas identified through outreach and input
  - Develop stand-alone assessment forms, where identified, that can be used off-line, in field applications and/or while the electronic data dictionary is under development
  - Establish Park technical working groups (TWG) as needed
- Develop a robust asset management system for the Park.
  - Conduct an inventory of existing assets
  - Prioritize needs and actions
  - Measure results and track progress over time

Discussion of Alternatives

The null alternative would continue to support safety and decisionmaking based on information gathered from standard engineering inventories but would not address the unique assets and needs of the Adirondack Park.

The preferred alternative provides expanded asset management capabilities and provide information specific to environmental systems, aesthetics and social factors along with the Adirondack context.

2.5 SUMMARY

A safe, well-functioning and ecologically sound transportation system has societal benefits. Design, maintenance and construction practices have changed since the roads in the Adirondack Park was originally built. The travel corridor planning process clarifies each corridor's current functional elements (both as a transportation system and as part of the natural environment) and allows the Department to make informed and balanced decisions. When important Social, Economic, and Environmental (SEE) relationships pertinent to travel corridors are identified, the Department is able to build these needs into future actions, such as planning, capital projects, guidance, training, and routine maintenance.

The intent of the TCUMP process is to foster improved communications, agency efforts, programs and resource use (e.g. staff, funding, time, etc.), however some individual projects may be identified. TCUMP development focuses on transportation functional needs while supporting a greater awareness of the social, economic and environmental transportation relationships.

SECTION 3 – TRAVEL CORRIDOR MANAGEMENT, DEVELOPMENT AND COORDINATION

3.1 INTRODUCTION

This section describes challenges, which includes multiple interests, ideas and responsibilities. Many of these challenges can be overcome through better communication and continuity across regional and agency boundaries. DOT, APA and DEC have established working groups, coordination mechanisms and training efforts to address these challenges (existing and future). For example, monthly or quarterly conference call between APA and the Regions (similar to those which take place with DEC), would be beneficial.

The TCUMP process acknowledges that it is necessary to engage all involved agencies, communities and stakeholders to succeed.

3.2 KEY CHALLENGES

3.2.1 DOT

The influence DOT has on travel corridors within the park is critical to the transportation functional needs established in this document. DOT is comprised of eleven (11) regions and the Main Office. There are three (3) DOT regions within the boundaries of the Adirondack Park These include Region 1 – Albany, Region 2 – Utica and Region 7 – Watertown (See Figure 3.1). Department policy is set through the Main Office and implemented at the regional level. Despite the unifying influence of a shared policy, each regional office has some differences in the way the roads assigned to them are managed. Examples of DOT regional variations such as mowing practices are evident throughout the Park.

Challenges include:

- Consistently implementing and sustaining the TCUMP process and its recommendations
- Staff changes and the loss of the knowledge base
- Internal communication and coordination across divisions, offices and bureaus throughout the Department that have different and overlapping accountability and policy-setting responsibilities for planning, design, construction and maintenance
- External communication and coordination with permittees, contractors, consultants and doing work on our ROW
- Provision of timely training, effective mentoring and a library of resources
- Transportation funding requirements
- Safety mandates
- Legal mandates
- Reconciling competing and disparate interests.
- Meeting the varying (and even disparate) needs of the travel corridor users

3.2.2 **DEC**

There are two DEC regions within the Park, Regions 5 and 6. Region 5 includes Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington Counties. Region 6 includes Herkimer, Lewis, Oneida and St. Lawrence Counties (See Figure 3.2). Similarly to DOT, although there are shared policies, there are also variations in the way they are applied in each region. DEC also faces challenges such as:

- Staff changes and the loss of the knowledge base
- Internal and external communication and coordination
- Legal mandates
- Funding and resources
- Reconciling competing and disparate interests

3.2.3 **APA**

The Agency is responsible for developing long-term policy, land use planning and the administration of land use regulations for a rural area representing one fifth of the State. The work of the Agency is often the subject of strong public interest and diverse opinion. Some key challenges the agency encounters include:

- Consistent, efficient and timely administration of regulatory review;
- external communication and coordination;
- reconciling competing and disparate interests;
- staff changes and the loss of knowledge base.

3.2.4 **Counties and Municipalities**

Face their own unique challenges including:

- Local plan variations
- Local "branding" vs. park-wide consistency
- Reconciling competing and disparate interests
- Funding and resources

Figure 3.3 maps the counties and municipalities within the Adirondack Park. Attachment B tabulates and provides municipal website links for all towns and villages within the Adirondack Park (organized by County).

Figure 3.1 Adirondack Park: Residency and Sub-Residency Boundaries and Locations

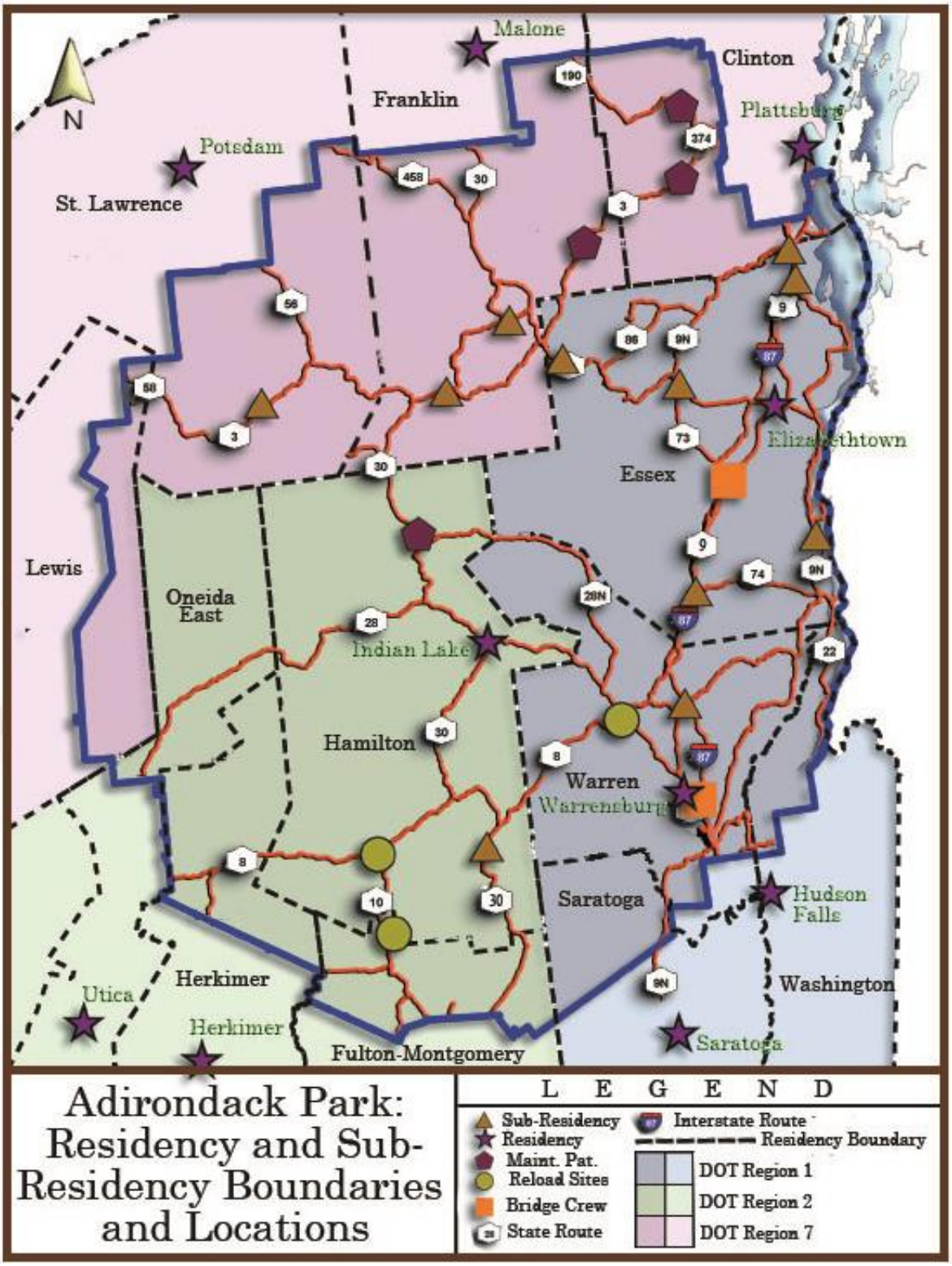
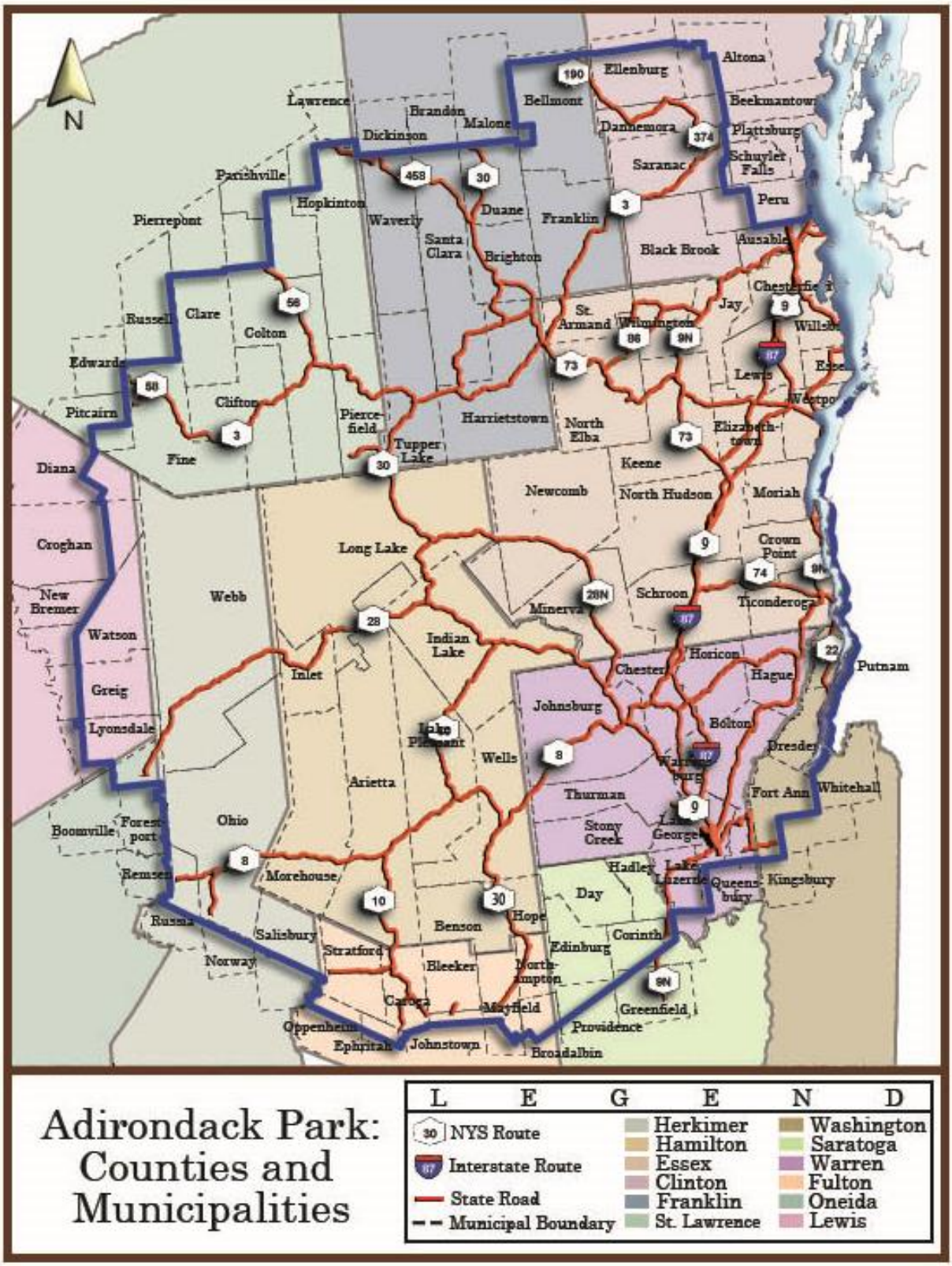


Figure 3.2 Adirondack Park: DEC Regional Boundaries

Figure 3.3 Adirondack Park: Counties and Municipalities



3.3 RELATED AND SUPPORTING EFFORTS

3.3.1 Overview

TCUMPs don't supplant other guidance pieces such as the Green Book; rather they work synergistically with them to assist the implementation of travel corridor planning. This section discusses these other guidance and regulatory support.

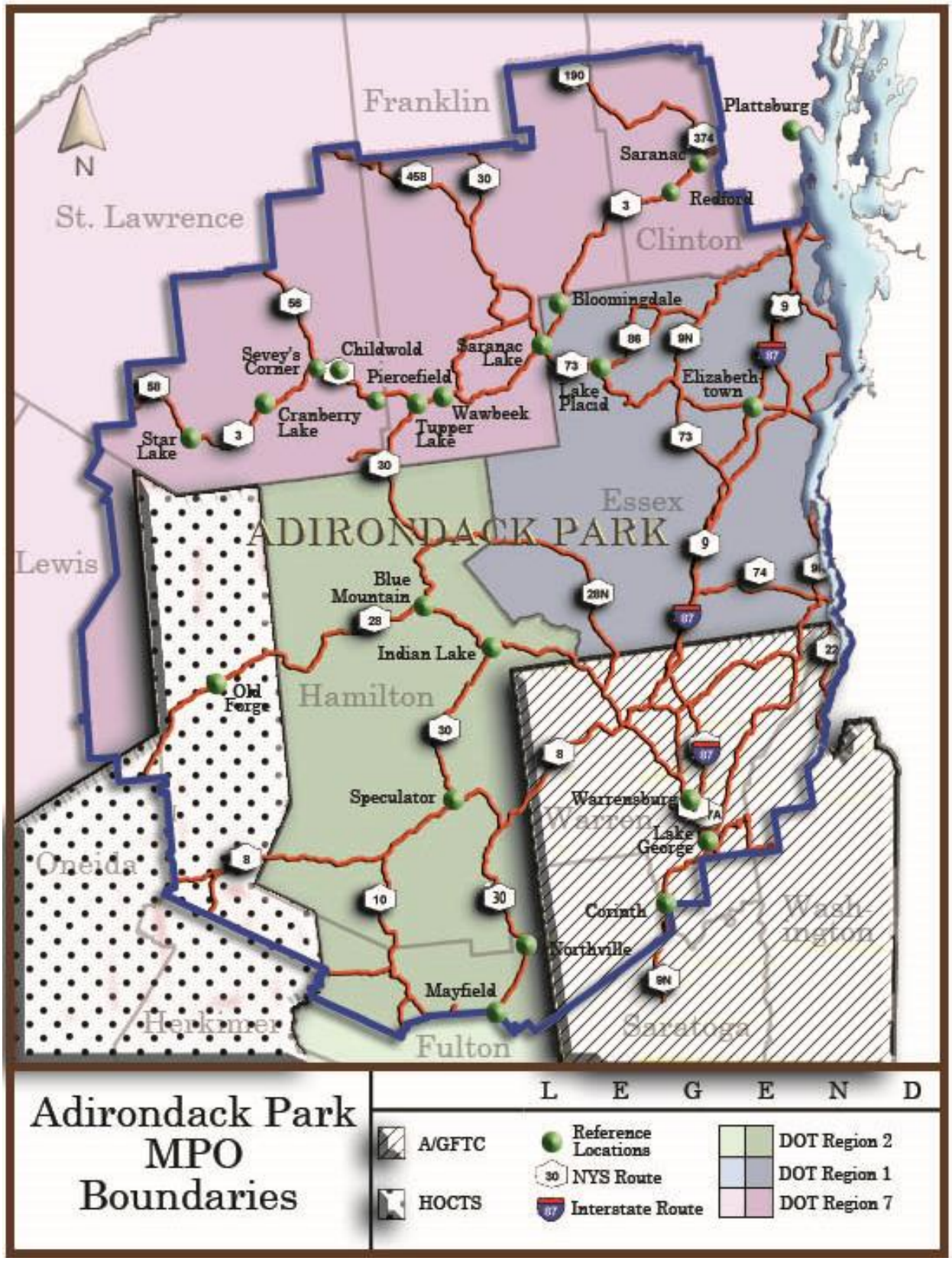
3.3.2 Section 814 APA (Executive Law Article 27) Review

All of the Department's actions within the Park undergo a comprehensive environmental review process, including a §814 review. The §814 review will look for consistency between the action and the TCUMP's recommendations. DOT actions within the Park are undertaken either through capital projects and/or operations (maintenance) activities. Capital projects are part of the Statewide Transportation Improvement Program (STIP); operations activities are part of DOT's transportation program. Department actions are tied to federal and state mandates, fluctuate with a hierarchy of needs, are contingent on the reliability of state and federal funding and need to respond to statewide emergencies.

3.3.3 Metropolitan Planning Organizations (MPOs)

Metropolitan Planning Organizations (MPOs are federally mandated (23 U.S.C. §§134-135) planning organizations composed of state and local transportation representatives. MPOs are required in urbanized areas with populations at or exceeding fifty thousand (50,000). Currently, there are two MPOs with jurisdictions that extend into the boundaries of the Adirondack Park (see Figure 3-4). The Adirondack-Glens Falls Transportation Council (A/GFTC) was founded in 1985 and is the designated MPO for Warren, Washington and Saratoga County (Town of Moreau) (A/GFTC, 2011). The Herkimer – Oneida Counties Governmental Policy and Liaison Committee (GP&L) was created in 1963 to, *"establish transportation goals and objectives on a local basis…"* for both Herkimer and Oneida County. The MPO is typically referred to as the "Herkimer Oneida Counties Transportation Study" (HOCTS).

Figure 3.4 Adirondack Park MPO Boundaries



3.3.4 DOT Environmental Review Process – NEPA and SEQR

Capital projects with federal funds undergo a mandated interagency environmental review process as part of either the NEPA process (federal funding) or SEQR (state funding). Both processes ensure that Department's actions minimize or avoid adverse environmental impacts.

3.3.5 DOT Environmental Checklist for Maintenance Activities

The Environmental Checklist for Maintenance Activities (Developed for the Adirondack Park and included in the Green Book) is the mechanism for incorporating appropriate review for DOT operational work planning and on-demand work. The main purpose of operational work planning is to schedule and complete maintenance work. The Environmental Checklist for Maintenance Activities is a means to:

- Provide checks and balances
- Communicate DOT's commitment to preserving park-like character
- Identify what maintenance activities are on Forest Preserve land or are adjacent to Forest Preserve land
- Evaluate the need for a "temporary revocable permit" (TRP) from the DEC.
- Identify the need to use motorized vehicles or motorized equipment during the maintenance activity and if the use of these vehicles and equipment is consistent with the APSLMP
- Evaluate the need to coordinate with the APA
- Identify and evaluate all environmental aspects of the DOT's maintenance activities

The most up-to-date Environmental Checklist for Maintenance Activities is depicted in Attachment F. See the Green Book for additional guidance.

This process has been very effective and led to secondary benefits including the development of comprehensive training, regular communication between MEC's and Operations staff, and communication with involved agency staff. This process is reviewed and updated as needed, incorporating input from operations staff and involved agencies. Future DOT Regional operations work plans will refer to and incorporate management objectives identified in TCUMPs as appropriate.

3.3.6 Environmental Handbook for Transportation Operations

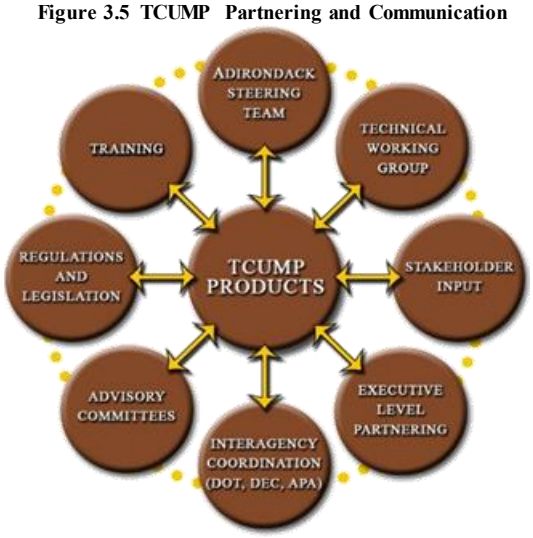
The *Environmental Handbook for Transportation Operations*, produced by the DOT Office of Environment, is intended to provide DOT personnel with general awareness and guidance of the primary requirements that apply to the types of activities conducted by DOT Operations. The Handbook is *not* a substitute for the actual applicable environmental regulations.

In general, the environmental requirements are described in the context of the operation or type of facility or equipment most affected by the issue. The requirements, however, may affect multiple activities and operations and cross reference and clarification by environmental staff may be required. Since regulations and activities are frequently changing, this handbook is intended to be a working document that is updated periodically.

3.4 PARTNERING AND COMMUNICATION

Corridor planning for Adirondack Park travel corridors requires partnering and communication among all stakeholders. The following subsections highlight some of these coordinated efforts.

Figure 3.5 TCUMP Partnering and Communication



3.4.1 DOT Adirondack Steering Team (AST)

DOT's Adirondack Steering Team (AST) is comprised of environmental staff from the three Park DOT Regions (1, 2 and 7) plus the Office of Environment. Team members represent their Regional Group or Program Area interests and collaborate as necessary with staff in other DOT program areas. The AST provides leadership in identifying and addressing priority issues; is a common forum for the issues that are relevant in the Park; and encourages pooling of resources. This is accomplished in a manner consistent with the TCUMPs. The AST is a significant tool to facilitate improvements in DOT's involvement in the Park. A more detailed description of the AST can be found in the team's charter and in the Topic Work Plan Assessment example.

> The mission of the Adirondack Steering Team is: "*To promote an efficient, effective and consistent approach to providing a transportation system in the Adirondack Park that supports a sustainable society.*"

The DOT Steering Team will decide, by consensus, which Park issues warrant further discussions with staff from the NYSDEC and the APA.

3.4.2 Interagency Coordination Meetings

Interagency Coordination Meetings (ICM) are one mechanism where the issues identified by the AST will be prioritized, coordinated and addressed. The membership for ICMs will include representation from all currently-participating agencies. The ICMs will be chaired by DOT's Adirondack Park and Forest Preserve Manager. Attendees are responsible for representing the interests of their Region/Agency at these meetings and collaborate with other staff and stakeholders as necessary. Issues not resolved at staff level or through ICMs may be referred to a

Technical Work Group (TWG) or elevated to Executive Level Partnering (ELP) for additional discussion and prioritization.

3.4.3 Technical Working Groups

Technical Working Groups (TWGs) are formed, as necessary, to follow-up on the resolution of priority issues and activities. The need for a TWG may be identified by an agency, the AST, an ICM and/or ELP. TWGs will consist of technical specialists and others appropriate to the topic being discussed. Staff from all involved agencies (federal, state and local) and stakeholders groups will have the opportunity to become involved. Multiple TWGs may be formed to address different aspects of broad topics, such as branding, utilities, right-of-way (ROW) acquisitions, guiderail, and the Adirondack Northway bridge treatments. TWG leaders will be drawn from the membership within each group. TWGs will support the TCUMPs. In particular, they will be needed to progress training and asset management objectives.

Many topics have a requirement for this need; the actual time commitment will vary depending on a range of variables including: topic complexity, amount of outreach needed, available human resources, schedule and products identified as being needed. Certain topics may be addressed quickly, in a compressed time frame; others may require long-term commitment and resources.

In general, Park technical working groups (TWGs) will define needs, identify opportunities, make recommendations and formulate strategies for the various TCUMP topics. See Section 6 *(Recommendations and Summary)* for the topics which are anticipated to require TWGs or TWG involvement.

3.4.4 Executive Level Partnering

The DOT/APA/DEC The Executive Level Partnering Group (ELP Group) serves as a forum for the three state agencies to work in partnership to enhance and expand upon existing communications and to address common interests associated with the development (repair, rehabilitation, reconstruction) and maintenance/operation of the State's transportation system and related facilities within the Adirondack Park.

3.4.5 DOT Operations Meetings

There are three DOT regions with maintenance responsibilities in the Park. DOT maintenance jurisdictions are generally divided along county lines, which results in a total of twelve maintenance residencies. In addition, there are three bridge maintenance groups, one per region. The issues facing each residency and bridge group are similar, however, each entity's response to a particular issue can vary. To improve and unify the Department's response, a "Park Operations Meeting" was initiated in 2007. Park operations meetings are convened to improve information sharing and to process input received from key DOT staff. When warranted (to facilitate understanding of an issue and to improve interagency communication), meetings occasionally

include staff from other agencies. Discussions include topics such as, TCUMP development, winter maintenance activities, the removal of hazard trees adjacent to Forest Preserve lands, the use of herbicide adjacent to wetlands and strategies for the management of invasive species. Park Operation Meetings are typically held annually.

Forums like the Park Operations Meetings are not exclusive to Operations. Other DOT functional units would also benefit from collaborative problem solving and information sharing. It is anticipated that these opportunities will increase as TCUMPs are implemented.

3.4.6 **Cross-Agency Training**

Training is a vital element for design, construction and maintenance personnel, and is particularly relevant to work in the Adirondack Park, where there are unique conditions, regulations and opportunities. As travel corridor plans develop, training opportunities will be identified (e.g. for agency, municipality, stakeholders' staff). Training is vital to continuing to raise the level of awareness and expertise for agency staff on Park transportation issues.

Agency partners such as DEC and the APA will assist DOT in developing, delivering and participating in training sessions (see Attachment D for sample training session description).

General training for all agency staff will be supplemented by focused training on specific issues and practices to meet each agency's staff and program needs. Training methods will vary depending on need and subject matter (e.g. classroom, field training, "tailgate meeting", etc.).

General Training Objectives

- To further understandings consistent with TCUMP awareness and interrelationships
- Support transportation needs and a sustainable system
- balance environmental considerations and relationships that support the ecological integrity and Park Like Character

All training, with the exception of the tailgate sessions, will be schedule through the Statewide Learning Management System (SLMS). SLMS is the enterprise–wide, web–based platform used by New York State agencies to manage and deliver training. SLMS also provides a centralized employee training record.

Table 3.1 DOT Training Courses Completed and/or under Development

Title	Description	Method	Duration	Participants
DOT Invasive Best Management Practices	General guidance to staff on issues of concern related to this topic with a BMP Manual Developed supporting training	Classroom and Field Training	Half-day	DOT staff
Beaver Management Techniques to reduce conflicts with highway's	Field training delivered by DOT,DEC, and APA staff at various location in Park. Typically includes a chronic problem location with the install of a control treatment	Field Training	Half-day	
Wetland Recognition	Help wide variety of staff understand what are wetlands and activities that can have negative impacts, and measures to protect these resources	Field Training	Half-Day	DOT,DEC and APA
Mowing Practices	Working with staff to minimize impacts on various topics including: timing of mowing, reducing erosion from mowers, no mow areas, etc.	Tailgate Session	1 hour	DOT Operations Staff
Drainage Maintenance	Working with staff to raise awareness: erosion sediment control, timing, etc.	Tailgate Session	1 hour	DOT Operations Staff

3.4.7 DOT Adirondack Park and Forest Preserve Manager

The primary contact person for DOT is the Adirondack and Catskill Park Forest Preserve Manager. Key duties for the Park include the following:

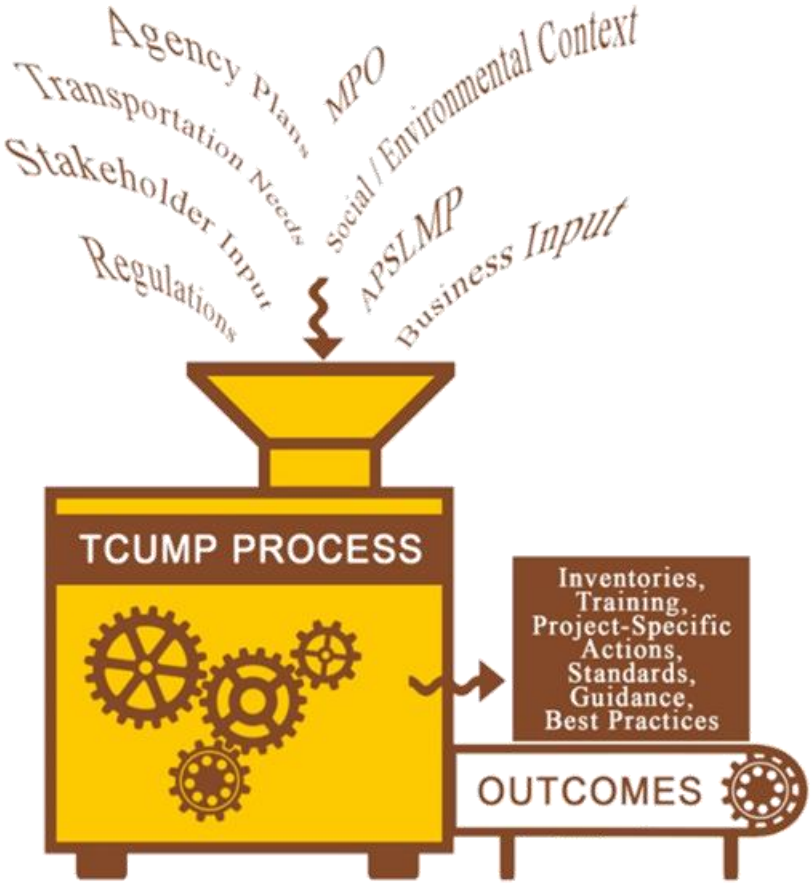
- Provide leadership and direction for environmental aspects of all DOT activities within the Park
- Act as a liaison with regulatory agencies overseeing forest preserve lands and the Adirondack Park
- Develop and manage work plans for specific travel corridors
- Provides updates to executive management regarding Park issues and concerns
- Develop environmental QA/QC program for highway maintenance activities within the Park
- Develop an environmental training program for maintenance activities within the Park

- Act as a liaison and facilitate intra and inter-agency partnership and communication programs such as: AST, ICM, ELP and FPAC

3.5 SUMMARY

The TCUMP process and supplemental documentation will help address challenges and promote positive, collaborative solutions. In addition, travel corridor management plans will reveal information gaps and action opportunities. The recommendations may result in inventories, training, project specific actions and/or the development of new standards, guidance and policy.

Figure 3.6 TCUMP Process



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SECTION 4 - TRANSPORTATION COMPONENTS OF TRAVEL CORRIDORS

4.1 INTRODUCTION

There are many components to a transportation system. This section discusses those relevant to the TCUMP process: transportation programs, infrastructure and elements. For each component, an overview is given and park-wide management objectives with Corridor Management Actions are presented. The intent is to limit redundancy and address global applications. This allows individual TCUMPs to implement global objectives and strategies in specific corridors as well as to address unique aspects of those corridors.

In contrast to Unit Management Plans for predominantly natural areas, UMPs for highway travel corridors largely address management of working landscapes with substantial built components. They require more intense management practices to support a safe, modern, well-functioning transportation system. The linear nature of travel corridors creates unique challenges including:

- Widely varied landscapes (both natural and socio-economic)
- Direct and indirect relationships to surrounding land uses
- A patchwork of public and private lands
- Several federal, state and local agencies with jurisdiction and mandates
- The complexity of inventory/assessment of the natural and physical resources, which may be different than non-transportation UMPs
- Relationship/interaction with the eight previously described classifications (see Section 1.4.4.3 in this document)
- Program-level considerations that influence the travel corridors (e.g.: CARDS – Centerline Audible Roadway Detection Systems)

In this document, "components" are analogous to "resources" in "traditional" Unit Management Plans. "Components" include transportation programs and design elements which affect the overall corridor management planning process. Programs are important, as they set policy, standards and guidance for application park-wide.

4.2 OWNERSHIP AND CONTROL OF THE TRAVEL CORRIDOR

A. Background and Existing Conditions

The process for maintaining, rehabilitating, widening or relocating roads within Forest Preserve lands is complex. Roads and surrounding rights-of-way (ROW) within the Park are owned/controlled by a variety of entities, are subject to laws and regulations that may be conflicting and governed by state constitutional restrictions and interpretations. The constitutional restrictions prevent Forest Preserve lands from being leased, sold or exchanged, and being taken by any public or private corporation. Within this legal context, TCUMPs must address evolving transportation, community, technology and other needs. In some circumstances, resolution may

warrant a state constitutional amendment that allows for limited use of Forest Preserve lands for transportation and utility purposes. (See Section 5.33, Utilities).

Highway ROW is generally defined as: "land, property or interest therein, usually in a strip, acquired for or devoted to a highway". The ROW includes infrastructure, the area required to maintain that infrastructure, as well as a safe clear area adjacent to travel lanes.

In the Park, as in many areas with early road systems, there are nuanced differences in how roads were established. These include details of ownership, continuity of width and what DOT may allow within the ROW.

When travel corridors are adjacent to Forest Preserve lands, there are significant legal interpretations, based on case law. Examples include:

- New utility lines are not authorized in the road corridors that are defined as "Highway by Use"
- Moving or modifying utilities in road corridors that are defined as "Highway by Use" requires a constitutional amendment
- DOT is not permitted to expand the highway ROW without using the land banks
- Those portions of the ROW along "Highways by Use" that were once maintained for road purposes but have not been so maintained for many years are no longer part of the ROW width (this has the effect of narrowing the area necessary to maintain the highway infrastructure

Figure 4.1 An example of ROW narrowed as a result of Highway by Use.

DOT closely coordinates with DEC and APA regarding any work adjacent to Forest Preserve lands. Coordination may include field visits, Temporary Revocable Permits (TRPs), training and development of guidance.

DOT will develop baseline information regarding ROW ownership and jurisdiction of each travel corridor. The level of detail should be sufficient to refine management objectives and Corridor Management Actions for individual TCUMPs.

B. Guidance

DOT Office of ROW Instruction Manual and ROW Mapping Procedure Manual; Green Book.

C. Corridor Management Objectives

- Address gaps in knowledge regarding ROW, including type of possession – easement, fee, highways-by-use

D. Corridor Management Actions

- Provide technical support as requested regarding ongoing efforts for a State Constitutional Amendment on Transportation in the Park that also includes local roads and utilities
- Develop a web-based library of documents relevant to travel corridor ROWs

E. Alternatives Discussion

The null alternative continues current ROW guidance (including but not limited to those items listed in B, above) and practices on an as-needed basis, including the DOT Office of ROW Instruction Manual, but does not clarify knowledge gaps regarding ownership and control of ROW. The lack of this knowledge creates uncertainty and potential delays for projects and activities.

The preferred alternative facilitates needed clarity and a more systematic approach to ROW issues for all land owners including a better understanding of the Forest Preserve limits relative to the ROW.

4.3 TRANSPORTATION PROGRAMS

4.3.1 Highway Safety Program

A. Background and Existing Conditions

Consistent with Section 10 of the Transportation Law, safety is a paramount concern for DOT. The goal of New York's highway safety programs is to collaborate with education, enforcement, engineering and emergency medical services organizations to save lives, prevent highway related crashes, and reduce the severity of crashes when they occur.

Managing the park-like character while responding to safety concerns is a particular challenge in the Adirondack Park. Many of the roads are rural in nature and rural road safety is a particular concern, because the majority of highway fatalities take place on rural roads.

In 2012, 19 percent of the US population lived in rural areas but rural road fatalities accounted for 54 percent of all fatalities. Even with reductions in the number of roadway fatalities, the fatality

rate in rural areas is 2.4 times higher than the fatality rate in urban areas. Rural areas face a number of unique highway safety challenges:

- Rural crashes are more likely to be at higher speeds than urban crashes
- Victims of fatal crashes in rural areas are more likely to be unbelted than their urban counterparts
- It often takes first responders longer to arrive at the scene of a rural crash, leaving victims waiting longer for medical attention

Outdated roadway design and roadside hazards such as utility poles, sharp-edged pavement drop-offs, and trees close to the roadway also are major contributors to the severity of rural crashes (source FHWA web site).

One of DOT's safety programs is the Highway Safety Improvement Program (HSIP) which consists of four elements:

1. The identification of high-accident sites
2. An engineering study of these sites and the development of cost-effective solutions
3. The implementation of these solutions
4. The evaluation of the implemented solutions

Highway safety improvement solutions range from simple non-capital work, such as traffic control and/or maintenance improvements, to capital safety projects and/or safety enhancements to other capital projects. DOT uses Highway Safety Investigation (HSI) methodology to respond to enforcement and customer inquiries to help determine if locations experiencing operational problems, but not yet identified as high accident locations, require engineering safety countermeasure treatments to address developing accident patterns. The information obtained from HSI investigations may also be used to assist enforcement organizations in targeting unsafe user behaviors.

DOT Highway Design Manual (HDM) provides guidance for assessing existing facilities to determine the number of safety concerns and nonconforming features that are present in the roadside area and the amount of upgrading that would be appropriate when work is performed on that existing facility. Roadside safety concerns are defined as features that may (1) increase the severity of a run-off-the-road (ROR) accident, or (2) change a ROR incident into a ROR accident, but are either located beyond the clear zone width or are within acceptable practice. With respect to roadside design, nonconforming features are features that do not conform to current practice and are typically within the clear zone width.

They may range from mildly deficient to severely deficient. The cost of upgrading some roadside safety concerns might not be justified if the resulting benefit to public safety is very small. A key factor in judging which features should be upgraded is the relevant accident history of the facility when compared with other similar facilities. Within the park the most noticeable example is transportation infrastructure such as guiderail placement, and signage. Examples of programs related to safety include: vegetation removal for clear zones and the recent change to closed

parapets on bridges along the Interstate 87, the Adirondack Northway, which is based on revised federal standards.

Roadside safety concerns may lead to new guidance (calling for guiderail or rumble strips), individual projects (curve or intersection improvement) or implementation of targeted maintenance activities throughout the Park.

The management objectives and Corridor Management Actions below reflect DOT's safety focus and use the full range of tools provided by the safety programs, while balancing the mandate to retain park-like character.

B. Guidance

DOT Traffic Safety & Mobility Instructions (TSMI); DOT Office of Operations Management Instructions (OOMI); DOT Traffic Engineering Directives (TED) and the Manual of Uniform Traffic Control Devices (MUTCD); Green Book, DOT Engineering Instructions.

C. Corridor Management Objectives

- Ensure that all new and proposed revisions to safety policy, standards and operational guidance are contextually appropriate to the Adirondack Park.

D. Corridor Management Actions

- Undertake an outreach effort to the applicable agencies and stakeholders prior to implementing proposed changes to an aspect of one or more of the transportation safety programs with the potential to impact the park-like character
- When the Department writes and/or revises policy, standards and operational guidance for safety, consideration will be given to the need for supplemental guidance specific to the Adirondack Park. If it is determined that an Adirondack-specific section or stand-alone policy, standard or operational guidance is warranted, the Department will also provide the opportunity for interagency involvement.

E. Alternatives Discussion

The null alternative would continue existing safety program guidance (including but not limited to those items listed in B, above) and provide a safe corridor for all users. This guidance, however, is open to professional judgment and, under the null alternative, might not be tailored to the unique context and needs of the Adirondack Park.

The preferred alternative supports Adirondack-specific new guidance and updates to existing guidance informed by enhanced outreach to applicable agencies and stakeholders.

Both alternatives are protective of safety and the environment, however the preferred alternative is more protective of park-like character.

4.3.1.1 Posted Speed Limits

A. Background and Existing Conditions

The posted speed limit is the maximum speed at which drivers can lawfully operate their motor vehicles according to the Vehicle & Traffic Law (V&T). Speed limit signs inform motorists of any speed restrictions that have been established by law or regulation.

Figure 4.2 Route 3

Requests made to lower establish posted speed limits may be based on significant pedestrian or bicycle activity and occasionally for other considerations. Simply setting the speed limit lower does not guarantee compliance. Studies have shown that the compliance level is best achieved when the speed limit is set at approximately the 85 percentile speed. Constant and vigilant enforcement would be required to achieve compliance at a speed limit deemed too low by motorists. A lower operating speed may be encouraged by alternative means, (e.g. warning signs, traffic calming measures, flashing beacons, etc.), and there are provisions in the law to enact seasonal or part time speed regulations. The level of enforcement requirements and whether they can be supported by the local or state entities is part of the information looked at when responding to requests for lower posted speed limits on a seasonal or part-time basis.

The individual TCUMPs will inventory and map speed limits along each corridor as part of the background information.

B. Guidance

DOT TED 03-002 Traffic Control Program: Speed Limits

C. Corridor Management Objectives – none identified

D. Corridor Management Actions - none identified

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to those items listed in B, above) for posted speed limits.

4.3.1.2 Roadside and Clearing Widths

A. Background and Existing Conditions

Clear zone widths vary as a function of speed, traffic volume, roadside geometry, location (rural versus urban) and practicality. The clear zone represents a hazard-free area maintained for use by errant vehicles to allow their safe recovery. The clear zone starts from the travelled way, extends across the shoulder and includes as much recovery area as possible (and practical). Standardized distances in DOT and federal guidance documents are provided as a range of values that engineers use as guidelines. The DOT HDM notes that the clear zone width ultimately selected represents a compromise, based on engineering judgment, between what can practically be built and the degree of protection afforded motorists. Clear zone distances vary in corridors from location to location based on context and judgment. Practical considerations include environmental effects, cost considerations, social considerations and other factors.

According to the DOT's HDM Chapter 10, the clear zone may, if warranted by special conditions, include occasional unshielded fixed objects, provided a reasonable rationale is documented. Clear zone widths are documented in DOT's record plans.

Figure 4.3 Clear zones vary. Refer to DOT HDM Chapter 10 for additional information.

Clear zones are supported by DOT's operations, including mowing practices, vegetation management and winter roadside maintenance. Transportation Maintenance Instructions for Mowing Guidelines (TMI-14-01) establish DOT's current policy for roadside mowing. This policy is based on highway safety principles, such as the maintenance of sight distances, use of clear zones and visibility of roadside features such as signs and guide rails. Maintaining roadside clear zones is part of DOT's *targeted mowing areas*. Targeted mowing areas may also include added clear zone widths in areas that provide significant and distinct safety benefits. Additional information on DOT's Integrated Vegetation Management (IVM) program can be found in §4.3.6 Vegetation Management.

B. Guidance

DOT HDM Chapter 10; AASHTO Policy on Geometric Design of Highways and Streets; Green Book

C. Corridor Management Objectives - none identified

D. Corridor Mangement Actions – none identified

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to those items listed in B, above) for roadside and clearing widths.

4.3.1.3 Falling Rocks and Slope Problem Areas

A. Background and Existing Conditions

Figure 4.4 Example of slope failure from DOT HDM Chapter 9

Most travel corridors have locations subject to falling rocks and/or slope problems. Though these locations are infrequent (a small percentage of the overall corridor length), they often occur in highly scenic, environmentally sensitive areas. In the Park, with its mountainous terrain, extensive rock faces and thin soils, falling rocks and slope problems are a subject of particular concern. Many road alignments reflect the earliest road construction. The roads follow paths of "least resistance" through narrow notches, along waterways in steep valleys and along mountain slopes.

Failing slopes threaten the integrity of highway infrastructure and the safety of all users. They exacerbate environmental issues such as flooding, erosion and sedimentation. Analysis of potential problems requires a thorough understanding of the local and regional soils, geomorphology, hydrology and microclimates. Interventions, especially for falling rock slope areas, require significant engineering judgment and risk management.

There is a need to balance the treatments for potential rock fall and slope problems with considerations such as: the limits of engineered solutions, costs, environmental permitting, recreational access, and the visual qualities of natural exposed rock face critical to maintaining park-like character. DOT has been active in avoiding rock removal techniques that are visually incongruous (e.g. blasting holes showing). That balance between safety and visual quality is crucial even in areas requiring non-rock slope stabilization. Choosing among interventions (during design) to suit a particular slope should be an iterative process, starting with the option of least visual impact that responds to the safety need(s).

Slope stabilization measures can range from the establishment of a seed mixture on a bare slope to highly visible catchment fences at the toe of rock outcrops. It is when the "ideal" risk-minimizing engineering solution is at odds with the minimization of visual impacts or preservation of a "natural" appearance that creativity and sensitivity is required.

Figure 4.5 Stone slope treatments. Stone slope treatments are a standard practice for slope stabilization, but may not suit the visual context of the Adirondack Park.

The frequency of the need for this creativity is due to the broad range of users in the Park and their sensitivity to preservation of visual character. Outside of the Park, typical slope treatments might be visible only from a distance and at high speed and of little concern to the user traveling through. However, the Adirondacks are experienced more directly, from a wider range of vantage points and by a wider range of users who are present specifically for the aesthetic and "forever wild" experience (e.g. motorists who are primarily tourists, fall color enthusiasts, cyclists, pedestrians, hikers, climbers, campers, boaters, fishermen and townspeople).

Aesthetics for rock cuts involve not only the inherent limitations and qualities of the technique chosen, but the finesse of the execution. For instance, scaling of individual unstable pieces from a rock face can be coarse with visible drill lines, thus appearing quarry-like, or it can be done judiciously with great sensitivity to natural fracture planes, thus appearing to be natural. If bolting is used, attention should be paid to the frequency and placement of plates as well as their shape, color, etc. If any other materials are introduced, they should be applied judiciously, with attention to integral color and surface detailing which blends with the natural stone.

Aesthetics for manmade slopes are most critical when their steepness opens the door to the entire vocabulary of engineered stabilization measures from erosion control blankets to gabion walls, GRES walls, bioengineered solutions and retaining walls such as MSE walls, poured concrete (textured or faced with other materials) and modular treatments, the subject of section 4.4.6. Unstable slopes can result from either cut or fill operations (see Figure 4-2.)

Designing and managing for critical slopes dovetails with drainage design and erosion and sediment control. Effective management of the water might do more for long term stability than surface treatment of slopes alone. The chief agent of slope failure is water movement, both surface and subsurface, and water pressure in rock fissures. It is important to "read" the on-site evidence carefully when analyzing a situation. Evidence of erosion at the juncture of a pavement edge with the top of a steep slope, for instance, might be best managed with a small curb to direct water to a

less vulnerable area rather than to broadcast rip-rap over the entire slope, which would also make subsequent maintenance more difficult.

B. Guidance

Green Book; DOT HDM Chapters 8 (Drainage) and 9 (Soils, Walls and Foundations); DOT Geotechnical Engineering Manual; DOT Geotechnical Control Procedures

C. Corridor Management Objectives

- Ensure user safety through slope treatments which are visually compatible with Park scenic quality

D. Corridor Management Actions

- Develop a "decision tree" of preferred slope treatments, in priority order, with accompanying aesthetic guidelines for each
- Develop a web-based library of slope treatments, with aesthetically positive and negative examples, as well as copies of/links to rock slope location studies, outcrop maps, terrain reconnaissance reports, etc. performed by Regional or MO geotechnical engineers
- Update relevant DOT guidance to incorporate Park environmental considerations

E. Alternatives Discussion

Under the null alternative, falling rocks and slope problem areas would continue to be addressed based on existing guidance (including but not limited to those items listed in B, above) and databases. This provides for a safe corridor, but opportunities to respond to site-specific aesthetic and visual context considerations might be missed.

The preferred alternative would ensure that solutions are highly responsive to the Park context. It would raise awareness of the full range of available tools and increase the level of sensitivity with which rock and slope treatments are implemented.

4.3.1.4 Audible Roadway Delineators

A. Background and Existing Conditions

Audible roadway delineators (ARDs), also known as "rumble strips", are patterned indentations in the road surface at the edge of a travel way intended to improve highway safety. Audible delineators can be constructed in a variety of ways, but DOT's preferred method is referred to as MIARDs – Milled-In Audible Roadway Delineators. A special subcategory increasingly used by DOT is CARDs – Centerline Audible Roadway Delineators, placed on the centerline of undivided roadways and therefore requiring careful coordination with centerline striping.

Per DOT Engineering Instruction 13-021, "Rumble strips save lives and prevent serious injuries

by alerting drivers with an audible warning (rumbling sound) that they are leaving their driving lane. Centerline rumble strips also cause a physical vibration to vehicles when they begin to stray into oncoming traffic lanes. They help combat distracted driving and can alert drivers to lane limits when weather conditions reduce driver visibility or roads are covered with snow." FHWA found CARDs to be a particularly proven, cost-effective safety measure that helps prevent head-on, sideswipe and opposite direction run-off-the-road collisions. Per HDM Ch. 3, shoulder ARDs should be placed where there is a proven history of drift-off-the-road accidents.

DOT requires CARDs in all construction contracts for paving work on highway segments which meet established criteria, including:

- Posted speed is ≥45 mph
- Annual Average Daily Traffic (AADT) ≥2,000 vehicles per day
- Combined width of the lane(s) and shoulder, in each direction ≥13 feet
- At least 1,500 feet of CARDS is needed (not cost-effective for less)

Additional considerations regarding the use of ARDs include ambient noise and need for coordination with bicycle use. Both are particularly relevant in the Park, where cycling is integral to recreation and transportation, and noise control is important to preserving the experience of nature by users.

Noise: ARDs are placed where they will fulfill their warning function without intruding into the general travel roadway surface. DOT standards try to strike a balance between safety and ambient noise by limiting the depth of indentations to 0.375" and reducing the width and spacing of indentations in rural areas.

Bicycling: Per FHWA guidance, "Rumble strips are primarily a safety device for passenger vehicles. For other road users, particularly bicyclists, they may cause concern. Part of the success in accommodating the variety of road users present on our roadways is the use of flexibility in the design and placement of rumble strips."

Since the centerline locations of CARDs essentially precludes bicyclists riding along them, the main concern is for those ARDs installed at the edge of the travel way along shoulders, known officially as SHARDS (Secondary Highway Audible Roadway Delineators) or, more informally, "shoulder rumble strips". DOT promotes the use of SHARDs for their safety benefits, but its guidance includes considerable flexibility for cyclists: "To provide for adequate bicycle maneuvering beyond the rumble strip, rumble strips should not be installed [with limited exceptions] on shoulders under 6' (1.8 m) in width since they do not provide width for the offset to the rumble strip, the 12" (300 mm) rumble strip width, and a remaining 4' (1.2 m) paved shoulder for cyclists."

To permit bicyclists to cross between the shoulder and the travel lane without having to ride on the SHARD depressions, systematic gaps (12' long every 60') are to be included along continuous stretches of SHARDS, in addition to required gaps at commercial driveways, highway intersections, turning or merging lanes and crosswalks.

Current and potential locations of ARDs in the Park will be identified in individual travel corridor unit management plans.

B. Guidance

Engineering Instructions 13-021 and 16-014; HDM Chapter 3; Standard Sheets 649-01 and 649-02; Standard Specification Section 649; NCHRP Report 641 "*Guidance for the Design and Application of Shoulder and Centerline Rumble Strips*," (2009); *Rumble Strips and Rumble Stripes*, FHWA guidance.

C. Corridor Management Objectives

- Ensure balanced consideration of all user needs including potential noise impacts when planning on installation of ARDs

D. Corridor Management Actions

- Undertake an outreach effort to agencies and stakeholders, in particular local bicycle groups and bicycle events planners, prior to implementing any ARDs
- Update relevant DOT guidance to incorporate Park considerations

E. Alternatives Discussion

Under both alternatives, ARDs would be installed according to existing guidance (including but not limited to those items listed in B, above) based on engineering features, safety and environmental considerations.

The preferred Alternative would consider the need for Park-specific guidance and recommends additional outreach to stakeholders.

4.3.1.5 Traffic Calming

A. Background and Current State

Traffic Calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users.[9] Traffic calming techniques are used to stem the rise of speeds and related accidents, and to improve the environment in residential settings.

When a community's main street is also a state highway, as it is in several localities within the Adirondacks (see Attachment G), communities are faced with significant challenges. The biggest challenge is to strike a balance between the needs of pedestrians, shoppers, employees, business owners, and residents with the needs of through traffic - both auto and freight - to move safely and efficiently over longer distances. Traffic calming may be one tool when applying a complete street approach to these challenges.

Traffic calming measures can be divided into two categories.

1. Those that use physical restrictions to the travel way, such as lowering the speed limit, speed humps and tables, lane constrictions (including neck-downs to a single lane), chicanes, tight curves, turning radius reductions, and sight distance limitations. The restrictions should continue to provide a comfortable environment for the driver.

2. Those that, without actual, physical restrictions to the travel way, convey the message that priority is given to creating a pedestrian and resident-friendly setting. Measures include plantings; a variety of aesthetic treatments (e.g. special paving and/or markings; decorative benches, light poles, and/or kiosks); pedestrian/bicycle accommodations (e.g. sidewalks, pedestrian bulb-outs, mid-block crosswalks, and bicycle lane markings); and distinctive community entrances as demarcation for the traffic-calmed area (e.g. gateways).

Traffic calming techniques, when appropriately installed, can support law enforcement activities by clarifying desired behaviors. However, these measures are not a substitute for normal law enforcement.

Community involvement may be the most important element in a successful traffic calming project. Close community involvement enables planners/designers to see the problem from the local perspective. It also helps the community understand the impacts of traffic calming measures and the constraints within which the project must be developed. Without community involvement, the solution to a problem may not satisfy the needs of the community or the project, and result in failure.

[9] Lockwood, Ian. *ITE Traffic Calming Definition*. ITE Journal, July 1997, pg. 22.

Generally, DOT is responsible for medium- to high-speed roadways (≥40 mph), while cities and villages are responsible for lower-speed (<40 mph) roadways and streets. Traffic-calming techniques are most appropriately applied to lower speed roadways and streets.

B. Guidance

HDM Chapters 17, 18 & 25

C. Corridor Management Objectives

- Traffic Calming techniques, when implemented, will be responsive to the unique needs and context of the Adirondack Park

D. Corridor Management Actions

- TCUMPs will inventory locations where a need/desire for traffic calming measures has been identified
- Develop a web-based library of traffic calming treatments which support branding for the Adirondack Park
- Consider updating relevant DOT guidance to incorporate Park aesthetic considerations

E. Alternatives Analysis

The null alternative would be reactive, using the existing library of traffic-calming treatments. Branding opportunities might be missed.

The preferred alternative would be pro-active, creating a library of traffic-calming techniques and updating relevant guidance to be more responsive to the Park context and desire to brand hamlets and villages.

4.3.1.6 Lighting

A. Background and Current State

Highways are designed to be safe without fixed highway lighting. When warranted, roadway lighting improves nighttime highway safety. Effective lighting refers to the ability of the light to provide contrast between objects and background so that motorists can detect conflicts in sufficient time to take evasive action.[10] Quantity of light does not necessarily indicate a good lighting system; quality of light does. Ensuring that the lighting provides minimum acceptable levels of illumination is of great importance to all users of a roadway environment.[11] Site conditions may dictate if roadway lighting can be installed, or may place certain constraints on the design.

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[10] New Hampshire Roadway Lighting Design Manual
[11] FHWA Lighting Handbook

Warrants for highway lighting are found in DOT's Policy on Highway Lighting. Warrants for freeway lighting are contained in AASHTO's Roadway Lighting Design Guide. Meeting these warrants does not obligate the State or other agencies to provide lighting or participate in its cost.

The APA project guidelines for lighting indicate that dark sky is a valuable natural resource. Maintaining this resource does not mean prohibiting nighttime light; instead, it involves using only light that is necessary and in the most efficient manner possible. Light pollution can occur in different forms, including trespass, over-illumination, glare, and sky glow.[12]

Light trespass (obtrusive lighting) is defined by three major interrelated elements:

- Spill light: Light that falls outside the area intended to be lit. It is typically measured in lux in a vertical plane with the light meter oriented towards the light source
- Glare: Light that is viewed at the light source (luminaire), which reduces one's visibility
- Sky glow: Brightening of the sky caused by outdoor lighting and natural atmospheric and celestial factors

Nighttime lighting can impact animals and birds both on and off the roadway. A good deal of activity takes place at night. Lighting in environmentally sensitive areas with animal and bird activity should be designed to provide a minimum duration, direct the light only where needed, and reduce intensity as much as possible.

Exterior lighting is also a part of the operating and security strategy for DOT residencies and sub-residencies. Effective security lighting allows building occupants to see the faces of visitors at the door, allows police officers to see the building and yard area, and provides illumination to deter potential criminals. Operational lighting may be used during winter operations or when emergency deployment occurs after dark.

Best management practices for lighting include:

- Avoiding or minimizing offsite glare, light trespass and sky glow
- Incorporating local lighting ordinances
- Considering motion sensors, timers or programmable systems
- Illuminating to the proper level of light with good uniformity, according to the relevant visual tasks and activity levels
    - Considering a shielded fixture (one directed down towards the ground)
    - Lighting only the area that needs it
    - Be no brighter than necessary
    - Minimizing blue light emissions

B. Guidance

[12] Development in the Adirondack Park

DOT HDM Chapter 12; FHWA Lighting Handbook; AASHTO GL-6 *Roadway Lighting Design Guide* (www.transportation.org); ANSI/IES RP-8 Standard Practice for Roadway Lighting (www.ies.org); APA's *Development in the Adirondack Park*; International Dark-Sky Association web pages

C. Corridor Management Objectives

- Ensure that lighting in the Park is cost effective and considers impacts to the natural environment

D. Corridor Management Actions

- When fixtures are introduced or replaced employ the lighting recommendations from *Development in the Adirondack Park* and best management practices indicated above.

E. Alternatives Discussion

There is no SEQR action for lighting under the Master TCUMP. Alternatives for lighting will be evaluated both in individual TCUMPs and on a project-specific basis.

4.3.2 **Administration of Capital Construction Program**

A. Background and Current State

Figure 4.6 Culvert Replacement Project

All structures need periodic maintenance and repair. Just as homes need to be repainted and repaired, DOT has to repave and repair its roads and bridges. Choosing which projects to progress and fund is a complex process that starts with a "transportation need". Transportation needs might include: responding to a high-accident location, connections needed for a new residential or commercial development, a road or bridge in need of rehabilitation, or improvements to promote better air quality.

Regional asset inventories keep track of the condition of State facilities (including highway pavement, bridges, sidewalks, and curb ramps) and can be used to identify some transportation needs. In addition to regional asset inventories, local and regional planning studies are a key means of identifying transportation needs as well as potential solutions. Which projects get funded at what time also depends on variables such as the amount and source of money available to the State or a municipality, or what other work is scheduled for the same area. The

final Capital Program is in the form of an agreement between the DOT, the Governor's Office, the Legislature, and the Federal Government.

Federal and state regulations require DOT to addresses transportation needs in both a Comprehensive Statewide Transportation Master Plan and in a State Transportation Improvement Program (STIP). The Comprehensive Statewide Transportation Master Plan serves as the federally recognized, long range transportation plan for the State of New York pursuant to federal law and in accordance with State Transportation Law. Federal regulations require each State to prepare and periodically update a statewide, intermodal transportation plan that addresses specified factors, is developed involving extensive public outreach and is valid for at least 20 years as a condition of receiving federal transportation funds. The current long-range comprehensive statewide transportation master plan covers the period through 2030. The STIP is a specific list of all projects, or project phases, in New York State proposed for federal funding.

Figure 4.7 Improvements to accommodate bicyclists. An example of a project specific need arrived at through local and regional input.

Individual projects are identified, prioritized and developed by DOT's Operations, Planning, and Engineering divisions. These projects are then either put out to bid and awarded to contractors or accomplished by in-house operation's staff. DOT continues to provide oversight during the construction phase through its Construction division. The complexity of project development typically requires substantial teamwork and input from a wide range of stakeholders. This poses a challenge in coordination and communication but also offers an opportunity to incorporate a wide range of professional expertise and perspectives.

Project schedules are highly variable and subject to change depending on the availability of resources.

Within the project development process, NEPA, SEQRA and Section 814 provide additional oversight and the opportunity for the TCUMP to provide additional environmental context.

Whether it is scenic enhancement, branding need or infrastructure improvement, the Capital Program provides an opportunity to address project-specific actions identified in the TCUMPs.

B. Guidance

Green Book; DOT HDM; DOT Project Development Manual (PDM)

C. Corridor Management Objectives

- Projects resulting from the Capital Program Update process will reflect full consideration of specific Adirondack corridor needs

D. Corridor Management Actions

- Engage Metropolitan Planning Organizations (MPOs) early as needs are identified
- Improve interagency coordination and the ability for stakeholders to provide input into our Capital Program

E. Alternatives Discussion

There is no SEQR action under the Master TCUMP for administration of the Capital Construction Program. Alternatives will be identified and evaluated on a project-specific basis.

4.3.3 **Operations (Maintenance) Program**

Operational activities include (but are not limited to) mowing, pavement repair, tree cutting, snow and ice removal, sign maintenance, pavement marking, bridge maintenance, rest area and comfort station maintenance and ditch and drainage maintenance. Operation's staff are at the front line of implementing many of the recommendations in TCUMPs. DOT's Maintenance Environmental Coordinators (MECs) are integral to this process and work with Operation's staff to support the TCUMPs. The flow chart in Attachment F illustrates this relationship.

Figure 4.8 Vehicle cleaning station.

Routine DOT operations typically have minimal impacts. However, through the combined effect of individual, discrete activities (mowing and ditching) or the repeated effect of a single activity, there is the potential for cumulative environmental impacts. In addition, the timing of operation activities in relation to factors such as weather, wildlife migrations, seed production (see invasive plants), etc. has the potential for impact. For example, one isolated ditch cleaning may not cause the spread or introduction of invasive plant species, but repeated and cumulative ditch cleanings can initiate invasive plant species infestations and/or exacerbate their tendency to

spread. The net result is added costs for invasive plant species control, management and/or removal.

DOT operations are sometimes done as projects and are progressed as Categorical Exclusions (CEs). Refer to Section 4.3.2 for additional information on the administration of capital projects.

A. Background and Current State

DOT's operations/highway maintenance programs ensure that highways, roads, bridges and rest areas, etc. across the State stay in a safe and working order. Proper care and upkeep conserves the public's investment in the highway system, and ensures that the system will continue to provide maximum benefits to the traveling public. A highway maintenance worker must complete a variety of tasks on these roadways including regular maintenance, snow and ice removal, and fixing any defects in the road such as potholes caused by wear and tear and extreme weather. Operations also have a critical role during state emergencies. Refer to Section 4.3.5 for additional information.

The Division of Operations is responsible for the direct snow and ice control services on approximately 36,100 of the State's 43,490 lane miles of highway, and administering the roughly 7,390 lane miles performed under Municipal Snow and Ice Agreements.

There are approximately 1,000 miles (2,400 state lane miles) of highway in the Park boundaries. In order to more efficiently maintain our state roadways, operational activities are usually assigned to a Residency or Sub-Residency (see Section 4.3.4.1 below for an explanation of DOT Residencies). This section includes applicable, key DOT Operational relationships.

B. Guidance

DOT Transportation Maintenance Instructions (TMIs); Green Book; DOT Environmental Handbook for Transportation Operations; Adirondack Operations Work Planning

C. Corridor Management Objectives

- Reduce or minimize the environmental impacts of operational activities consistent with the Park context

D. Corridor Management Actions

- Coordinate maintenance activities across jurisdictional boundaries. Use forums like the Adirondack Operations Meeting to ensure that there is agreement on a consistent approach to managing the corridor
- Implement a program for "unique maintenance locations", defined as limited road sections with particularly unique or sensitive components-- which warrant an exception to routine operational activities
    - Identify those components (e.g.: no-mow areas; spoil areas) which need to be managed uniquely

- Consider timing operational activities relative to factors such as weather, wildlife migrations, seed production (see invasive plants), and pollination
- Maintain access to state lands and participate in improvement where appropriate
- Coordinate maintenance activities with adjacent land uses

E. Alternatives Discussion

The null alternative provides maintenance which meets statewide goals and standards based on current guidance documents (including but not limited to those items listed in B, above).

The preferred alternative formalizes environmental initiatives and ethics, implements a program that provides for additional environmental protection (e.g. during mowing operations) and coordinates with other agencies, entities and adjacent land owners. It also provides the opportunity to incorporate the Adirondack context into the Operations (maintenance) Program.

Figure 4.9 Ditching. Ditching is essential to manage highway runoff. But it requires a balanced approach to manage possible negative side-effects such as; impacts to water quality, movement of invasive species and the disposal of surplus material.

4.3.3.1 Residencies, Sub-Residencies and Re-Load Sites

A. Background and Existing Conditions

DOT has 60 Transportation Maintenance Offices (also known as Residencies) statewide. The Adirondack Park includes 12 counties, each with a Residency having jurisdiction in the Park. (See Figure 4-11). Residencies are headed by a Resident Engineer and are responsible for the day-to-day maintenance and operation of the state roadways within their jurisdiction. Work includes doing minor road or bridge repairs, removing snow, repairing and replacing signs, repairing guide

rail; and mowing grass. There are approximately 24 Sub-Residencies and Re-load sites in the Park. Sub-Residencies are smaller than Residencies and are local outposts, so that equipment and staff are closer to work areas and snow plow routes. Re-load sites often serve as staging areas for materials and or equipment (e.g. spare guiderail sections).

These facilities are sited on lands classified in the APSLMP as "State Administrative" and which are addressed by the following guidelines:

> *"All State Administrative facilities should be located, designed and managed so as to blend with the Adirondack environment and to have the minimum adverse impact possible on surrounding state lands and nearby private holdings. Whenever possible, such facilities should be adjacent to or serviceable from existing public road systems within the Park."*

See the APSLMP for additional requirements.

There are further environmental considerations related to the operation of DOT facilities. It is an important aspect of the corridor planning process to identify, evaluate and address environmental considerations such as:

- Water quality and run-off
- Visual and aesthetic aspects and opportunities
- Invasive species
- Storage of fuels
- Storage of salt and winter maintenance products

Figure 4.10 Reload Site restoration. A former "reload site" near Long Lake repurposed to create a vehicle "pull-off" area with scenic views.

B. Guidance

DOT Environmental Handbook for Transportation Operations; DOT Transportation Maintenance Instructions; Adirondack State Land Use Master Plan

C. Corridor Management Objectives

- Improve the environmental quality of all DOT maintenance facilities in the Park

D. Corridor Management Actions

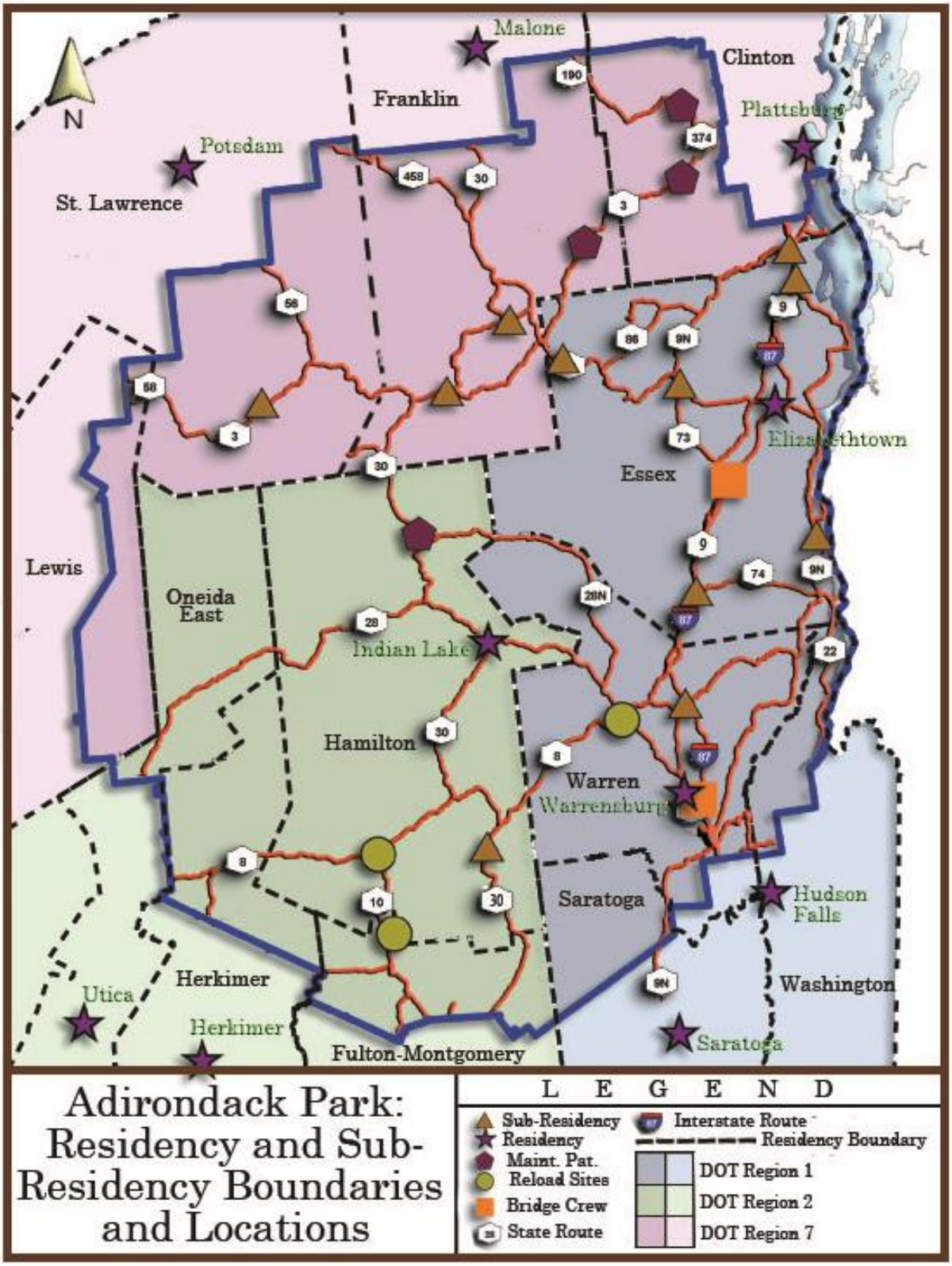
- Develop BMPs for DOT maintenance facilities such as:
  - Invasive species management plan
  - Visual screening of facilities
- Develop a web-based library of facility treatments that promote park-like character
- Periodically evaluate current, relevant DOT guidance and update as appropriate to incorporate Park environmental considerations

E. Alternatives Discussion

The null alternative continues to follow current policies and guidance (including but not limited to those items listed in B, above) for residencies, sub-residencies and reload sites.

The preferred alternative provides the opportunity to incorporate an Adirondack context into the relevant DOT guidance and develop BMPs and treatments for site development and maintenance of residencies, sub-residencies and reload sites.

Figure 4.11 - Adirondack Park: Residency and Sub-Residency Boundaries and Locations



4.3.3.2 Winter Maintenance – Snow and Ice Control

A. Background and Existing Conditions

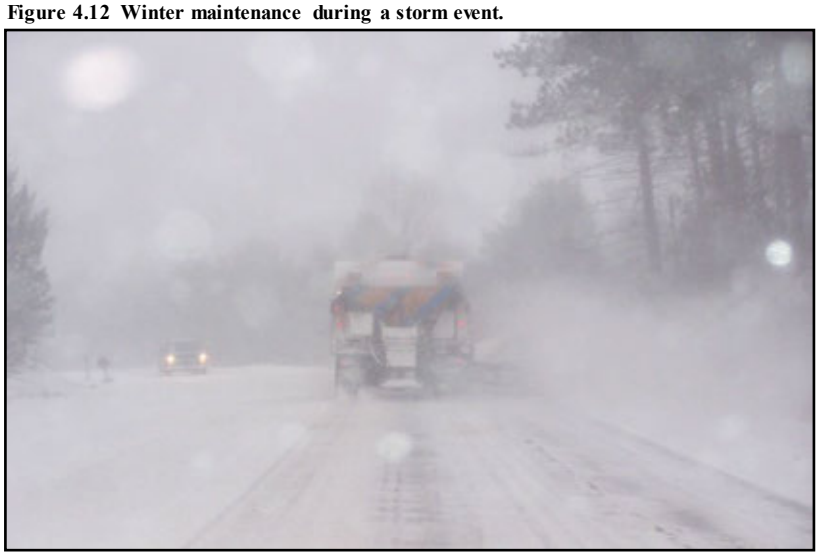
Winter weather in the Park is difficult to predict. There are many variables affecting winter maintenance operations such as type of precipitation, air and pavement temperature, traffic and wind. Per DOT's Snow and Ice Manual:

> *"The Department's goal is to provide highways that are passable and reasonably safe for vehicular traffic as much of the time as possible within the limitations imposed by weather conditions and the availability of equipment, material and personnel. It is recognized that due to resource limitations and weather conditions, pavement surfaces will be snow covered and/or slippery some of the time. The traveling public must exercise caution and drive appropriately in those situations."*

Per NYS Highway Law, §12: *"The State shall control snow and ice…as necessary to provide reasonable passage and movement of vehicles"*. "Reasonable passage" does not mean that the pavement surface will always be in a "bare" or "wet" condition. During storm events, weather characteristics and logistical challenges preclude this possibility.

Winter snow and ice control is achieved by utilizing a variety of tools and methods to prevent bonding of snow and/or ice to the pavement. Such methods include pre-storm application of anti-icing agents, appropriate and controlled application of deicing chemicals (rock salt, treated rock salt, etc.) during winter weather events, and timely plowing to remove any accumulated snow, ice or slush. Abrasives in limited quantities may be used to provide temporary traction during very cold conditions. Any hard pack development is addressed with heavier applications of salt combined with mechanical removal methods.

Figure 4.12 Winter maintenance during a storm event.



DOT acknowledges that there are environmental concerns with every available snow and ice control practice. All of the various treatments have some form of tradeoff when considering effectiveness versus environmental impact. Striving for a balance between safety, reliability, environmental impacts and cost is driving DOT's snow and ice operational strategies.

Over the course of time, DOT strategies have evolved with regard to snow and ice operations. For example:

- The use of abrasives (i.e. sand) has been reduced in the last few decades in part due to environmental concerns such as: air quality; infiltration of sand into adjacent streams and ecosystems; clogging wetlands and trout stream habitats with sediments; and sand build-up within drainage courses that impedes effective drainage.

- Sodium chloride is the predominant anti-icing agent used by DOT. Its water solubility eliminates the issue of sedimentation, but it may have other environmental impacts, including localized impacts on groundwater. Since sodium chloride loses effectiveness at very low temperatures, it may be treated with magnesium chloride or calcium chloride to improve its performance. Therefore, DOT has explored alternatives and supplemental solutions over the years. Acetate-based products such as calcium magnesium acetate have been considered, however, none of these products are without potential environmental impacts and operational trade-offs.

B. Guidance

DOT Highway Maintenance Guidelines Chapter 5; DOT TMIs; DOT Environmental Handbook for Transportation Operations; Green Book

C. Corridor Management Objectives

- Maximize efficiency of Park snow and ice operations while minimizing the environmental effects
- Strengthen DOT's leadership role in the management of Park roadway snow and ice

Figure 4.13 Snow and Ice Summit.

D. Corridor Management Actions

- Develop BMPs for snow and ice
- Participate in research, pilot programs and associated studies that support continuous improvement for snow and ice practices
- Maintain strong management and supervision oversight of snow and ice control operations to ensure the appropriate amounts of chemicals are applied when necessary
- Review and improve, as appropriate, housekeeping practices at salt storage facilities
- Identify potentially sensitive locations for additional analysis.

E. Alternatives Discussion

Under the null alternative, a safe corridor during winter operations would continue to be provided using existing guidance (including but not limited to those items listed in B, above) and practices, including environmental protection measures.

The preferred alternative formalizes residency-specific environmental initiatives and good housekeeping practices, recommends the development of additional BMPs for enhanced environmental protection (e.g. during snow and ice operations) and continues to support research opportunities for continuous improvement of snow and ice practices.

4.3.3.3 Snow Plow Turn-Around

A. Background and Existing Conditions

Snow plow turnarounds are important components in DOT's snow and ice operations and are commonly adjacent to highway corridors. They provide a safe location with sufficient space and sight distance for a snow plow to turn around. These turn-arounds are located at specific distances for strategic operational purposes.

New technology, changing fiscal and employee resources at the state, county and town levels, may require reconsideration of the distribution of beats and turn-arounds including abandoning some sites and new construction of others. Follow the Adirondack Park Operations Work Plan to ensure full consideration of potential environmental impacts.

B. Guidance

TMIs

C. Corridor Management Objectives

- Location and operation of snowplow beats and turn-arounds facilitate will reflect a safe and environmentally sound winter maintenance program.

D. Corridor Mangement Actions - None Identified

E. Alternatives Discussion

The null and the preferred alternative provide operational and associated needs for existing snow plow turn around locations according to existing guidance (including but not limited to those items listed in B, above) based on engineering features, safety and environmental considerations.

4.3.4 **Highway Work Permit Program**

A. Background and Current State

External use of New York State highway right of way must be carried out and completed in accordance with terms and conditions of a ***highway work permit*** (HWP) issued by the Commissioner of Transportation or their duly assigned agent, in accordance with New York State Highway Law, Article 3, Section 52. This is to ensure that work accomplished in the right of way, meet the standards and policies of public safety, highway laws and regulations, preservation and function of the highway, and that the work is in the best interests of the traveling public.

On an annual basis, thousands of permits are administered statewide by DOT. Developers, utility companies, municipalities, residents, and others who plan to do work on state highway right of way must obtain a HWP. Some typical examples of this work would be driveway installations, temporary logging entrances, drainage work, slope work, sign installations, events, erecting banners across a state highway, installation and maintenance of utilities, and planting.

HWP applications are submitted to the DOT Residency for the county in which the work will occur (for Residential Driveways) or DOT Regional Office (all other types of permits). The DOT Residency or Regional Office will outline any additional requirements depending on the nature of work, and issue the HWP after all application requirements are met.

Figure 4.14 Work under a utility permit.

Types of HWP permits issued by DOT include:

- Residential Driveway Permits
- Commercial Driveway/Access Permits
- Utility Permits
- Other Types of Highway Work Permits

In addition, DOT also issues other types of permits including Special Use Permits for Races, Parades, Filming or Other Events.

HWPs have the potential to affect the park-like character and resources within the Adirondack Park. Work done under permits where resources have not been identified have, in the past, inadvertently contributed to the spread of invasive species, visual impacts, loss of habitat connectivity, impacts to threatened and endangered species, erosion and impacts to wetlands. With the asset management inventory included in the TCUMP process, better information will be available to allow permit activities to occur in an environmentally sound manner. Permits involving utilities (new and maintenance thereof) are of particular concern, since those facilities have the potential to affect a significant portion of the corridor.

B. Guidance

Guidance regarding highway work permits and special use permits may be found on DOT's web site. https://www.dot.ny.gov/divisions/operating/oom/transportation-systems/traffic-operations-section/highway-permits

C. Corridor Management Objectives

- Progress all permits under DOT jurisdiction consistent with the desired outcomes and vision for TCUMP

D. Corridor Management Actions

- Create a peer group for mentoring, responding to unique questions arising during the HWP process, and cross-training
- Develop an interagency communication plan
- Consider Adirondack-specific permit conditions to be included in HWPs

E. Alternatives Discussion

The null alternative provides a process for highway work permits that are consistent with state policies, regulations and guidance (including but not limited to those items listed in B, above).

The preferred alternative supports improved intra- and inter-agency communication for highway work permit practices. The preferred alternative also includes the opportunity to incorporate an Adirondack context into the highway work permit (conditions) application process.

4.3.5 **Emergency Response Program**

A Background and Current State

As part of managing a transportation system it is inevitable emergencies will occur. Natural disasters come in different forms and sometimes happen without warning. Even when adequate warning is given, as in the threat of a storm, it is difficult, expensive and sometimes impossible to prevent transportation infrastructure destruction (flooding and road washout), bridge failures, debris accumulation, and the community impacts that result from these.

Figure 4.15 Oswego County Emergency Maintenance Operations

Emergency response includes all activities that address the ***short-term***, direct effects of an incident. It includes immediate actions to save lives,

protect property, and meet basic human needs. In addition, emergency response may encompass the execution of emergency operations plans and mitigation activities.

Many emergencies are the result of storm events and typically involve highway washout, slope failures, culvert and bridge damage or loss. Other emergencies involve the sudden or eminent failures of culverts or slopes.

Despite the fact that emergency situations unfold quickly, there are tools available (and under development) that facilitate short term and permanent fixes that comply with the directives described in the TCUMP. For example, DOT is working on guidance on the environmental aspects of DOT's emergency stream work after disaster-level flood events, so that work is conducted in a manner that is sustainable, preserves critical transportation infrastructure, protects life and property and maintains essential services. These practices are the result of experiences gained through extensive interagency partnership and cooperation during - and between - several disaster events since 2011.

Good emergency management begins with effective preparedness efforts and preventative maintenance activities. Operationally, "preparedness" is focused on establishing guidelines, protocols, and standards for planning, training and exercises, personnel and equipment certification, and information management. Good emergency management enables DOT staff in the Park regions to:

- Manage the entire life cycle of a transportation emergency
- Establish priorities
- Identify expected levels of performance and capability requirements
- Provide the standard for assessing capabilities, and help stakeholders learn their roles
- Designate organizational functions, roles, and responsibilities for emergency response
- Identify the characteristics of large-scale emergency incidents
- Develop or review and edit pre-prepared response plan
- Determine skills, systems, and capabilities needed to successfully plan for, prepare for, respond to, and recover from such events

B. Guidance

DOT's Statewide Transportation Information and Coordination Center's (STICC) Intradot Site; Incident Command System (ICS); DOT's Highway Design Manual (HDM); DOT's Project Development Manual (PDM); DEC and APA Emergency Review Procedures

C. Corridor Management Objectives

- Support emergency management operations within the Park that more fully consider the Adirondack context while preserving critical transportation infrastructure, protecting life and property and maintaining essential services.

D. Corridor Mangement Actions

- Develop Adirondack Park field reference sheets for distribution to emergency contractors during restoration/repair/response work
- Determine the need to develop and formalize Adirondack Park-specific emergency operating procedures
- Incorporate best practices into all emergency transportation operations within the Park, including but not limited to:

    - Minimize channel changes such as straightening and deepening and re-establish natural stream sections
    - Minimize the use of equipment in the stream, to the extent practicable
    - Consider replacing or repairing culverts with habitat connectivity considerations
    - Consider park-like character when choosing construction practices and materials
    - Re-construct bridges to blend into the natural surroundings

- Establish appropriate assessment and technical teams during emergency events to incorporate environmental considerations into emergency restoration and repair. The teams may include staff from both the DOT and regulatory agency(s)
- Identify a qualified environmental staff member to support the STICC (when emergency operations are within the Park). The member will advise the Emergency Operations Center(s) (EOC) on permitting and restoration issues in accordance with state and federal regulations

E. Alternatives Discussion

The null alternative provides a state agency emergency response (within the Park) which meets statewide policies, regulations and guidance (including but not limited to those items listed in B, above). Opportunities for full realization of the APSLMP may be missed.

The preferred alternative ensures that emergency operations in the Park are aligned with the APSLMP including attention to park-like character and fit with the unique Adirondack context. This is accomplished by actions such as: improved procedures, field tools, best management practices and improved oversight.

4.3.6 **Integrated Vegetation Management Program**

A. Background and Existing Conditions

Integrated Vegetation Management (IVM) is a term describing preventive maintenance measures to control vegetative growth. DOT is responsible for the control of vegetation growing along its highways, for highway safety and operation reasons, as well as for aesthetic reasons. DOT's vegetation management practices in the Park have four primary considerations:

- Safety (e.g.: sign visibility, sight distance, pavement shading, control of "fixed objects", hazard trees and noxious vegetation control)

- Operational functionality (e.g.: keep drainage system clear and flowing)
- Ecology (e.g.: control of invasive species, timing of mowing to support native species, treatments for shorelines)
- Aesthetics (e.g.: view management, fall color interest, planting to preserve park-like character)

The key words here are "integrated" and "management". A fundamental aspect of IVM is to use appropriate management methods in a coordinated fashion, to manage the growth of vegetation. The basic concept is to focus on cost-effective, long-term management with minimal impact on human health and the environment through the use of cultural, physical, biological, or chemical methods to achieve established vegetation management objectives

Plant communities that exist adjacent to the travel corridors are also characterized by mowed grass, forest, farm frontage (including transitional fields), shrub areas, waterfronts, wetland complexes, stream corridors, residential and commercial areas, cleared utility areas and other vegetated landscapes. The predominant plant communities in the Adirondack Park are forests. The roads and development associated with travel corridors create ecological transitional zones (ecotones) at the forest interface. Without active IVM, these transitional zones would progress, through natural succession, back to forest. IVM is critical at this interface to maintain a safe clear zone and a safe operating environment for the traveling public and highway maintenance workers.

Individual corridor vegetation management strategies are based on several factors, including:

- Safety
- Right of way width
- Highway design history
- Road alignment/profile
- Soils/ hydrology
- Topography/ aspect
- Utilities
- Availability of equipment and personnel

Each corridor requires varying degrees of herbaceous and woody plant management such as: mowing, tree and brush cutting, and the judicious use of herbicides. DOT employs IVM (Integrated Vegetation Management) best practices in its use of mechanical and chemical control. IVM also promotes a more efficient use of resources with associated cost savings.

<u>IVM Safety Considerations</u>

Vegetation management creates and maintains appropriate clear zones and clear areas with the use of control methods that favor the presence of herbaceous plant cover and small brushy vegetation and keeping them free of trees and large shrubs. It is important to recognize that clear zone widths and tree canopy conditions vary from corridor to corridor and within individual corridors. Another important benefit to IVM is that it creates and preserves sight distance and the visibility of hazards such as wildlife. Hazard trees require continuous, timely evaluation and removal for safety purpose and, when on Forest Preserve, coordination with DEC.

IVM Considerations in Planning, Design and Construction

To support sound vegetation management, considerations should be incorporated as part of a project's planning, design and construction. Construction projects offer opportunities for ecological restoration consistent with DOT's landscape stewardship principles. These include:

- Safety issues
- Ensuring that vegetation in completed projects can be maintained in a safe and sustainable manner
- Avoiding or protecting native vegetation
- Limiting the construction footprint
- Minimizing soil disturbance
- Restoring native plant communities
- Reusing existing topsoil
- Controlling invasive plant species
- Maintaining or restoring scenic vistas

IVM and Pavement Shading (Icing)

Tree canopy cover and the shade it provides has maintenance implications even when no hazard trees are present. Portions of corridors with a more open canopy and/ or greater tree set back (from the highway), especially on the prevailing sunny side, benefit from higher pavement temperatures during winter maintenance periods. Excessive shade can produce "cold spots" and the rapid formation and persistence of ice in the roadway. The judicious management of roadsides could directly result in smaller and/or fewer cold spots and, secondarily, reduced salt use. Management activities can include preventing new conifer growth, pruning and selective tree removals, and canopy thinning, balanced with other consideration (e.g. aesthetics, forest preserve).

IVM Coordination with Utilities

Utilities corridors, especially those with overhead wires, require a diligent IVM program that promotes desirable, stable, low-growing plant communities. Where the DOT shares travel corridor with utility corridors there is a need to achieve:

- Stable plant communities that support DOT's IVM program
- Partnerships when working in the forest preserve
- Safety around utility lines while performing hazard tree work
- Consistent and improved communication between DOT and involved utilities

Figure 4.16 Little Bluestem (*Schizachyrium scoparium*) is a native grass that reduces the need for mowing along difficult slopes.

IVM Mowing Considerations

Mowing is an essential component of operations, to ensure safety and visibility. The limits and timing of mowing differ to suit various purposes, such as preserving clear zone and sight distances. While a certain amount of mowing will always be essential, DOT strives, through policy and practice, to reduce the extent of mowing where possible and where it can yield cost savings and environmental benefit. To guide maintenance crews in identifying areas where mowing is to be reduced or deferred within the state rights-of-way, mowing limit markers are used. Guidance for the placement of mowing limit markers is found in the TMI-14-01 (Mowing Guidelines). Maintenance staff place mowing markers or mowing markers are included in capital projects (as standard payment items) and placed in the right-of-way (with consultation from maintenance) during construction.

IVM Herbicide Considerations

Herbicides are a component to an IVM program. Herbicides are used along travel corridors to control vegetation around sign posts and guiderail. Other purposes include treatment of small trees and brush on slopes and road shoulder treatments. Where there are no other effective manual or mechanical treatments, herbicides are also used to control invasive species. The removal of invasive species within the Park has a direct ecological benefit. DOT has a professional and state-certified staff that completes all of the herbicide related work.

IVM Invasive Plant Species Considerations

Vegetation management is one of several factors that can inadvertently result in the introduction, spread of invasive species. Invasive species are of particular concern in the Park because the extent and integrity of the Park's natural vegetation is integral to maintaining park-like character. The relative sparseness of development has insulated the Park from the establishment of many invasive plants. Vegetation management can also contribute to the control of invasive species. Mowing and herbicide application are examples of vegetation management practices that can contribute to

either the control of invasive plant species (when properly practiced) or the spread of invasive plant species (when improperly practiced). See Section 5.22.5 for additional information on invasive species.

IVM Aesthetic Considerations

Some vegetation management practices may have an affect on park-like character. In addition, vegetation management practices can maintain scenic vistas and other visual resources that would otherwise be blocked by vegetation growth.

IVM Ecological Considerations

There are opportunities with a sound vegetation management plan to support or progress ecological goals and objectives. Refer to individual corridor management plans for unique ecological considerations associated with each roadway. Some of the categories to consider are:

- Pollinators
- Threatened and Endangered Species
- Retention of habitat and nesting sites
- Species diversity
- Wildlife corridors

In conclusion, vegetation management is a balancing act for all involved. Vegetation control must protect highway user safety and the operability of the transportation system. At the same time, it must minimize, or avoid, impacts to water quality, soil stability, habitat for ground-nesting migratory birds and other wildlife, farms next to the roadside, private property and settings of historic buildings or parkways

B. Guidance

Green Book; DOT Environmental Handbook for Transportation Operations; DOT Transportation Maintenance Instructions (TMI 14-01); and DOT HDM Chapters 10, 11 and 28.

C. Corridor Management Objectives

- Continue to build an IVM plan that protects the safety of highway users and creates a corridor that retains the park-like experience (character)

D. Corridor Mangement Actions

- Consolidate existing IVM components, expand on them and develop guidance for DOT staff
    - Practices that limit the introduction and spread of invasives

  - Promotion of native species to reduce mowing needs and stabilize slopes that are difficult to maintain

- Partner with and maintain consistent and improved communication with utilities regarding vegetation management
- Identify locations within the Park where management of clear zones might contribute to other objectives such as habitat connectivity, visual resource area protection or a more natural roadside edge in individual TCUMPs
- Vary clear widths and "scallop" (undulate) forest edges
- Identify opportunities for resource sharing among the three Regions in the Park (e.g. Hazard tree crew, herbicide crew, specialized equipment, best practices, etc.)
  - Explore expanded resource sharing with partners such as APIPP and DEC
- Develop current scenic vista clearing guidance as part of an interagency TWG

E. Alternatives Discussion

The null alternative continues to support vegetation management in the Park via a statewide IVM plan (based in part on those items listed in B, above) . Opportunities to respond more specifically to the Adirondack context may be missed.

The preferred alternative more fully incorporates the Adirondack context into the Integrated Vegetation Management Program, through the provision of additional guidance, training, research, better inventories and enhanced coordination with other agencies, utilities and entities.

4.4 TRANSPORTATION INFRASTRUCTURE IN TRAVEL CORRIDORS

4.4.1 <u>Pavement and Shoulders</u>

A. Background and Existing Conditions

A highway lane is the portion of the traveled way used for a single line of vehicles. Most public roads (highways) have at least two highway lanes, one for traffic in each direction, separated by lane markings. Highway lane widths, which typically vary from 9 to 15 feet, are commonly narrower on low volume roads and wider on higher volume roads. The U.S. Interstate Highway System uses a 12-foot standard for lane width, while narrower lanes are used on lower classification roads. As lane width decreases, traffic capacity will typically decrease.

Figure 4.17 Narrow Shoulder Adjacent to Sensitive Natural Areas. A narrow shoulder may be required adjacent to sensitive natural areas, such as the wetland shown here.

A highway shoulder (paved or unpaved) is a necessary part of all highways and serves several functions including[13]:

- Lateral support to the highway pavement. Structural support of sub-base and surface courses
- Mail delivery
- Improved safety, including refuge room for disabled vehicles and in emergencies for vehicles to avoid oncoming vehicles out of control
- Accommodation of low-moving vehicles such as horse and buggy or farm equipment and over-width vehicles
- Accommodation of bicycle and occasional pedestrian use
- Temporary parking for people who wish to stop and enjoy the scenic vistas

The width of a shoulder, usually from 2 to 10 feet, varies with demand and the highway's classification. The transverse slope (the rate at which the shoulder slopes away from the pavement surface) also varies. Refer to the HDM Chapter 2 for additional information.

In the Adirondacks, it is not unusual to find roadway and shoulder widths that remain as they were when originally constructed. This is partially a result of environmental conditions, existing ROW, and other factors. In the 70's, the AHC proposed design width standards for pavements and shoulders that recognized the importance of both to transportation, recreation, and Park character. The current Park guidelines (11-foot travel lanes and 6-foot shoulders) have been in place for over 20 years. These guidelines are included in the Green Book, but do not preclude other design widths, which may respond to site conditions or safety needs.

Figure 4.18 Wider shoulders where feasible, support transportation and recreational needs.

Transportation improvements are needed in many areas of the park, e.g. drainage improvements, due to the fact that corridor sections have seen few upgrades since their original construction. Individual TCUMPs will identify pavement and shoulders where additional width to support multi-modal needs should be considered.

B. Guidance

AASHTO's a Policy on Geometric Design of Highways and Streets; Green Book; DOT HDM; DOT Highway Maintenance Guidelines

C. Corridor Management Objectives

[13] HDM Chapter 2, page 2-15

- Pavement and shoulder widths respond to site conditions, safety needs and anticipated needs/use

D. Corridor Maintenance Actions

- Develop a "decision tree" to assist when considering non-standard widths for highway lanes and/or shoulder paving in response to needs or safety issues
- Planning inventory of potential locations where additional width to support multi-modal needs should be considered
- Share information regarding pavement and shoulder widths with stakeholders and members of the public who may want information on existing bicycle lanes and/or shoulder widths to plan their trip.

E. Alternatives Discussion

There is no specific SEQR action under the Master TCUMP for changing pavement and shoulder widths. Alternatives will be identified and evaluated on a project-specific basis.

The Master TCUMP supports consistency and Park-context sensitivity in decisionmaking for pavement and shoulder widths by providing training, improved asset management and stakeholder coordination

4.4.2 **Drainage System**

A. Background and Existing Conditions

Properly designed and maintained drainage systems protect bridges, pavements, rights-of-way and other assets by directing surface and subsurface water away from or off the infrastructure. This helps prevent collection of water on the roadway and saturation of the highway foundation and damage to bridges and culverts which can lead to unsafe roadway conditions and possible infrastructure failure. It also prevents standing water on the highway, which can lead to the formation of black ice and hydroplaning.

Figure 4.19 - Ditch Cleaning Activities

The New York State Department of Transportation has the following drainage assets on the state highway network within the Adirondacks:

- Approximately 700 large culverts between 5-feet and 20-feet span (diameter)
- Roughly 7,500 small culverts less than 5 feet in span (diameter)
- An unknown number of shoulder miles of ditches, gutters and curbs in open drainage
- An unknown length of pipe in closed conduit systems with drainage structures including catch basins, drainage inlets, etc.

Figure 4.20 Water or Wetlands Affects Drainage Design.

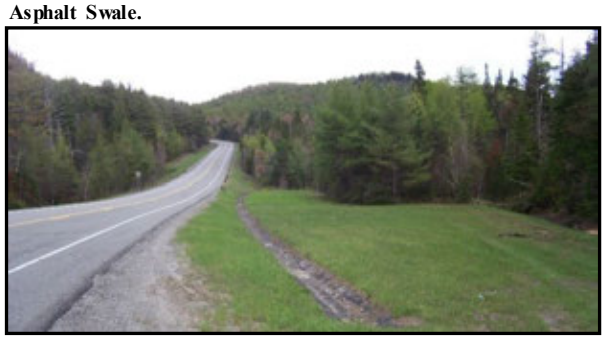
There are locations in the Park where drainage systems are not functioning as intended and are in need of repair or replacement. When a drainage system is installed or replaced, the design should take into consideration how various options have the potential to affect park-like character. Options should, in part, be selected based on limiting these effects, which range from: roadside clearing, introducing pollutants to the surrounding environments, altering hydrology, generating waste materials, change in land use (ROW takes), etc.

The geology, hydrology and soils of the Adirondack Park vary widely. A "one-size-fits-all" approach may not be appropriate throughout a corridor (or section of) for either design or operations. For example:

- The design for a ditch along a corridor that has underlying sandy soils would have a different cross-sectional geometry than a ditch in a location where water doesn't percolate as quickly
- Prior to routine ditch cleaning, coordinate with the DOT MEC. The MEC will use the flow chart, "*Process for Coordination of Maintenance Activities in the Adirondack Park*" (see Attachment F) to determine the appropriate course of action
- Some drainage features were constructed as permanent stormwater management practices (e.g. dry or wet swales). Care must be taken to retain their functionality

Considering environmental factors (e.g. depth to groundwater, adjacent wetland or surface water hydrology or soil types) before installing any new or proposed drainage improvements has advantages (e.g.: resource savings) beyond the obvious environmental benefits. Critical site conditions inform decisions, possibly eliminating unnecessary or unwarranted improvements or alterations. For example, sites with high water table would not benefit from ditching. The constructed ditch will not drain positively and may introduce standing water

Figure 4.21 Grassed Swale as an Acceptable Alternative to Asphalt Swale.



close to the roadbed.

B. Guidance

DEC New York Standards and Specifications for Erosion and Sediment Controls; DEC New York State Stormwater Management Design Manual; DOT Design Manual Chapter 8; related DOT TMIs; and Highway Maintenance Guidelines Chapter 3 – Highway Drainage.

C. Corridor Management Objectives

- Maintain/improve travel corridor drainage systems to preserve transportation infrastructure while maximizing environmental benefits (e.g. improve water quality) and enhancing park-like character

D. Corridor Management Actions

- Develop a "decision tree" to assist when considering drainage treatments and maintenance and to develop a general hierarchy of priorities for work to be completed
- Introduce stormwater management practices where they add value (e.g. detention basins, infiltration basins, bioretention basins, stormwater treatment systems, dry swales, wet swales, permanent check dams, sedimentation basins, rain gardens, etc.)
- Identify competing environmental mandates and address at the Interagency Coordination Meetings

E. Alternatives Discussion

Under the null alternative, existing guidance (including but not limited to those items listed in B, above) will continue to support an adequate travel corridor drainage system sufficient to preserve the transportation infrastructure.

The preferred alternative recognizes that the specific Adirondack Park context warrants additional consideration for travel corridor drainage system design and maintenance. To that end, the preferred alternative provides for additional environmental awareness and protection (e.g. the decision tree) using a park-wide approach. It also provides the opportunity to incorporate the Adirondack context through value-added stormwater practices, improved guidance and awareness and inter-agency coordination.

4.4.2.1 Frost Heaving and Boulder Heaving

A. Background and Existing Conditions

The HDM, Chapter 9 describes this topic as follows: Frost heaving and boulder heaving are caused by a combination of three conditions:

- Frost-susceptible soils
- Water source
- Freezing temperatures

The most susceptible soils for frost heaves are fine sands and silts. Frost heaves can also occur in areas where the top of bedrock is 4 ft. or less below the top of pavement. As the ground freezes, water forms ice lenses, and as low temperatures persist and more water freezes, the lenses continue forming and increasing in quantity and size. This expansion is reflected at the pavement surface as bumps and cracks. In spring, as ice lenses melt from the top, the upper subsurface strata become supersaturated and will not support traffic loads. This lack of support results in the deformations and potholes that are frequently experienced in late winter and spring.

Boulder heaves are caused by freeze-thaw of soil around boulders. As soil water freezes and expands, it elevates the boulder. As it thaws, loosened soil adjoining the void beneath the elevated boulder partially fills the void and supports the boulder in a raised position. With time, these solid objects may actually be forced to the pavement surface, causing very abrupt surface distortions. Eliminating the bump created by a boulder heave requires physically removing the boulder and replacing it with material similar to that formerly surrounding the boulder.

Figure 4.22 Section of Route 28 Subject to Frost and Boulder Heaves.

Frost and boulder heaves may be relieved by removing at least one of the three essential components. The water component may sometimes be eliminated by proper drainage. The soil or bedrock component is minimized by undercutting the susceptible material and replacing it with granular material. The freezing-temperature component is inherent to our climate and cannot be eliminated from the soil.

Boulder and frost heaving is more common within the Adirondack Park than other area in the State, leading to costly maintenance challenges. Frost and boulder heave locations occur in isolated travel corridor sections, contingent upon finding the site conditions (three criteria) described above. The frequency and extent of these occurrences is mitigated by DOT's previous

and planned remediation measures addressed as a part of each involved region's maintenance and Capital Program.

If heaving is not addressed, highway structure and drivability are compromised. This requires drainage and/or foundation improvements (e.g. soil replacement or elevating road). As with other projects, the work requires balancing the need for improvement with landscape and environmental impacts, including mitigation measures. Individual TCUMP's should identify these locations for further consideration as projects are progressed to improve the transportation system.

B. Guidance

HDM Chapter 9, *Soils, Walls and Foundations*; TMIs,

C. Corridor Management Objectives

- Maintaining the transportation infrastructure and avoiding travel disruption due to frost and boulder heaving while minimizing environmental effects

D. Corridor Mangement Actions

- Inventory and identify critical heave locations so that improvements to target areas can be incorporated into upcoming projects
- Share timely information with regulatory agencies to facilitate permitting

E. Alternatives Discussion

The null alternative provides sufficient mechanisms, based in part on the guidance items included in B, above, to address damage to transportation infrastructure as a result of boulder heaving and frost heaving.

The preferred alternative employs a corridor approach including improved inventory capabilities which can lead to long-term solutions and streamlined coordination/permitting. It also raises (early) awareness with other agencies and stakeholders regarding this issue.

4.4.3 **Rest Areas, Safety Parking Areas and Scenic Overlooks**

A. Background and Existing Conditions

There are several types of roadside facilities that provide opportunities for travelers to safely stop, rest, manage their travel needs and access some of the State's recreational facilities. These roadside facilities include rest areas with and without tourism information centers, safety parking areas without buildings, scenic overlooks, fishing access sites and trailhead parking areas. These facilities are functional, desirable elements of the complete travel corridor. The rest areas, safety parking areas and scenic overlooks are maintained by DOT. Other roadside parking, including fishing access sites and trailhead parking areas are typically maintained by others and discussed in Section 5.4.2.3.

Rest Areas

Rest Areas are unique pedestrian environments. Motorists (many of whom are unfamiliar with the area) exit their vehicles and experience the locality up close and on foot. Many rest areas function as gateways to the State or to specific tourism regions within the State. Rest area facilities may be the initial point of contact between the traveling public and New York State. DOT guidance on rest area design requires contextually sensitive design for buildings and the surrounding landscape. Motorists' first impression of the State should be positive. Rest areas may also contribute to local and regional economic development strategies by providing tourism materials and provide an opportunity for public education (e.g. firewood, invasive species etc.). In the Adirondack Park, all of the rest areas are situated on I-87 (Adirondack Northway).

Table 4.1 Tourist Information Centers and Rest Areas in the Adirondack Park

County	Route	Reference Marker	Facility Name
Essex	185	910L 1201 1033	Tourist Information Center**
	22	22 1209 1488	Tourist Information Center**
	I 87	87I 1211 1015	Schroon Lake North*
	I-87	87I 1211 1016	Schroon Lake South*
	I 87	87I 1211 182	High Peaks North/Tourist Information Center
	I 87	87I 1211 185	High Peaks South/Tourist Information Center
	I 87	87I 1211 1420	Lewis Rest Area/Tourist Information Center*
	86	86 1202 1091	Tourist Information Center**
	28N	28 1202 1035	Tourist Information Center**
Hamilton	30	30 2206 1724	Tourist Information Center**
	8	8 2209 1282	Tourist Information Center**
Herkimer	28	28 2308 1114	Tourist Information Center**
Warren	9N	9N 1702 1058	Tourist Information Center**
	9	9 1710 2077	Tourist Information Center**
	9	9 1710 2082	Tourist Information Center**
	28	28 1710 1054	Tourist Information Center**

* currently closed ** Not operated by DOT

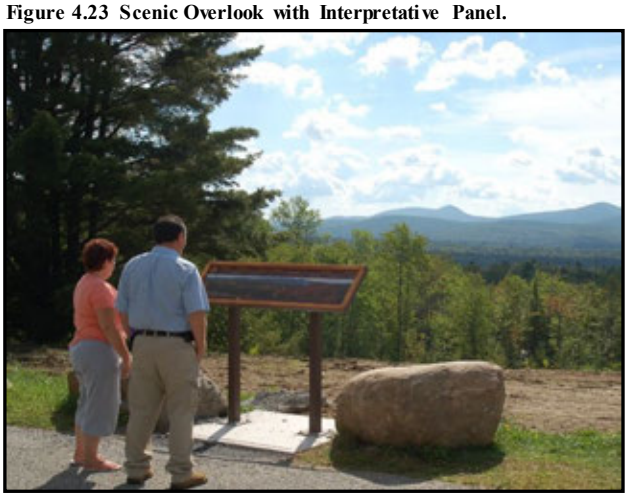
Safety Parking Areas

Roadside parking areas exist on all types of State highways, including limited access highways. They provide an opportunity for vehicles to park off the highway and to safely exit and enter the highway. The areas are designed for motorists to rest, and may include scenic vistas, historic markers, interpretive signs, picnic tables, trash receptacles, paths and portable toilets. They may also provide a secondary benefit of fishing and recreational trail access. All parking areas should provide accessible parking spaces in compliance with applicable accessibility guidelines.

Scenic Overlooks

Scenic overlooks are safety parking areas with a specific purpose - to provide motorists an opportunity to safely exit the highway and experience an outstanding view. Scenic overlooks are intended for short duration parking; will not accommodate overnight parking. They are places to take photos and continue travelling. Scenic overlooks are only sited in locations with outstanding scenic value. Any scenic overlook located on a New York State Scenic Byway should be coordinated with the corresponding byway management organization. In addition, any scenic overlook adjacent to state lands should be coordinated with DEC for vegetation management activities. In general, scenic overlooks should be in full view of the highway. Sight distance for entering and exiting the overlook area, grading, vegetation management, management of the scenic view and the relationship to any residential properties must be considered.

Figure 4.23 Scenic Overlook with Interpretative Panel.



Figures 4.24 Informal Pull-Off. The result of vehicles pulling off road to view and photograph the High Peaks.

Informal Pull-offs

Along with rest areas, safety parking areas and scenic overlooks, informal pull-offs have occurred over time. These may have occurred to provide access to photo opportunities, hunting/fishing locations, a water feature or even to forest preserve lands. DOT should consider whether these informal pull-offs should be eliminated or addressed on a program level (e.g. incorporated into other Unit Management Plans, or the DOT formalizes the informal pull-off area as a facility). The facilities controlled by the DOT and discussed above are a small portion of the parking access areas within the Adirondack Park. Other parking facilities in the Park are discussed in Section 5.9.

B. Guidance

Green Book; DOT HDM Chapter 27 *Highway Rest Areas and Roadside Parking Areas*; DOT Manual of Administrative Procedures (MAP) 1.6-2, AASHTO *A Guide for the Development of Rest Areas on Major Arterials and Freeways*

C. Corridor Management Objectives

- Enhance public amenities within safety parking areas, rest areas and scenic overlooks to fit the Adirondack context where possible.

D. Corridor Mangement Actions

- Incorporate specific recommendations for the enhancement of public amenities in the individual TCUMPs
- Cultivate partnership opportunities
- Develop a library of rest area, parking area and scenic overlook treatments
    - Examples include the use of native grasses, incorporating interpretative signage, and public interactive displays
- Update vegetation management guidance for scenic overlooks in the Park
- Develop a program to address informal pull-offs as noted above

E. Alternatives Analysis

The null alternative provides for rest areas, safety parking areas and scenic outlooks that are consistent with state and federal polices, standards and guidance (including but not limited to those items listed in B, above).

The preferred alternative expands opportunities to incorporate the Adirondack context into design and operation guidance for rest areas, safety parking areas and scenic outlooks. The preferred alternative also recommends that DOT develop a program to address informal pull-offs.

4.4.4 **Bridges**

A. Background and Existing Conditions

A bridge is defined as a structure, including supports, erected over a depression or an obstruction such as water, highway, or railway and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between undercopings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes. Multiple pipe configurations will qualify as bridges where the clear distance between openings is less than half of the smaller adjacent opening, and the total length along the center of the roadway is greater than 20 feet.

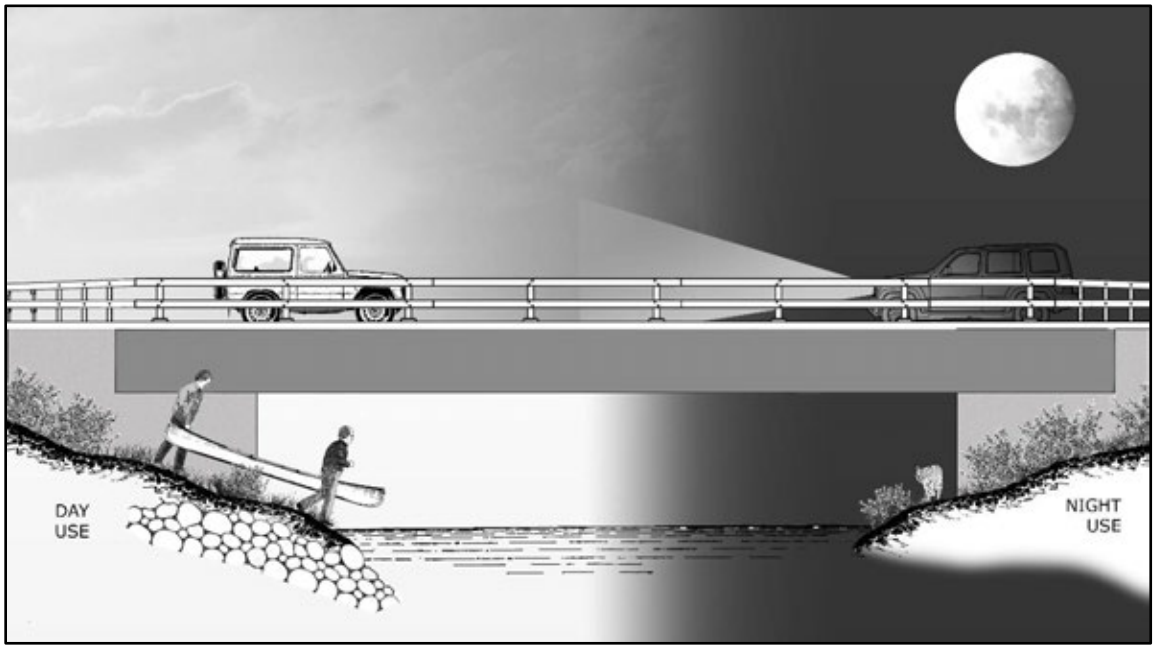
There are approximately 862 bridges within the Adirondack Park.

Bridges are large capital investments with long (50 yrs. +) life cycles. They require a combination of routine maintenance, element-specific maintenance projects undertaken by DOT forces, and capital projects over their life span or to increase their life span.

Any project or activity, from designing a new bridge to rehabilitating an existing bridge to performing routine maintenance, presents a potential opportunity to address related travel corridor needs (e.g. wider structures for bicycle accommodation, recreational access and habitat connectivity). The extent to which these opportunities can be addressed will be based on physical restrictions (e.g.: site limitations, foundation, hydrology and geometry) and availability of resources.

Figure 4.25 Bridge Treatment for Aesthetic Purposes (dry stacked stone formliner pattern).

Figure 4.26 Addressing Related Travel Corridor Needs. Example of addressing related travel corridor needs such as wildlife movement and recreational access.



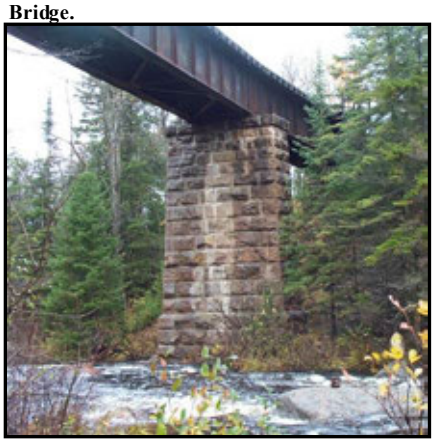
See DOT's Bridge Manual for further guidance.

Aesthetic Considerations for Bridges

Bridges in the Park have specific design components which are incorporated to ensure aesthetic consistency and maintain park-like character. In hamlet areas the opportunity to reflect community character should be addressed during the public involvement process.

Treatments, such as those described in Section 4.4.6, are options that can be considered to enhance the appearance of parapet walls and jersey barriers. The selection of bridge railing should consider aesthetics, community settings and views from the bridge to scenic resources. Further information on aesthetics is available in Section 23 of DOT's Bridge Manual.

Figure 4.27 Parallel Masonry on a Railroad Bridge.



A formliner pattern that matches a parallel masonry look is a suitable treatment for bridge abutments and piers. This treatment simulates the masonry abutments and piers of the Adirondack Park railroad bridges (see Figure 4.28). Historic highway bridge treatments would have looked similarly.

Multimodal and Recreational Considerations for Bridges

Bridges are not only used by motor vehicles. They are also a necessary component of bicycle, pedestrian and snowmobile accommodation. Many DOT bridges cross streams and rivers, some of which are prime fishing venues. Parking areas for anglers can be included as a project enhancement and, where safety considerations allow; wider bridges to accommodate anglers can be considered. Similar treatments can apply when vistas or other features that attract sightseers are encountered. Parking areas, overlooks or other accommodations such as sidewalks on the bridge can be considered.

Habitat Integrity/Connectivity Considerations for Bridges

Bridge locations are also very important locations for fish and wildlife movement. Best practices include low flow channels, upland benching, stone placement considerations and approach plantings. Refer to Section 5.23.3 for additional information on Habitat Connectivity issues within the Park.

B. Guidance

DOT Bridge Manual; Green Book

C. Corridor Management Objectives

- Ensure that all new and proposed revisions to policy, standards and operational guidance related to bridges reflect the management principles agreed to for the Park and are applied to projects and activities

D. Corridor Mangement Actions

- Collaborate with DEC and APA to develop a process that identifies and prioritizes recreational corridor crossing needs
- Assess corridor needs related to bridges to ensure they are considered when bridge projects are progressed
- Develop a data dictionary for Adirondack Park bridges that includes information such as scenic qualities, access needs, snowmobiling considerations, signage recommendations, habitat connectivity, and other areas identified through outreach and input
- Develop branding treatments for bridges in the Park
    - Finalize draft branding treatments for all bridges on Interstate 87, the Adirondack Northway, within the Park
- Bridge maintenance and construction projects within the Park will incorporate best practices where possible, including but not limited to:

    - Minimizing channel changes and the amount of cut or fill needed
    - Limiting construction activities in the water to periods of low or normal flow
    - Minimizing the use of equipment in the stream
        - Blending into the natural surroundings
        - Minimize impacts of detours

- Using stream bank stabilizing methods that are responsive to wildlife, ecological context and public recreation
- Consider providing or maintaining public recreational access
- Using soil stabilization "best practices" on exposed soil around bridges
- Designing, constructing and maintaining bridges to avoid disrupting and, where possible, to facilitate the migration or movement of wildlife, fish or other aquatic life
- Using best management practices to avoid the introduction and spread of invasive species
- Maintain, where possible, existing, native vegetation adjacent to streams (limit disturbance)

E. Alternatives Analysis

Under the null alternative, bridges would continue to be addressed based on existing guidance (including but not limited to those items listed in B, above) and databases. The null alternative would provide for a safe and environmentally sound corridor, but opportunities to enhance site-specific habitat connectivity, aesthetic considerations and visual context might be missed.

The preferred alternative ensures that bridge projects and bridge maintenance in the Park are aligned with the APSLMP including attention to park-like character and fit with the unique Adirondack context. This is accomplished by actions such as: identification of needs, improved procedures, branding treatments and best management practices.

4.4.5 **Culverts**

A. Background and Existing Conditions

A culvert is a conduit which conveys stream flow through a roadway embankment or past some other type of flow obstruction. DOT, by statute, and following the FHWA, defines a culvert as any structure carrying a highway over an obstruction which has an opening, measured along the centerline of the highway, with a span of 20 feet or less. Spans in excess of 20 feet are considered bridges and are discussed Section 4.4.4. Culverts are constructed from a variety of materials and are available in many different shapes and configurations.

There are currently approximately 8,200 culverts within the Adirondack Park of which approximately 700 are large culverts (>5 foot span). Safety considerations for culverts include the use of guiderails or safety grates.

The majority of culvert locations in the Park involve some form of water including perennial streams, intermittent streams, lakes, ponds, and wetlands. Often times water resources including wetlands are found at culvert locations. When a culvert project occurs along a corridor, related aspects of the travel corridor should be addressed (e.g. bicycle accommodation, recreational access and habitat connectivity).

Existing site conditions may warrant specific design or operational measures, such as providing for fish passage, energy dissipation, and debris control. Refer to DOT's HDM Chapter 8.6.4 for additional guidance.

Figure 4.28 Box Culvert Replacement to Accommodate Aquatic Species Passage. During and after construction.

As with bridges, when DOT is replacing or doing major repairs to a culvert, a contextual solution is selected, considering factors such as park-like character, access to water resources, habitat integrity/connectivity, opportunities to enhance branding elements, existence of trails and recreational considerations. DOT still has an opportunity to address some of the needs identified in the corridor planning process on "maintenance level" contracts or work done by DOT staff. For example, there may be an opportunity to include a snowmobile trail crossing or a "channel grade control" to elevate the water level and improve habitat connectivity.

However, in emergency situations very limited opportunities will exist for comprehensive fixes; a temporary fix may be the best solution until additional resources become available.

B. Guidance

DOT HDM Chapter 8; FHWA Hydraulic Design of Highway Culverts Third Edition; Green Book; DOT TEM.

C. Corridor Management Objectives

- Ensure that all new and proposed revisions to policy, standards and operational guidance related to culverts reflect the management principles agreed to for the Adirondack Park

D. Corridor Mangement Actions

- Collaborate with DEC and APA to develop a process that identifies and prioritizes recreational corridor crossing needs
- Develop an inventory of corridor needs related to culverts to ensure they are considered when culvert projects are progressed

- Develop an a data dictionary for Adirondack Park culverts that includes information such as scenic qualities, access needs, snowmobiling considerations, signage recommendations, habitat connectivity, and other areas identified through outreach and input
- Consider developing "Adirondack Park-specific" design criteria for visually prominent culverts and/or culverts that are in VRAs
- Culvert construction and replacement projects within the Park will incorporate best practices where possible, including but not limited to such considerations as:

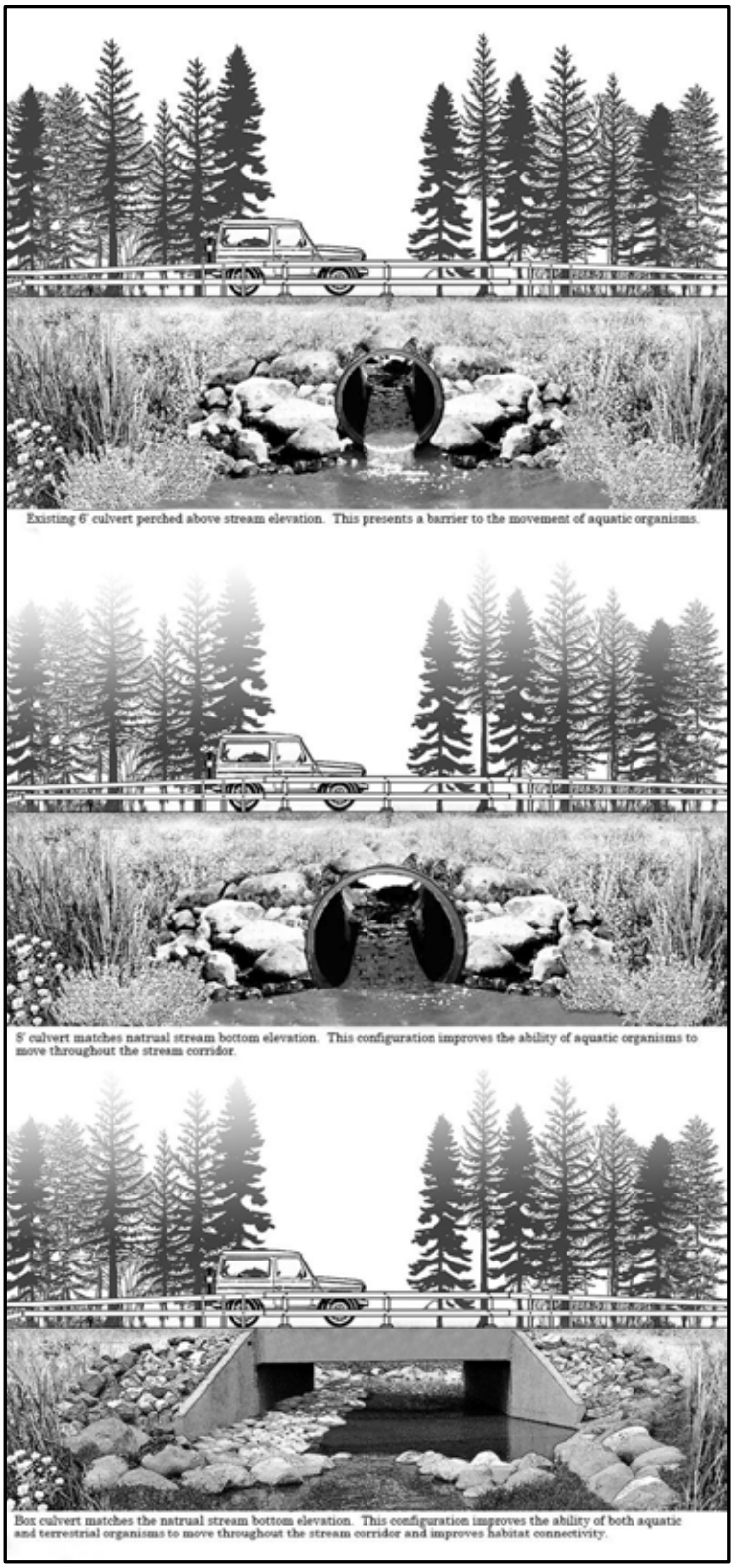
    - Minimizing channel changes and the amount of cut or fill needed
    - Installing culverts during low flow conditions
    - Minimizing the use of equipment in the stream
    - Blending into the natural surroundings
    - Minimize impacts of detours
    - Consider providing or maintaining public recreational access
    - Designing, constructing and maintaining culverts to avoid disrupting and, where possible, to facilitate the migration or movement of wildlife, fish or other aquatic life
    - Using stream bank stabilizing methods that are responsive to wildlife, ecological context and public recreation
    - Using soil stabilization "best practices" on exposed soil around culverts
    - Maintain, where possible, existing, native vegetation adjacent to streams to limit disturbance
    - Using best management practices to avoid the introduction and spread of invasive species

E. Alternatives Discussion

Under the null alternative, culverts would continue to be addressed based on existing guidance (including but not limited to those items listed in B, above) and databases and would provide for a safe and environmentally sound corridor, but opportunities to enhance site-specific habitat connectivity, aesthetic considerations and visual context might be missed.

The preferred alternative ensures that culvert projects and culvert maintenance in the Park are aligned with the APSLMP including attention to park-like character and fit with the unique Adirondack context. This is accomplished by actions such as: identification of needs, improved procedures, branding treatments and best management practices.

Figure 4.29 Existing Conditions and Potential Solutions for Improved Habitat Connectivity.



4.4.6 **Fences and Walls**

A. Background and Existing Conditions

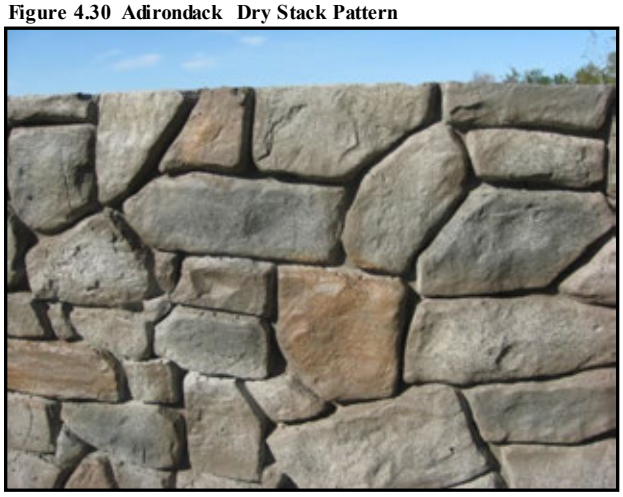
In compliance with the APSLMP, this TCUMP provides the guidance satisfying the requirement that walls and fences fit harmoniously into the natural surroundings, with minimal impacts upon the Park's ecology and environment. It builds on the existing wall treatment hierarchy included in the Green Book.

Contextualizing retaining walls can be accomplished by careful material selection and surface treatment. Concrete (either cast-in-place or pre-cast) may be colored and/or textured. Where gabions are to be used, stone should match the surrounding rock colors and baskets galvanized. Treatments (colorizing) to further naturalize gabion baskets may be used. On large, high walls, consideration should be given to benching or terracing for vegetation establishment. Although less frequently used, wooden retaining walls are an excellent choice when blending is desired.

Fences are infrequently used by DOT in the Park. Where present, materials (e.g. wood, metal, chain link, etc.) can have a visual impact and determine the fence's contextual compatibility. Fence location has a direct impact on the movement of wildlife in the Park. When replacing or introducing new fencing, habitat connectivity should be considered (see Section 5.22.3).

Walls and Reinforced Soil Slopes

Figure 4.30 Adirondack Dry Stack Pattern



Retaining walls and reinforced soil slopes are used in areas where free-standing (natural) earth slopes are undesirable or unachievable due to space restrictions. These walls include poured, gravity or cantilever reinforced concrete, timber, steel or precast concrete cribbing, stone-filled wire-basket gabions, timber or steel sheeting, or steel soldier pile and lagging walls, all of which provide external support to a retained soil mass. Chapter 9 of the Highway Design Manual (HDM) describes wall systems used by the Department. The list includes three categories of support systems based on their intended functional life; permanent, temporary and interim. Retaining wall systems are classified according to the basic geotechnical mechanism used to resist lateral loads and the construction method used for the installation of the walls. Refer to HDM Chapter 9 for a detailed description of each retaining wall system classification including associated method of construction, means of stability and design requirements and constraints. Retaining walls may incorporate various aesthetic treatments to enhance or blend the wall into the surrounding environment. Aesthetic treatments are applied to the face of a wall system either during or after the manufacture of units (e.g. precast) to modify the wall's appearance. Aesthetic treatments can include color, texture, exposed surface aggregate,

architectural patterns, artistic designs, the addition of simulated joints or cracks, and/or other treatments or materials. Modifications to wall appearance cannot adversely impact the wall's structural integrity, function or life span. A commonly used aesthetic treatment for concrete walls and barriers in the Adirondack Park is an applied patterning with color that mimics the appearance of a drystack stone wall. The pattern is so popular that several formliner manufacturers refer to it as "Adirondack DryStack".

See the Green Book for hierarchy of wall treatments.

Fences

Within the Adirondack Park, the use of fencing (other than private fences), is most likely limited to barrier (including ROW) and snow fencing. Details of fencing used to contain rockfall are discussed in Section 4.3.1.3.

- Barrier fencing – DOT uses barrier fences to exclude pedestrians, bicyclists, unauthorized vehicles and domesticated animals or to serve as a visual barrier
    - Fencing is not warranted or effective for wildlife (deer, moose, etc.) control. Wildlife vault or crawl under most types of fencing. In addition, fencing may cause wildlife to spend more time in the ROW searching for a way out
    - ROW fencing - used to delimit the boundaries of the state rights-of-way and private property. Continuous fencing of limited access highways is considered desirable as a legal means of establishing trespass. Most ROW fencing occurs on I-87 (Adirondack Northway)
    - Visual screening fence – serve as a visual barrier commonly used to mask unsightly areas (junk yards) and to screen high-speed or limited access highways from residences. In the latter example, fence design should receive special consideration for material, color, scale and detail

- Snow fencing - an engineered mitigation measure used to control the wind transport and subsequent deposition of snow. Snow fencing can be structural or non-structural (living)
    - Structural snow fences are wooden, plastic or metal fences situated and designed (length, height, permeability etc.) for the specific purpose of drifting snow control
    - Living snow fences (or windbreaks, shelterbreaks) are linear plantings of single or multiple rows of vegetation (trees, shrubs, standing corn rows, etc.) selected and situated (location in the landscape, spacing between plants and rows) for the specific purpose of drifting snow control

Refer to HDM Chapter 10 for additional information (including warrants) on fencing.

B. Guidance

Green Book; DOT HDM Chapters 9, 10 & 28; DOT Geotechnical Design Procedures (GDP), GDP-11, GDP-14; DOT Geotechnical Engineering Manual (GEM), GEM-20, GEM-21; DOT Environmental Handbook for Transportation Operations

C. Corridor Management Objectives

- Encourage development of aesthetic standards for walls and fences to be constructed or reconstructed within the Adirondack Park

D. Corridor Management Actions

- Refine the Green Book's "decision tree" of preferred wall and fence treatments, in priority order, with accompanying aesthetic guidelines for each
- Develop a library of wall and fence aesthetic treatments
- Develop a list of plant material (specific to the Adirondack Park) suitable for use as living snow fences

E. Alternatives Discussion

Under the null alternative, fences and walls would continue to be addressed based on existing guidance (including but not limited to those items listed in B, above), but opportunities to enhance fences and walls to be more site-specific, address aesthetic considerations and be visually responsive to the Park's context might be missed.

The preferred alternative would ensure that fences and walls constructed or reconstructed are highly responsive to the Park context. It would raise awareness of the full range of available tools and increase the level of sensitivity for the design and maintenance of fences and walls.

4.4.7 **Barriers (including Guiderails)**

A. Background and Existing Conditions

In the Park, visual considerations of barriers are a major priority. Conventional barrier types, such as galvanized steel box-beam and W-beam guide rail, may not be considered appropriate aesthetically. DOT's Policy is to identify locations where guide rail can be eliminated, use cable guide rail where appropriate, use an appropriate aesthetic barrier at selected locations of special aesthetic value and standard grey galvanized box beam at all other locations.

Locations of special aesthetic value, such as scenic overlooks, rest areas, fishing areas, and some special gateway locations, would receive special aesthetic treatment, such as painting, powder coating, or the use of timber-faced steel guide rail. However, all safety warrants must be met for any barrier treatment selected.

There are four types of barrier in common use statewide: cable guide rail, corrugated metal or W-beam guide rail (no longer used in the Park), box beam guide rail, and concrete barriers. The selection of an appropriate barrier is primarily governed by safety considerations. If safety considerations indicate the need for a W-beam guiderail, a non-standard feature justification is required.

This decision process for selecting the barrier system type is sequential and includes:

- A need for a barrier (guiderail or concrete)
- Possible elimination of the need by flattening slopes
- Suitability for guiderail system (cable or box beam) If yes, (see guiderail systems below)
- Suitability for concrete barrier (see concrete barrier below)

Guiderail Systems

Decisions to include guide rail and the type of guide rail system to be used will follow guidance in HDM Chapter 10 and the Green Book. This decision process is sequential and includes (along with the first two steps noted above):

- Suitability for a cable system, if no
- Use box beam

Along with the safety benefit of eliminating the need for rail, flattening slopes, where possible, provides a suitable use of surplus material and spoil generated from transportation activities such as highway reconstruction, ditch cleaning and re-paving. Spoil may be available from other DOT projects to help mitigate the need for guiderail. Additional cost savings are realized by reusing surplus material, eliminating long-term maintenance of rail, initial purchase cost and future replacement cost. Barriers require regular maintenance to ensure that, when struck by errant vehicles, they perform as originally intended.

HDM Chapter 10 describes alternate systems that may be suitable. Other designs not described in the HDM may also prove acceptable. In general, these systems could be more expensive than the standard alternatives. Before proposing use of an aesthetic barrier, it should be verified that the system has had an adequate safety evaluation. Any new systems proposed must be reviewed by DOT's Design Quality Assurance Bureau.

Brown Steel Guide Rail Systems (formerly "Rustic" Rail)

In the early 1970s, several park agencies and environmental groups requested that the Department use brown guide railing in some park areas. This was desired as an important way of "branding" the park in a manner similar to the brown and yellow signs used for the same purpose. At about that time, the steel industry had marketed A588 steel, an alloy with copper in it that was supposed to weather to a rust brown and then leave a superficial coating, a patina, that would significantly retard any subsequent rusting action. This material was used to produce steel guide rail which was installed in a steadily increasing number of aesthetic settings.

Unfortunately, this patina-forming process did not function adequately when the rail was placed in settings where there were regular moisture and elevated salt levels, conditions typical for roadside settings. This material has shown to deteriorate at an unacceptably accelerated and unpredictable rate under field conditions thus creating a serious safety hazard. In 2007, the Department began to phase out the use of A588 for guide rail. New projects may no longer specify A588 guide rail.

Extensive experiments were conducted to identify a durable means of coating galvanized steel to a brown color, but all have shown aesthetic deterioration within a few years of installation. To maintain the desired aesthetics, coated rail would need to be periodically repainted or recoated. DOT continues to support and search for an aesthetic treatment to replace A588 guide rail.

Concrete Barriers (including Stone-Faced and Textured Barriers)

In some situations, guiderail systems are insufficient to protect errant vehicles. In these instances, a rigid concrete barrier may be appropriate. Refer to Chapter 10 of the HDM for additional information on when to use concrete barriers. Once it has been determined that a concrete barrier is required, additional consideration must be given to whether the area has special aesthetic value, wildlife concerns (crossings) or other environmental factors. Early coordination with involved agencies is required when a concrete barrier is proposed.

In situations where a more visually appealing barrier is warranted, stone faced or textured barriers may be appropriate. The primary reasons for using barriers with stone facing or textured surfaces is to establish, reinforce or complement,

- An area's identity
- Existing historic districts
- Historic restorations
- Downtown redevelopment areas
- Tourist areas

A variety of specialized stone-faced and textured masonry wall designs have been used on New York's state highways, but none have been accepted as "standards". The selection of an appropriate barrier is primarily governed by safety considerations. Treatments, such as those can be adapted for use on concrete barriers to enhance their appearance without compromising safety. Figure 4.6, shows a jersey barrier with and without the Adirondack Drystack aesthetic treatment. The side-by-side comparison aptly illustrates the beneficial impacts of applying the aesthetic treatment to concrete walls along the Park's scenic travel corridors.

B. Guidance

Green Book; DOT HDM Chapter 10.

C. Corridor Management Objectives

- The choice of barrier type within the Park should be contextually sensitive.

D. Corridor Management Actions

- Develop a decision tree for Adirondack Park barrier treatments
- Continue to support research projects to evaluate new products as they become available to find "brown guide rail" alternatives
    - Continue ongoing Natina study/ field demonstration (started in 2012) on Route 73 in Region 1, Route 30 in Region 2 and Route 3 in Region 7

E. Alternatives Discussion

Under the null alternative, barriers would continue to be addressed based on existing guidance (including but not limited to those items listed in B, above) and would provide for a safe and environmentally sound corridor, but opportunities to enhance site-specific, aesthetic considerations and visual context might be missed.

Figure 4.31 Simulation of Jersey Barrier with and without Adirondack Drystack Texture and Color

The preferred alternative would ensure that barrier solutions are highly responsive to the Park context. It would raise awareness of the full range of available tools and increase the level of sensitivity for the design and maintenance of highway barriers.

4.4.8 **Traffic Control Devices**

Overview

Traffic control devices (TCD) are critical for the safe and efficient transportation of people and goods. TCDs may consist of signals, flashing beacons, rail crossing systems, pedestrian signals, regulatory signs, warning signs, guide signs, and lane markings

A traffic control signal is a device by which traffic is alternately directed to stop and permitted to proceed. Traffic control signal is defined in Section 154 of the NYS Vehicle and Traffic Law. Traffic control signals are sometimes referred to as 3-color signals or stop-and-go signals. The purpose of a traffic control signal is to assign right of way at an intersection.

A flashing signal is an intersectional traffic control device which displays flashing indications to approaching traffic on all approaches to an intersection to notify motorists of possible vehicular intersectional conflict. Flashing signals may be used at intersections where emphasis of the stop requirement is needed, but conditions do not justify installing a traffic control signal. They may also be used at intersections where sight distance is severely restricted.

Pedestrian signal indications are traffic signal indications intended for the exclusive purposes of facilitating and controlling pedestrian traffic. Pedestrians are required, by law, to obey vehicular signal indications, unless pedestrian indications are provided.

The function of traffic control systems at railroad-highway grade crossings is to provide appropriate information and sufficient time to permit roadway users to make relatively uncomplicated decisions that will allow them to safely pass over the crossing.

A flashing beacon consists of two or more flashing yellow indications facing in one direction to emphasize a sign message or to warn approaching traffic of a potential hazard. Flashing beacons may be used at obstructions in, or immediately adjacent to, the roadway, or to supplement regulatory or warning signs.

Markings on highways and on private roads open to public travel have important functions in providing guidance and information for the road user. Major marking types include pavement and curb markings, delineators, colored pavements, channelizing devices, and islands. In some cases, markings are used to supplement other traffic control devices such as signs, signals, and other markings.

The functions of highway signs are to provide regulations, warnings, and guidance information for road users. Words, symbols, and arrows are used to convey the messages.

4.4.8.1 Highway Signs

A. Background and Existing Conditions

Highway signs are an integral component of any roadway system, including those in the Park. There are strict federal standards (MUTCD) for the design, placement and use of signs. Signs provide the traveler with information and are defined by their function, which are[14]:

- Regulatory signs that give notice of traffic laws or regulations (e.g. stop, yield, etc.)
- Warning signs give notice of a situation that might not be readily apparent (e.g. deer crossing, curve ahead, etc.)
- Guide signs show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, or cultural information

This section focuses on MUTCD highway signage as well as other appurtenances and markers, such as delineators, reference markers and mowing limit markers. These appurtenances and markers are not part of the MUTCD.

The evolution of Park highway signage has a long history that goes back to the Adirondack Highway Council (AHC). A key distinction of the sign program in the Park is the use of yellow text on brown backgrounds. This color scheme, for non-regulatory Park signs, was first presented in a 1975 AHC study. After extensive efforts by the AHC (lead by the DOT Commissioner), brown signs with yellow text were adopted for use in the Adirondack Park by Federal Highways Administration (FHWA) headquarters (Washington, D.C.). The adoption and approval of this unique signage remains the only exception of its type in the country. In 2010, a revision to the Federal Manual of Uniform Traffic Control Devices (MUTCD) prompted further scrutiny and re-negotiation with FHWA. FHWA upheld the use of the signage color scheme. See the Green Book for a list of sign types, including examples.

The brown and yellow sign standards have become an important identifying and branding element of the Park that is further discussed in Section 5.

Figure 4.32 Adirondack Park's Brown and Yellow Signs.

While the MUTCD exerts regulatory control, DOT does have some discretionary abilities to address some concerns such as signage clutter, consistency, life cycle (aging, fading), maintenance and placement where visual resources may be impacted. Clutter is not only an aesthetic issue, but has been recognized by FHWA as being of concern for safety. Each situation may require separate evaluation.

[14] MUTCD, Section 2A.05 Classification of Signs

Gateway and interpretative signs are discussed in Section 5.

B. Guidance

Green Book; Manual of Uniform Traffic Control Devices (MUTCD); DOT HDM Chapter 11

C. Corridor Management Objectives

- Promote consistent signage patterns and layout throughout the Park

D. Corridor Management Actions

- Update supplemental guidance on specifics such as aesthetic considerations, reducing sign clutter, placement and size of signs (i.e. Adopt a Highway) to minimize impacts from signage on the Park's character and visual resources
- Assess corridor needs related to signs to ensure they are considered when signing projects are progressed
- Update sign guidances to include a method for systematically evaluating, mitigating, and reducing the number of locations with signage concerns
    - All signs that should be brown and yellow that are not currently brown and yellow will be replaced under separate capital and maintenance activities

E. Alternatives Discussion

Under the null alternative, signs would continue to be addressed based on existing guidance (including but not limited to those items listed in B, above), but opportunities to enhance the Adirondack context might be missed.

The preferred alternative ensures that signs and sign placement are highly responsive to the Park context. It would raise the level of sensitivity for the for the quantity and placement of signs, ensuring a consistent approach throughout the Park.

4.4.8.2 DEC Sign Regulations

Reserved for DEC input

ARTICLE 9, TITLE 3 of the Environmental Conservation Law (Section 9-0305 Signs and advertising in Adirondack) states that in order to conserve the natural beauty of the Adirondack and to preserve and regulate it for recreation, pleasure, air, light and enjoyment, to keep it open, safe, clean, and in good order for the welfare of society, and to protect and conserve the investment of the State in forest lands, campsites and other interests in real property in the park, no person shall erect or maintain within the boundaries thereof any advertising sign, advertising structure or device of any kind, except under written permit from the department. The provisions of this

section shall not apply to signs erected or maintained upon a parcel of real property in connection with the principal business or principal businesses conducted thereon and which advertise such business or businesses only, or to signs within the limits of an incorporated village.

4.4.8.3 APSLMP Sign Regulations

The APSLMP provides signage guidelines for travel corridors and Agency regulations provide standards for signs associated with jurisdictional projects on private lands.

Travel Corridors

The APSLMP establishes basic guidelines for the management and use of travel corridors in the Adirondack Park and has identified the need for a comprehensive travel corridor signing policy since its adoption in 1972. The APSLMP called for a comprehensive plan to be developed by the APA, DEC, DOT and other interested state agencies with the objective of achieving uniformity and a high quality of design for all signs within the corridors.

The comprehensive signage plan includes: a visitor information program designed to inform the traveling public while minimizing the need for additional signs along the corridors; wooden park entrance signs; modest signage for landmark and vista locations; special design standards for non-traffic related signage; a plan for the removal of signs visible from the Northway that are not in conformity with private sign standards; and, the development of a standardized means of directing traveling public to public and private facilities in a manner that does not require additional signs on the Northway.

The comprehensive signage plan directed by the APSLMP has not been completed though certain elements have been incorporated into the New York State Scenic Byways Sign Manual (2005) and provide for improved branding of the Park and Byways program. A system of signs that is distinct and recognizable due to a common use of color, logo, material and scale are all important to a branding effort. The consistency of a recognizable brand is important while still allowing for a diversity of expression.

The DEC, DOT, APA and other involved agencies should continue to review the need for, and implement, a comprehensive signage plan as part of future updates to the park-wide Master TCUMP.

Private Lands

The sign standards under § 574.3 and Appendix Q-3 of agency regulations are intended to provide a coordinated, uniform and consistent approach for the review of proposed onsite signs taking into consideration the natural, scenic, aesthetic and open space resources sought to be protected by the statutes the agency administers. The standards govern the review of all onsite private signs associated with projects subject to agency jurisdiction in association with business, commercial, industrial, tourist and other activities. Off-premises signs are regulated by the Adirondack Park sign law, administered by the Department of Environmental Conservation pursuant to ECL 9-0305 and 6 NYCRR Part 195. If an off-premises sign is also subject to

agency jurisdiction, the agency shall apply their standards as well as those applicable under 6 NYCRR Part 195.

4.4.9 **Pedestrian Facilities**

A. Background and Existing Conditions

Pedestrian facilities include crossings, refuge islands, pedestrian signs and signals, information technology systems (ITS), sidewalks and other walkways, curb ramps, public transit loading zones, grade-separation structures and street furniture.

Pedestrian facilities:

- Connect pedestrian traffic generators such as homes, places of work, stores, schools, post offices, libraries, parks, etc.
- Provide transitions between different modes of transportation
- Provide health and recreation opportunities
- Should be planned, designed, operated, and maintained for people of all ages and abilities

Accessible design is fundamental to all pedestrian facilities including those in the Adirondack Park. DOT policy, consistent with federal policy, states that pedestrian facilities are integrated elements of the intermodal transportation system. The accommodation of pedestrians, including persons with disabilities, must be considered early and consistently during the project development process.

Travel corridor shoulders are the most prevalent infrastructure used for pedestrian movement in the Park. Pedestrian generators include community facilities, residential neighborhoods, campgrounds, regional events, parking areas, etc. For example, the Iron Man event, in Lake Placid, is a major economic draw, that is dependent on available shoulders to safely accommodate contestants during the event and trainees over the months leading up to the event.

Figure 4.33 Hikers using Travel Corridor Shoulders.

During the development of the first Green Book (DOT Guidelines for the Adirondack Park), travel corridor shoulders were recognized as integral to pedestrian facilities, with six feet adopted as the standard width goal. At present, shoulder widths along travel corridors in the Park range from one foot to thirteen feet. There are many contributing reasons for these variations. These variations and the challenges related to shoulder widths are discussed in section 4.4.1 Pavement and Shoulders.

In addition to DOT road shoulders, local roads and separated trail systems may contribute to the Park's pedestrian infrastructure. DOT has a primary role to provide pedestrian facilities on its infrastructure, but other stakeholders or partners will need to be identified to cooperate in planning

a robust Park pedestrian network. For example, during the reconstruction of Route 86 between Saranac Lake and Lake Placid, concerns were raised by the public about shoulder conditions along this route. DOT responded by repaving and restriping. The additional foot added to the shoulders was made possible by reducing travel lane widths, which were wider than the Green Book standards of 11 feet adopted in the Park.

There are many other pedestrian facilities in addition to shoulders, such as sidewalks and multi-use trails, which are important components of the Park pedestrian network. See HDM Ch. 18 for additional information.

B. Guidance

DOT HDM Chapter 18,

C. Corridor Management Objectives

- Strive to provide appropriate pedestrian infrastructure in the Park

D. Corridor Management Actions

- Identify a list of stakeholders and potential public/private partnerships for pedestrian facilities
- Assess corridor needs related to pedestrian facilities
- Provide decision-making guidelines for adjacent trail development to ensure consistency with community plans and opportunities
- Review existing features included in DOT's Complete Streets Checklist to determine if additional Adirondack Park specific features are warranted

E. Alternatives Discussion

Under the null alternative, existing guidance (HDM Chapter 18) continues to address pedestrian infrastructure needs on a project-specific basis to provide a safe and multi-modal corridor.

The preferred alternative provides additional information on Park specific criteria for pedestrian infrastructure on rural corridors. The Master TCUMP considers pedestrian infrastructure needs on a corridor-wide basis, independent of any specific DOT action. This information will be used as capital and maintenance activities are progressed and helps to identify gaps along corridors.

4.4.10 **Bicycle Facilities**

A. Background and Existing Conditions

Bicycling is an important transportation mode in New York State. Bicyclists of all ages and capabilities use the State's streets and highways. Statewide air quality, transportation mobility, safety and health goals are supported by encouraging bicycling throughout the State, including the Adirondack Park. FHWA reports that more than 50 percent of bicycle trips in the United States are taken for social/recreational purposes. This number is likely to be higher in the Adirondack Park. Other trip categories include personal or family business, school and church, work, and "other" trips.

It is DOT's policy to consider bicyclists as an integral part of our intermodal transportation system. Project scoping and design approval documents identify opportunities to accommodate bicyclists. Generators include community facilities, residential neighborhoods, campgrounds, parking areas and regional events (e.g. the Iron Man and Annual Black Fly Challenge).

Currently, travel corridor shoulders are the most prevalent bicycle infrastructure in the park. Facilities specifically for bicycling may not be needed on low speed or low volume roadways such as rural roads, as well as on all highways where bicycling is not permitted. On low-speed, low-volume roads, bicyclists share the road. Per NYS Vehicle and Traffic (V&T) law, "*every person riding a bicycle ...upon a roadway shall be granted all of the rights and shall be subject to all of the duties applicable to the driver*". There are other non-motorized transportation modes, such as in-line skating and roller skiing that can share bicycle facilities. See HDM Ch. 17 for additional information.

Figure 4.34 Bicyclist using Travel Corridor Shoulders.

In addition to DOT road shoulders, local roads and separated trail systems contribute to the Park's bicycle infrastructure. For these facilities, other stakeholders or partners will need to be identified to cooperate in planning a robust Adirondack Park bicycle network.

During the development of the first Green Book, travel corridor shoulders were recognized as bicycle facilities, with six feet adopted as the standard width goal. At present, shoulder widths along Park travel corridors range from one foot to thirteen feet. There are many contributing reasons for these variations, which are discussed in section 4.4.1 Pavement and Shoulders.

B. Guidance

HDM Chapter 17; FHWA's manual "Selecting Roadway Design Treatments to Accommodate Bicycles" (Publication No. FHWA-RD-92-073)

C. Corridor Management Objectives

- Strive to provide a network of appropriate bicycle infrastructure (e.g., bike lanes, separate bike paths, or side-street bicycle routes) in the Park

D. Corridor Management Actions

- Identify key travel corridors and/or routes along which biking accommodation is important. Key considerations may include performance criteria, route alternatives, design treatments, barriers, connections and continuity, etc.
- Encourage links between routes in order to make use of routes more effective and attractive to the cyclist
- Promote on-going involvement with stakeholders
- Assess corridor needs related to bicycle facilities

E. Alternatives Discussion

Under the null alternative, existing guidance (HDM Ch. 17 and other items included in B, above) continues to address bicycle infrastructure needs on a project-specific basis to provide a safe and multi-modal corridor.

The preferred alternative provides additional information on Park specific criteria for bicycle infrastructure on rural corridors. The Master TCUMP considers bicycle infrastructure needs on a corridor-wide basis, independent of any specific DOT action. The information generated will be used as capital and maintenance activities are progressed and will help to identify gaps along corridors.

4.5 CORRIDOR TRANSPORTATION SUPPORTING ELEMENTS

4.5.1 Surplus Material and Disposal

A. Background and Existing Conditions

Excess material is often generated as part of transportation maintenance and construction activities, such as ditching, highway reconstruction, drainage cleaning and shoulder trimming. Excess material can be classified as either surplus or waste. Surplus or used materials have value as commodities or as a recyclable material and DOT can reuse the materials. Waste is garbage, refuse, and other discarded materials for which DOT, for a number of reasons, cannot reuse.

The goal is to always find a reuse for excess material in a way that minimizes environmental impacts and maintains or improves park-like character. The handling and disposal of excess material has the potential to enhance transportation safety, reduce cost, and improve the environment. An example of a beneficial reuse would be flattening a slope to eliminate guiderail using surplus material. Reusing or reducing excess material reduces secondary mining impacts, minimizes the introductions and spread of invasive species, and avoids using virgin materials.

Figure 4.35 Typical Surplus Material from Ditching Operations.

The benefit of travel corridor planning is the opportunity to encourage or facilitate a "reuse mindset". This is consistent with DOT's environmental ethic and sustainability policies. Individual travel corridor plans should provide information regarding suitable reuse sites for excess material commonly generated by DOT's construction and maintenance activities where environmental regulations allow.

Millings

Millings are a by-product generated from the removal or *milling* of asphalt pavement as a part of roadway maintenance or projects. Some pavement treatments recycle milling back into the pavement. If this is not done, millings become surplus material. As per an agreement between DOT and APA, millings may be reused as "shoulder backup" without further approvals. Other uses for millings require approval (written or verbal from APA) and may include parking areas and DEC campgrounds. Refer to guidance developed by the DOT and APA (letter found in Attachment H).

B. Guidance

Standard Specifications Section 107-08; Green Book. 6NYCRR Part 360; Highway Design Manual; Environmental Handbook for Transportation Operations, DOT TEM

C. Corridor Management Objectives

- Where feasible, reduce the amount of surplus material and/or develop beneficial reuses for surplus material generated by DOT projects and activities

D. Corridor Management Actions

- Work with appropriate Agencies (APA and DEC) to secure approvals of sites in advance of needs
- Develop BMPs for Surplus Material and disposal
- Develop a hierarchy of reuse options for excess materials. This list should emphasize reuses that benefit DOT, other state agencies and municipalities over other options
- Develop an inventory of beneficial reuse areas (e.g. slope flattening areas, parking areas, etc.)

E. Alternatives Discussion

Under the null alternative, existing guidance (including but not limited to those items listed in B, above) continues to address the handling of surplus material on a case-by-case basis to provide a safe travel corridor.

The preferred alternative supports improved intra- and inter-agency communication for handling surplus material with the added benefit of streamlining the permitting process. The preferred alternative also provides opportunities to identify beneficial re-uses for generated materials rather than surplusing them.

4.5.2 **Borrow Areas**

A. Background and Existing Conditions

Natural resources play an important role in transportation. Sand, gravel, rock (collectively referred to as aggregates) and processed materials such as asphalt are used in construction, reconstruction and ongoing maintenance. Aggregates have specific properties and DOT specifications contain detailed material requirements. The materials are generally supplied by commercial entities (permitted mines), but may also originate from various locations, including nearby sources, commonly referred to as borrow areas.

Borrow areas associated with the initial Adirondack Park roadway construction are still visible in the landscape. These borrow areas were often sited in close proximity to the work being completed. The location of the borrow pit was based on the type of equipment available to construction personnel, lack of infrastructure for moving raw material along with less stringent environmental and material requirements. In some rare circumstances the use of borrow areas can still occur as part of DOT projects, but the use is closely regulated by current mining laws.

Historic borrow area sites that could benefit from restoration (e.g. ecological or aesthetic) may serve as locations to reuse surplus material (Section 5.5.1. Surplus Material). The individual corridor plans will include an inventory and mapping of existing/historic borrow sites to identify opportunities and characteristics.

B. Guidance

DOT Standard Specifications §107-08; Green Book

C. Corridor Management Objectives

- Support the restoration of historic borrow sites

D. Corridor Management Actions

- Look for opportunities to restore historic borrow area sites and support reclamation plans at existing permitted mine sites

E. Alternatives Discussion

Under the null alternative, existing guidance (including but not limited to those items listed in B, above) continues to address borrow area sites on a case-by-case basis to provide a safe travel corridor.

The preferred alternative supports improved intra- and inter-agency communication for handling borrow areas with the added benefit of addressing the aesthetic of restored borrow areas to be consistent with the Adirondack context.

4.5.3 **Staging and Stockpile Areas**

A. Background and Existing Conditions

Staging and stockpile areas for equipment and materials are essential to facilitate the construction and maintenance of the transportation system. These facilities are generally not aesthetically pleasing and may be temporary.

In construction, the size of the staging area will reflect the scope of the project and size of materials and equipment required. For example, a bridge replacement will require a large enough area for equipment circulation and the movement of materials such as existing and replacement bridge beams. A paving project will require a location to stockpile recyclable millings. An emergency project will need locations to process debris. Construction contracts contain provisions for restoring staging and stockpile areas.

Staging areas for DOT Operation activities are typically smaller in scale and may occupy the same location from year to year. The individual corridor management plans will inventory and map these staging area locations.

Staging and stockpile areas can be managed to reduce the potential for negative environmental effects such as visual impacts, invasive species, and water quality by the use of standard specifications, permits and oversight by DOT staff. In some circumstance these impacts may not be avoidable and or not realized fully. To better address the Department's need for staging and stockpile areas as part of the TCUMP process there are also opportunities to raise awareness, develop strategies, and further other TCUMP objectives. Access to public lands and the recreational opportunities is just one of the many possible opportunities. The following is a list of some of the past DOT staging and stockpile areas that have been restored following construction with beneficial outcomes:

- Route 28 Old Forge Landfill improved many environmental factors
- Route 30 Culvert Replacement restored wetlands
- Route 3 Tupper Lake improved Fairgrounds

Figure 4.36 Converted Staging Area with Interpretative Kiosk

B. Guidance

DOT Standard Specifications §107-08; Green Book; DOT CIM

C. Corridor Management Objectives

- Where feasible, reduce the effects of staging and stockpile areas required for DOT projects and activities and develop beneficial reuses for the areas.

D. Corridor Management Actions

- Look for opportunities to close, restore or provide a beneficial reuse for staging and stockpile areas where feasible
- DOT will develop BMPs for all staging and stockpile areas within the Park

E. Alternatives Discussion

Under the null alternative, staging and stockpile areas will continue to be managed consistent with state policies, regulations and guidance (including but not limited to those items listed in B, above).

The preferred alternative supports the development of standards and guidance on the beneficial reuse of staging and stockpile areas in a manner that responds to the Adirondack context.

4.6 SELECTED DESIGN FACTORS

Overview

Several Park planning documents offer design guidance for travel corridors. Travel corridor designers, managers and planners must review and understand these criteria when designing, modifying, managing or planning for travel corridors within the Park.

The Memorandum of Understanding Between the Department of Transportation, The Department of Environmental Conservation and the Adirondack Park Agency Concerning the Development and Implementation of Travel Corridor Unit Management Plans Pursuant to The Adirondack Park State Land Master Plan observes that the state highway corridors in the Adirondack Park *"frame the visitor experience…provide community character…are an important interface with significant natural resources…serve as important connections between communities …and are an essential determinant of the image and entire atmosphere of the Park for many visitors."*[15].

Development in the Adirondack Park (1991) describes aesthetic objectives for Park travel corridors that focus on the preservation and enhancement of the park's "*character and scenic qualities*".[16] The guidance indicates that roadway designers who understand each area's "defining aesthetic elements" are better positioned to design and maintain roadways that are consistent with the APA's vision. Six (6) of the twelve (12) "further guidelines" for travel corridor development elaborated in the document can be directly applied to federal, interstate and state roadways. The updated DAP (2013) recommends that projects within the park should "*avoid or minimize impacts to natural and man-made travel corridors and scenic vistas*".

The APSLMP guidelines for management and use encourage travel corridor managers to endeavor to *"…achieve and maintain a park-like atmosphere with the travel corridors that complements the total Adirondack environment*."[17] The document defines six (6) land use typologies with the Adirondack Park, each with a well defined design and development criteria (see inset). The document also remarks that the extensive state roadway network allocates to the DOT considerable influence over all roadways within the Park. This influence has the potential to have a "*very positive effect on the Park's appearance and atmosphere"*[18].

DOT guidance requires designers to "*make a conscious effort"* to design projects that, "*fit harmoniously into the natural surroundings, with minimal impacts upon the Park ecology and environment*"[19]. Recommended techniques include varying clearing limits, altering back and fore slopes to match existing topography, rounding slopes, avoiding sensitive environments and modifying ditch depths.[20]

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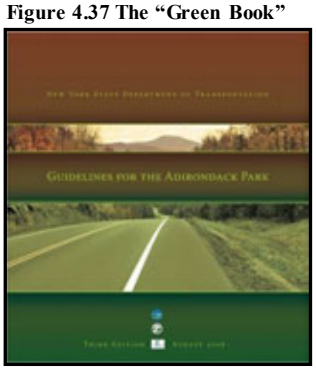
[15] *Memorandum of Understanding Between the DOT, DEC and APA* (2009).
[16] *Development in the Adirondack Park* (APA, 1991)
[17] *Adirondack Park State Land Master Plan* (APA, 2016)
[18] Ibid.
[19] *Guidelines for the Adirondack Park (*1996)
[20] Ibid.

Citing specified design criteria in this section does not preclude the use of engineering judgment to consider alternative engineering values and does not necessarily mean that existing roadways, which were designed and constructed, using different criteria, are either substandard or unsafe. Many existing facilities are adequate to safely and efficiently accommodate current traffic demands and need not be reconstructed solely to meet current design criteria. See DOT's Highway Design Manual for additional design criteria, factors and considerations.

4.6.1 DOT Guidelines for the Adirondack Park (The "Green Book")

Although the Green Book does not establish design criteria, it must be consulted because it provides guidance to consider when designing projects within the Adirondack Park. It emphasizes the importance of establishing continuity of design across the Park (all 3 DOT regions) ensuring that the Park exhibits a unique, identifiable character to road rehabilitation and maintenance.

Figure 4.37 The "Green Book"



When using the guidelines in the Green Book results in a value less desirable than that listed as design criteria in the HDM, a nonstandard or a nonconforming justification must be prepared in accordance with DOT policy. Part of the justification should be a reference to the Green Book guidelines.

4.6.2 Design Speed

Design Speed is a speed used during the project development stage to determine the various geometric design features (e.g. travel lane width, maximum grade, radius of curves). It is considered a core critical design element upon which other design elements are based. The design speed is related to the highway's functional classification and average daily traffic volumes. A selected design speed is not in conflict with providing a highway that has park-like character. Design speed should not be confused with the legally posted speed limit shown on traffic signs.

4.6.3 Design Criteria

These design criteria provide guidance to individuals preparing the plans, profiles and cross sections for construction and reconstruction of the Park's roadways. The intent is to provide a design from a safety, operational, or cost-effectiveness perspective. Design criteria values take into consideration the Department's Context-Sensitive Solution philosophy and strive for outcomes that meet transportation service and safety needs, as well as environmental, scenic, aesthetic, cultural, natural resource, and community needs. AASHTO's *A Guide for Achieving Flexibility in Highway Design*, 2004 contains guidance on selecting proposed values that take into account the context of the project. For additional information on the design criteria see DOT's Highway Design Manual, Chapter 2.

4.6.4 Traffic Volumes

Traffic volume directly affects the geometric features (see HDM Chapter 2) selected for design of highway and bridge projects. The general unit of measure for traffic on a highway is the two-way, average daily traffic (ADT). Refer to DOT's HDM Chapter 5 for additional information on traffic data. As appropriate, individual corridor plans will identify areas of concern related to traffic volumes and changes to corridor features that result from those traffic volumes.

Traffic Volumes may have value in the TCUMP process and could be used to guide recommendations and priorities. (e.g.: Greatest return for investing in branding would be on highest volume roads).

4.6.5 Use of Nonstandard or Nonconforming Features

A nonstandard feature (NSF) exists when the established design criterion for a critical design element is not met. An existing feature may be nonstandard or a nonstandard feature may be created as part of the proposed work. In either case, all nonstandard features to be retained or created when DOT is undertaking a project in a travel corridor must be listed, justified, and approved in accordance with DOT's HDM and Project Development Manual (PDM).

Since many of the values for the critical design elements are dependent on design speed, the selection and justification of a nonstandard design speed is not permitted (per 23 CFR 625).
Instead, the design speed shall be determined in accordance with HDM Section 2.7 and any nonstandard critical design elements individually justified.

In addition to the critical design elements described in HDM Chapter 2, there are other design elements or parameters with recommended values that must be considered. These elements may be important and can have a considerable effect on the project. Any decisions to vary from recommended values or accepted practices for these elements must be explained and documented as nonconforming features in the Project's design approval documents.

Individual TCUMPs will inventory nonstandard features. The reconciliation of nonstandard features, as appropriate, is typically conducted within DOT's capital program. DOT capital projects are reviewed on a project-specific basis and seek to avoid minimize or mitigate impacts to social, economic and environmental resources. For example a bridge having nonstandard shoulder widths would require a larger footprint when replaced likely having potential impacts to the surroundings. The evaluation of the impacts and benefits need to be part of the final evaluation of what actions result.

SECTION 5 – SOCIAL, ECONOMIC AND ENVIRONMENTAL COMPONENTS

5.1 OVERVIEW

This section discusses the social, economic and environmental considerations related to travel corridor planning in the Park. Consistent with all state and federal regulations, it examines the potential positive and negative impacts of transportation activities on these components. It includes recommendations and potential mitigation measures.

Topics are discussed on a Park-wide basis. Where appropriate, implications for individual TCUMPs are presented. The goal is a consistent planning approach, with strategic implementation based on a sound understanding of the depth and breadth of the issues.

5.2 LAND USE

Land use refers to the legal classification (statutory law) of land into use categories. Zoning, or the public regulation of the use of land, is a land use tool used by jurisdictional governments to regulate growth and development.

The federal transportation planning process described under Title 23 USC §§134 and 135 mandates consideration of land use and related issues when making decisions regarding the maintenance, operations and expansion of transportation systems. 23 USC §134(g)(3)(A&B) requires consultation with officials responsible for other types of planning activities that are affected by transportation in the area, or to coordinate its planning process. Transportation plans are required to be developed with due consideration of other related planning activities. 23 USC §135(d)(1) E) requires that transportation planning activities promote consistency between state and local planned growth and economic development patterns (land use).

The integration of land use, development and transportation planning is a best management practice that is consistent with DOT's Smart Growth policy. The relationship between land use and transportation requires an assessment and evaluation of how land use decisions affect the transportation system and its ability to provide access to opportunities, goods, services and other resources. Similarly, transportation decisions can affect the land use development demand, choices and patterns.[21] In the Adirondack Park, land use categories for lands adjacent to state travel corridors originate from a combination of both state and local guidelines.

[21] FHWA (2013) website, *Planning Processes: Land Use and Transportation.*

5.2.1 **Local Land Use**

Local land use in the Park is influenced by jurisdictional governments (through zoning regulations), the APA's private land classification definitions (Section 1.4.4), APA's Agency-approved Local Land Use Programs (ALLUP) and APA's administration of environmental statutes.

APA has broad authority over land use, land development and subdivision, shoreline restrictions, freshwater wetland projects, and regional projects within the Park. In addition, the APA administers the APA Act, the Freshwater Wetlands Act and the Wild, Scenic and Recreational Rivers System Act (on private land). APA permits for regional projects are based on location (critical environmental areas) and use. Permits issued by the APA are Class A, Class B and IC-B. APA's shoreline restrictions establish standards to protect water quality and shoreline character for all private land use areas in the Park. Refer to APA website for additional information, including permit requirements (including §814 obligations).

5.2.2 **Comprehensive Plans and Zoning**

A. Background and Existing Conditions

According to the APA, of the 102 towns/villages within the Park, 63 have zoning, (zoning, zoning and subdivision regulations or ALLUP), 18 have ALLUP and 25 are without zoning, subdivision, site plan review or ALLUP.[22] A description of the APA's ALLUP program and a listing of all Adirondack Park communities with local land use regulations can be obtained by contacting the APA. Individual travel corridor unit management plans will consider, coordinate, be consistent with and, where appropriate, consult each (applicable) community's planning efforts, including comprehensive plans and zoning ordinances. No changes to zoning will be requested as part of any TCUMP. Detailed information on zoning classifications, local or regional special planning districts, Greenway Brownfield Opportunity Areas (BOA), designated state or federal heritage areas, watershed management areas or others will be discussed as needed in individual TCUMPs.

B. Guidance
DOT's Project Development Manual (PDM); APA; DOS

C. Corridor Management Objectives - None Identified

D. Corridor Mangement Actions - None Identified

[22] APA (2016). *Local Land Use Controls in the Adirondack Park.*

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to those items listed in B, above) for land use.

5.3 REGIONAL AND RELATED PLANNING EFFORTS

Regional planning initiatives in the Park are managed by an assortment of federal, state and local government agencies, non-governmental organizations (NGOs) and community based organizations (CBOs). These efforts have direct and indirect impacts on the Park's transportation system and, as a result, implications for TCUMPs. They help to define TCUMP outcomes and reveal partnership opportunities that facilitate shared objectives, goals and outcomes. Understanding these planning efforts ensures that the TCUMPs are consistent with regional planning and take advantage of positive partnerships. It is important to identify/define these connections across all geographic scales, from the entire Park to the local level.

The purpose of this section is to review a selection of federal, state, regional, local and non-governmental planning initiatives within the Adirondack Park. Although all Park planning efforts are relevant and important, only current planning endeavors defined as well-developed, widespread and with the greatest collaborative opportunities, will be considered. Individual TCUMP will address specific aspects of regional planning (previously identified or not) and identify relevant, local (county, city, town and village) planning opportunities.

5.3.1 **State Planning**

5.3.1.1 NYS Smart Growth Public Infrastructure Policy Act (SGPIPA)

Pursuant to Environmental Conservation Law (ECL) Article 6, this TCUMP is compliant with the New York State Smart Growth Public Infrastructure Policy Act (SGPIPA).

To the extent practicable TCUMPs have met the relevant criteria as described in ECL § 6-0107. The Smart Growth Screening Tool was used to assess the project's consistency and alignment with relevant Smart Growth criteria. See Attachment I.

5.3.1.2 New York State Department of Environmental Conservation (DEC)

DEC is the state agency tasked with managing state-owned lands within the Adirondack Park. The DEC, in consultation with the APA, write and implement Unit Management Plans (UMP). These plans assess the natural and physical resources present within a land unit, are consistent with the APSLMP and identify opportunities for public use that are consistent with the Park's land use classifications. State agencies coordinate during the development/updating of these UMPs, and the completed plans should receive due consideration.

5.3.1.3 Adirondack Park Agency (APA)

The APA is the state agency tasked with developing long-range land use plans for both public and private lands within the Park. Relevant regional planning documents produced by the APA include:

- Adirondack Park Agency Rules and Regulations (APARR)
- Adirondack Park State Land Master Plan (APSLMP) (in coordination with the DEC)
- Adirondack Park Land Use and Development Plan (APLUDP)
- Development in the Adirondack Park (DAP)
- Policy on Energy Supply, Conservation and Efficiency in the Adirondack Park
- Adirondack Park Trends Analysis Plan (APTAP)
- Hamlets 3

APA services include economic development planning, economic and demographic data collection and analysis, project feasibility studies, grant assistance, community and strategic planning, project siting and permitting and industry retention and recruitment.

Adirondack Park Trends Analysis Plan[23] –The Plan identifies inventories, determines trends and analyzes the Park's natural, cultural and other resources of special significance. This database aids APA's decision-making process and can be used in the TCUMP process. The Plan identifies four resource categories:

- Economic, fiscal and cultural resources
- Park character resources
- Physical resources
- Biological resources

These categories are intentionally multidisciplinary and encourage the development of partnerships with other agencies, municipalities, researchers, volunteers and other potential partners.

[23] The database is managed by APA's Planning Division.

5.3.1.4 New York State Department of State (DOS)

The DOS is the State's planning agency. It plays an important role in the Governor's Regional Economic Development Council process, makes strategic investments to revitalize communities and spur economic growth and oversees the State's Community Action Agencies (addresses the causes of poverty). The Department provides assistance to counties, cities, towns and villages by providing financial and expert technical assistance.

The DOS partners with community-based organizations, academia, governments including development, natural resource and social service agencies and other stakeholders to advance progressive land use solutions, community-based development and building standards and codes. Programs undertaken by the DOS' Division of Planning include the New York Rising Community Reconstruction Program (NYRCR), Regional Economic Development Council (REDC), Local Waterfront Revitalization Program (LWRP) and Brownfield Opportunity Area (BOA) plans.

5.3.1.5 Empire State Development (ESD)

The mission of Empire State Development (ESD) is to promote a vigorous and growing state economy, encourage business investment and job creation and support diverse, prosperous local economies across New York State. This mission is accomplished through the efficient use of loans, grants, tax credits, real estate development, marketing, and other forms of assistance.

The Park is included in three different ESD regional offices: Mohawk Valley, Capital District and North Country. Each office provides regional economic statistics on labor force (demographics and income), local businesses (principal industries and top ten employers), market access (highways and rail, bus, airport and port services), hospitals, colleges and universities and local utilities.

Recently, the ESD released the Adirondack Park Upper Hudson Recreation Hub grants. The money will be used by Adirondack communities to enhance business development and access to recently acquired state lands. Physical improvements funded by the grant include:

- Trailhead parking and equestrian facilities in the Town of North Hudson along NY Rte. 9
- Development of an equestrian staging area at the trailhead to an existing equestrian trail in the Town of Long Lake
- Improvements to the Town of Minerva campgrounds and Town of Newcomb information centers

In addition, the funds are being used to leverage existing Essex County planning efforts such as the Adirondack Parkwide Recreation Strategies, Hamlets 3 and local community comprehensive plans. Project partners include SUNY ESF, DEC, APA, the Hamilton County Board of Supervisors and the Leading E.D.G.E.

5.3.1.6 State University of New York (SUNY) – Environmental Science and Forestry (ESF) Newcomb Campus – Great South Woods Project – Outdoor Recreation Enhancement in the Adirondacks

The Great South Woods Project (GSW) is a collaborative, community-based planning initiative that focuses on the southern Adirondack Park. The project promotes regional-scale thinking to enhance and diversify public access to the Forest Preserve and Conservation Easement lands. The intent is to develop recreational access and infrastructure – for self –powered and motorized activities – that better connects Adirondack destinations and Adirondack communities. Organizational objectives include:

- Community and stakeholder involvement in a landscape-scale planning process
- Establishment of a new, community-based land-and-water trail and lodging
- Development of front-county areas of state lands for improved access
- Improvements to the protection of back-country areas of state lands while improving the trail systems in these locations

SUNY ESF also operates the Adirondack Ecological Center (AEC). The mission of the AEC, which is part of SUNY ESF, is to understand the Adirondack ecosystem through research and education. Programming (research, meetings and courses) at the AEC is done by ESF faculty or scientists and professionals from other institutions and governmental agencies. AEC programs of note include the Adirondack Long-Term Ecological Monitoring Program (ALTEMP), and the UMP-GIS Consortium. The GIS Consortium was founded to provide the DEC with an efficient method to access and evaluate existing inventory data using GIS. The intent is to create a coordinated approach to land use planning in the Park.

5.3.1.7 Lake Champlain/Adirondack Biosphere –

The Champlain-Adirondack Biosphere Reserve straddles the border of north-central New York and northwestern Vermont. Lake Champlain, the sixth largest lake in the United States, and the Adirondack and Green Mountains are the central features of the biosphere reserve. It includes extensive temperate coniferous and deciduous forests as well as large numbers of lakes, bogs, and freshwater wetlands. The primary goal of the Champlain-Adirondack Biosphere Reserve is to use education, research, and demonstration projects to encourage social and economic vitality and to preserve and improve the environmental health of the region.

Administrative authorities for the Lake Champlain/Adirondack Biosphere include the Adirondack Park Agency; U.S. Department of Agriculture, Forest Service; Vermont Agency of Natural Resources

5.3.1.8 Metropolitan Planning Organization (MPOs)

Metropolitan planning organizations (MPOs) are regional policy organizations that are required in urbanized areas with populations over 50,000. MPOs administer the metropolitan transportation planning requirements of federal highway and transit legislation by developing transportation plans and programs.

Portions of the Adirondack Park fall within the boundaries of two MPOs; the Adirondack-Glens Falls Transportation Council (A/GFTC) and the Herkimer-Oneida Counties Transportation Study (HOCTS). Both organizations facilitate cooperative transportation planning and decision-making process between area municipalities and state and federal agencies and establish a process for the allocation and use of the region's federal highway and transit funds.

- A/GFTC is recognized by the FHWA and Federal Transit Administration (FTA) as the designated MPO for Warren County, Washington County and the Town of Moreau in Saratoga County. The Council consists of two principal working groups, the Technical Advisory Committee (TAC) and the Policy Committee. Planning activities undertaken by the A/GFTC include the *Unified Planning Work Program*, the *Transportation Improvement Program* (TIP), and the *Long Range Plan* (LRP).
- GP&L is the designated MPO for transportation in Herkimer and Oneida Counties. The MPO is the principal decision-making committee of the Herkimer-Oneida Counties Transportation Study (HOCTS). The MPO has final approval and authority on all major transportation decisions, policies and programs developed through HOCTs. HOCTS establishes transportation goals and objectives for the region and develops (with the state) cooperative transportation plans and programs. HOCTS maintains the area's TIP and prepares the Unified Planning Work Program.

5.3.1.9 Regional Economic Development Council (REDC)

The Regional Economic Development Council Initiative (REDC) was created in 2011 to develop long-term strategic plans for economic growth in New York State by Governor Andrew Cuomo. Ten regions across the State develop strategies for regional growth that are community-driven and focus on partnerships between the State, private sector and higher education. Each region focuses on key industry clusters, global exports and investment opportunities that represent the area's individual strength and unique characteristics. The regions compete for funding from the Upstate Revitalization Initiative.

The Adirondack Park is included in three regional councils:

- North Country
- Capital Region
- Mohawk Valley

Grants proposed include the development of a new Medical Fitness Center in Lake Placid, downtown revitalization funds for Saranac Lake, Ticonderoga and Indian Lake, hotel projects on

Schroon Lake and Lake Pleasant, funding for work at Great Camp Sagamore, the PARK Museum and Wild Center, snowmobile trail groomers and work on two byway projects, including the First Wilderness Heritage Corridor and the Lakes-to-Locks Passage.

5.3.1.10 Development Authority of the North Country (DANC)

The Development Authority of the North County (DANC) was created by the New York State legislature (Section 8, Title 29 of the Public Authorities Law) in 1984. As originally conceived, DANC was formed to institute a comprehensive and coordinated program of economic development activities in Jefferson, Lewis and St. Lawrence counties with an emphasis on developing infrastructure and housing for Fort Drum. DANC still provides funding for housing and infrastructure, but also offers technical services, which enhances economic opportunities and promotes the health and well-being of the communities it serves. The Development Authority operates a solid waste management facility, water and wastewater facilities, an open access telecom network, an internet mapping application and administers several business and housing loan programs. DANC has adopted several policies, including the environmental policy and sustainability initiative. The primary environmental goal is to maintain excellence in environmental protection throughout the Authority's service area.

5.3.1.11 Lake George Park Commission

The Lake George Park Commission oversees and manages the resources of the Lake George Park, particularly the lake's water quality. The Commission is conveyed special authority and responsibility by New York State. Its programs fill critical gaps to protect the lake and foster cooperation between public and private entities. Programs include water quality, watershed and scenic protection, lakeshore protection, invasive species prevention and management, stream corridor management and recreational use.

5.3.2 **Local Planning**

The Adirondack Park Agency provides assistance to local governments within the Adirondack Park. The APA website includes guidance for starting a planning program, agency-approved local land use programs (ALLUPs), annual training for planning board and zoning board of appeals members and grant opportunities. Their website includes a listing of all Adirondack Towns and Villages (including links to websites), Adirondack Towns and Villages with comprehensive plans and zoning ordinances and communities that have participated in the APA's ALLUP program. Individual TCUMPs will review local planning documents when making recommendations on travel corridor development.

5.3.3 **Other Organizations and Stakeholder Groups**

A. Background and Existing Conditions

State agencies are responsible to obtain input from the full range of stakeholders affected by their actions. Using that input is key to making transportation decisions that benefit society. The success of DOT's mission depends on identifying and addressing stakeholder needs, in coordination with transportation partners – other government agencies, municipalities, community residents, special interest organizations and facility users.[24]

Other planning organizations and stakeholder groups include non-governmental organizations, alliances, associations, conservancies, and trusts. They are generally categorized as special interest groups that work to promote shared goals among the membership. Non-governmental organizations (NGOs) are any non-profit, voluntary citizens' groups which are organized on a local, national or international level. They provide analysis and expertise and their relationship with offices and agencies differs depending on their goals, venues and mandate.[25] Conservancies and trusts are organizations that work to protect natural resources primarily by acquiring property through donations (cash and real estate). Associations and alliances are partnerships between unique organizations that are formed to progress common goals.

A working list of Stakeholder groups associated with the Adirondack Park can be found in Attachment J. These groups are listed according to their particular focus and major contribution to planning in the Adirondack Park. As appropriate, individual TCUMPs will use Attachment J along with soliciting other stakeholder groups when developing corridor-specific management plans.

B. Guidance

Adirondack Park State Land Master Plan; DEC Unit Management Plans; DOT Guidelines for the Adirondack Park

C. Corridor Management Objectives

- To further regional goals and objectives, ensure that DOT is involved in planning efforts that impact travel corridors

[24] NYSDOT (2004) *Public Involvement Manual – Project Development Manual – Appendix 2.*
[25] NGO Global Network (http://www.ngo.org/ngoinfo/define.html)

D. Corridor Management Actions

- Partner with federal, state and local government agencies, NGOs and community based organizations (CBOs) to define and collaborate on common interests that can be supported by the TCUMP goals and objectives
    - Develop an online library of related planning documents
    - Identify key priorities, needs, lead point-of-contacts and contributors
    - Review formal regional plans and incorporate objectives that can be supported into individual TCUMPs
- Establish an annual open house for planning organizations and stakeholders

E. Alternatives Discussion

Under the null alternative, planning efforts would continue to be considered primarily during the project development process.

Under the preferred alternative, an awareness of key Park-related federal, state and local planning efforts would inform decisions and activities at all levels, including maintenance and operations. Planning tools and resources would be more widely available and planning efforts would support a corridor-wide approach. The planning dialogue would be inclusive and ongoing.

5.4 ACCESS to DEC-MANAGED STATE LANDS / FOREST PRESERVE

A. Background and Existing Conditions

State lands within the Park total approximately 3 million acres most of which are forest preserve. These lands are classified based on their capacity to withstand use and the classification categories are defined in the 2014 Adirondack Park State Land Master Plan (APSLMP). See Section 1.4.4 of this document for additional information.

Travel corridors provide public access to and contribute to the experience of Wildlife Management Areas, Forest Preserve and Conservation Easement lands. Access to these public resources is one of the most important opportunities for travel corridor planning. Forest Preserve/State lands administered by DEC are the single largest land holding adjoining the travel corridors. Historically, the agencies have partnered in establishing most of the existing access points and related facilities (e.g. parking lots, signage, view management, trail heads, etc.). Therefore, it is important that new or expanded access locations, related facilities and operational activities continue to be done collaboratively by consulting the appropriate Unit Management Plan(s) (UMPs) and DEC Land Manager(s).

Not all lands can withstand ever-increasing, unlimited visitor use levels without suffering a loss of character. The challenge for DEC Land Managers is to determine how much use and what type of use the area, or particular sites within it, can withstand before the impacts of use cause serious degradation of the resource. A key DEC Land Manager's responsibility is to ensure that a natural

area's "carrying capacity" is not exceeded while providing for visitor use and benefit. The TCUMP process allows for a dialogue to ensure that DEC's and DOT's goals are fully coordinated.

B. Guidance

NYSDEC Unit Management Plans for various State Lands; Recreation Management Plans for State-Held Easements on Private Lands; APSLMP; MUTCD, DOT HDM

C. Corridor Management Objectives

- Support a park-wide, systematic approach to Forest Preserve/State lands including access, related facilities and operations that is consistent with existing plans (e.g.: UMPs), applicable guidance and carrying capacity considerations.

D. Corridor Management Actions

- Identify locations within the Park where additional access to Forest Preserve/State lands would support public recreation and the objectives of the APSLMP
- Identify public and/or private partners to plan, construct and maintain public access sites and related facilities along the travel corridors
- Identify any alternatives to parking or trailheads available, such as shuttles
- Ensure that parking facilities are appropriately sized according to the state land units capacity to withstand use as provided in DEC adopted unit management plans
- Close or rehabilitate parking areas, roadside parking and/or trailheads as appropriate to support roadside safety and the UMPs for state lands adjacent to travel corridors
- Erect signage alerting motorists to upcoming trailheads or parking area along travel corridors. Work with local government and State Police to establish no-parking zones adjacent to road shoulder parking facilities to reduce unsafe parking as needed

E. Alternatives Discussion

The null alternative would continue to address access needs or requests on a case-by-case basis, but without formalized collaborative guidance, processes or prioritization. This can result in missed opportunities and inefficiencies.

The preferred alternative supports a more comprehensive, corridor-level approach based on safety, user need and the land's capacity to withstand use. This approach aligns access efforts efficiently and cost-effectively across jurisdictional boundaries and ensures that related efforts are also coordinated. It promotes synergy between DEC UMPs and individual TCUMPs.

5.5 REGIONAL AND LOCAL ECONOMIES

A. Background and Existing Conditions

Over 3,600 businesses call the Park home, with firms ranging in size from large manufacturers and resource extraction operations to local retailers and restaurants. Major business sectors in the region include manufacturing, construction, forestry, agriculture, and tourism but the area's unique quality of life attracts a diversity of firms in all segments of the economy (see Attachment L).

The primary economic impacts of the TCUMP will come from direct expenditures for maintenance and capital transportation projects to maintain a quality infrastructure. The travel corridor (ROW) also supports access to businesses and utilities such as broadband. These systems are vital to people living in and visiting the Park.

Municipalities can enhance their attractiveness to business sectors by adopting policies and practices that help make residents and visitors healthier, including "complete streets" (see Section 2.1.2.1) that accommodate all modes of travel (pedestrian, bicycling, automobiles, transit, and freight) as part of hamlet revitalization.[26]

Figure 5.1 Iron Man Event. Contributes millions of dollars annually to the regional economy.

Part of the APA's policy is to support economic development activities, including the creation and retention of jobs within the region in ways that are consistent with the Agency's statutory responsibilities. The APA Economic Services provides technical services for existing and prospective businesses, local and regional economic developers and community planning and development organizations.

B. Guidance

APA

C. Corridor Management Objectives

Provide a sustainable, connected transportation infrastructure that promotes an "Adirondack" quality of life and supports diverse regional and local economies.

D. Corridor Mangement Actions

- Incorporate "complete streets" as part of hamlet place-making
- Develop and use a Park community survey to inform future DOT activities within hamlets or villages (see Attachment M)

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[26] Advancing Economic Opportunities Across the Adirondack Park - November 2014

- Support multi-modal connections between hamlets.
- Provide technical support as requested regarding ongoing efforts for a State Constitutional Amendment on Transportation in the Park that also includes local roads and utilities

E. Alternatives Discussion

There will be no direct economic impact from the Master TCUMP. Economic and other impacts will be addressed as future actions are identified and implemented.

5.6 COMMUNITY COHESION AND CHARACTER

A. Background and Existing Conditions

DOT is committed to providing safe and equitable access to transportation options and has policies to ensure that community, social and economic values are incorporated into transportation decision-making. Examples include CSS, Smart Growth, Complete Streets, Livable Communities and Safe Routes to School (SRTS). Refer to Section 2.1.2.1 for a more in-depth discussion of these programs.

The TCUMP process has the same commitment to incorporating community values and needs. This will be accomplished by first developing a deep understanding of the community and then identifying solutions. Understanding the community relies on a baseline inventory that includes existing transportation, land use, historic resources, architectural character, natural environment, community services, recreation and economic development conditions and needs. Recognizing the connection between Park travel corridors and the communities they traverse is essential.

The process presents collaborative opportunities. Public involvement (section 2.2) and stakeholder partnering (section 3.5) are important components of TCUMPs. Demographic analyses of Adirondack Park communities (conducted by APA, AATV, ANCA, DEC etc.) should be reviewed and incorporated into planning efforts. The goal is a balanced outcome that considers the broader social context.

TCUMP considerations build in additional community factors beyond those outlined in the APSLMP for UMPs. For example, towns/villages are generally not discussed in UMPs, however they are considered to be important factors in travel corridors. There are one hundred and two (102) towns/villages/hamlets in the Park (See Attachment B). Of those approximately 78, or 76% have state highways that function as local "main streets" (see Attachment G). "Main Streets as State Highways" is discussed within the FHWA's CSS program. The program encourages a shift from the traditional perception of state highways as travel corridors to travel corridors as unifying elements that have the potential to strengthen community life and livability.

Other collaborative opportunities include community or park branding (section 5.5.1.3) and regional planning among the Park's communities. Regional planning initiatives pursue mutually beneficial community connections. For example, DEC is currently identifying community "hubs" for existing and future trail systems. An interconnected trail system has the potential to strengthen

the region and promote the state lands and natural resources that attract visitors to the Park. Involved communities may develop new interests in these shared resources, consider them a social and economic benefit and develop complementary amenities. Individual TCUMPs should look for synergistic opportunities including partnerships with other state agencies, local governments and NGOs (see Section 5.4.3).

B. Guidance

DOT Public Involvement Manual; Smart Growth, Complete Streets; Context Sensitive Solutions, FHWA Website, SRTS, APA Website

C. Corridor Management Objectives

- Strive for community-based solutions

D. Corridor Management Actions

- Develop and use a Park community survey to inform future DOT activities within hamlets or villages (see Attachment M)
- Increase stakeholder outreach and opportunities for input.
    - Schedule regular meetings with communities in the Park
- Ensure that CSS principles are applied to state highways that function as local "main streets" in the Park's towns/villages/hamlets

E. Alternatives Discussion

Under both alternatives, community cohesion and character would continue to be addressed (based, in part, on the items included in B, above). Under the preferred alternative, planning tools and resources would be more widely available and planning efforts would support a community-based approach.

5.7 SOCIAL GROUPS BENEFITED OR HARMED

The TCUMP does not directly or indirectly use criteria, methods or practices that discriminate on the basis of race, color, national origin or income level. The TCUMP does not result in adverse effects, and any beneficial effects that occur as a result of the plan are equitably distributed across the Park. Individual TCUMPs will document the location of Environmental Justice (EJ) communities. Capital projects within the Adirondack Park address specific aspects of social groups benefitted or harmed (previously identified or not).

A. Background and Existing Conditions

Social groups benefitted or harmed analyses, also known as "distributive effects analysis" or "outcome equity", examine an action's potential effects on different communities and population groups.[27] This establishes how an action's adverse and/or beneficial effects are distributed and evaluates if that distribution is fair and equitable.[28] Three basic steps are required, including an:

1. Identification of the affected population
2. Estimation of the nature and extent of effects
3. Assessment of the equitability of the effects[29]

Population statistics used to inform a distributed effects analysis originate from the U.S. Census Bureau and include the 2010 decennial census data and the American Community Survey (ACS) estimates (2008 – 2012 and 2014). Processed census data were reported by the APA, Cornell's Program for Applied Demographics (PAD), the 2014 Adirondack Park Regional Assessment, the Environmental Protection Agency's (EPA) EJScreen and other sources. Data geographies include census blocks (2010 Census Data), block groups (2014 ACS) and census tracts (2014 ACS). Because the Park is not as extensively surveyed as major metropolitan areas, a variety of data sets and geographies had to be used. Assumptions used to arrive at the demographic estimate are a function of the geography used. For data sets viewed at the block level, APA's count method employing residential parcels was used. All other data set geographies used PAD's Estimating and Projecting a Non-Standard Geography: The Case of the Adirondack Park.

A.1 General Park Demographics

The APA reports that the Park population, based on 2010 Census data, is 130,137[30]. This number was estimated for counties partially within the Park and includes data from 14,192 census blocks. The 2010 "In-Park County Population" by county is found in Table 5.2.

Table 5.1 2010 Census Population Estimate for Adirondack Park Counties*

County	2010 Census Population Estimate
Clinton	15,315
Essex	39,370
Franklin	16,868
Fulton	10,453
Hamilton	4,836
Herkimer	3,651
Lewis	959
Oneida	277

[27] NCHRP Report 456. (2001).
[28] NCHRP Report 532. (2004).
[29] Ibid.
[30] Adirondack Park Population Trends – 2010 (2011).

Table 5.1 2010 Census Population Estimate for Adirondack Park Counties*

County	2010 Census Population Estimate
Saratoga	7,475
St. Lawrence	3,448
Warren	24,267
Washington	3,218
Total	130,137

*Data taken from APA *"Adirondack Park Population Trends – 2010"*

A.2 Elderly and/or Disabled Persons or Groups

Cornell's Program for Applied Demographics (PAD) estimates from the 2010 Census suggests that there are 22,395 persons aged 65 and older in the Adirondack Park[31]; approximately 17% of the total Adirondack Park population. The EJScreen summary from the 2008-2012 ACS provided a slightly lower estimate of 16%. The rise in the Park's elderly population is a trend documented by the APA and PAD.[32]

Data on disabled persons within the Park were taken from the Census ACS 2014 survey using block group geographies. The data suggests that 13% of the Park population identified themselves as "disabled". Table 5.3 shows the distribution of disabled persons in the Park by county.

Table 5.2 Percentage of Park Population Identified as Disabled for each County

County	Percent (%) of Total Population (within the Adirondack Park) Identified as Disabled
Clinton	13
Essex	14
Franklin	12
Fulton	12
Hamilton	11
Herkimer	12
Lewis	13
Oneida	13
St. Lawrence	18
Saratoga	13
Warren	12
Washington	10

Data taken from 2014 ACS data using block group geographies

[31] Ibid.
[32] APA's *Adirondack Park Population Trends – 2010* (2011), and PAD's *Estimating and Projecting a Non-Standard Geography: The Case of the Adirondack Park*.

A.3 Transit Dependent

Estimates from the Census Bureau (2014 ACS data sets) indicate that private automobile is the most popular means of commuting to work in the Adirondack Park. The data suggests that over 80% of the Park's population drive a personal automobile to work alone (70%) or with others (10%). The growth of carpooling in the park is supported by web-based commuter boards such as iPool2 and Adirondack Regional Rideshare. Mass transit (excluding taxicab) is the fourth most popular commuter mode (0.5%), behind pedestrian (4%), but ahead of bicycle (0.3%) and motorcycle (0.12%). Table 5.4 shows the results of the 2014 ACS (Table B08301 – *Means of Transportation to Work*) for block groups within the Adirondack Park. It is important to note that these estimates provide an indication of the commute modal distribution within the Park, but are not indicative of the number of Park residents that are *exclusively* dependent upon transit.

Table 5.3 Means of Transportation to Work

County	Total Estimated Population	Automobile	Carpool	Public Transit	Motorcycle	Bicycle	Pedestrian	Other	Work @ Home
Clinton	6189	4968	887	22	5	4	86	90	127
Essex	17153	12998	1830	115	28	46	725	486	840
Franklin	7308	5259	634	65	14	63	658	54	546
Fulton	5620	4605	648	27	4	16	110	5	202
Hamilton	1901	1491	156	0	2	9	115	55	73
Herkimer	1857	1436	108	10	0	2	110	3	187
Lewis	1581	1238	200	1	2	2	40	16	81
Oneida	238	186	24	0	0	0	11	0	16
St. Lawrence	1400	1070	169	0	2	3	34	16	106
Saratoga	3137	2534	350	23	0	0	51	5	174
Warren	10370	8338	1016	29	8	29	364	84	503
Washington	1196	1005	121	0	5	0	13	3	49
Totals	57950	45127	6143	292	70	175	2319	81	2905

Data taken from ACS 2014, Table B08301 – Means of Transportation to Work

The Adirondack Park has several public transportation organizations that operate within the Park's more populated towns and villages. While some are seasonal and tourist-based, others function year-round. Refer to Attachment K (Transit Options for the Adirondack Park) for a listing of public transportation to, from and within the Adirondack Park.

A.4 Low Income, Minority and Ethnic Groups (Environmental Justice)

The FHWA Order[33] and USDOT[34] order define a "minority" individual as a person who identifies with one or more of the following categories (1) Black, (2) Hispanic or Latino, (3) Asian American, (4) American Indian or Alaskan Native, or (5) Native Hawaiian and Other Pacific Islander.[35] Ethnicity data was taken from the 2010 Census and EJScreen (2008 – 2012 ACS estimates). The results are presented in Table 5.5. EJScreen data estimated the total minority population within the park to be 8%. 2010 Census data suggests that the Park's minority population comprises 6.3% of the total Park population. Both data sources report the predominant ethnic demographic in the Park as white.

Table 5.4 Ethnicity in the Adirondack Park

Ethnicity	Total Population		Percent (%)	
	2010 Census	2008 – 2012 ACS estimate (EJScreen)	2010 Census	2008 – 2012 ACS estimate (EJScreen)
White	121,924	144,018	93.7	92.0
Black or African American	3,078	3,950	2.36	3.0
American Indian or Alaska Native	396	1,309	0.30	1.0
Asian	614	1,180	0.47	1.0
Native Hawaiian and Other Pacific Islander	25	79	0.02	0
Hispanic or Latino	2,639	3,575	2.02	2.0
Other Race	113	242	0.09	0
Other Plus 2 or more Races	1,363	1,648	1.04	1.0
Total	130,154	156,001	100.00	100.00

The FHWA Order and USDOT Order define a "low-income" individual as a person whose median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines.[36] Poverty guidelines were taken from both the HHS website and the U.S. Census Bureau website and are defined in Table 5.6

Table 5.5 2015 Poverty Guidelines

Size of Family or Household Unit	HHS Poverty Guideline	U.S. Census Bureau Poverty Guidelines
1	$11,770	$12,085
2	$15,930	$15,397
3	$20,090	$18,872
4	$24,250	$24,259

[33] FHWA (2012). *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.*
[34] DOT (2012). *Final DOT Environmental Justice Order.*
[35] FHWA (2015). *Federal Highway Administration Environmental Justice Reference Guide.*
[36] Ibid.

Table 5.5 2015 Poverty Guidelines

Size of Family or Household Unit	HHS Poverty Guideline	U.S. Census Bureau Poverty Guidelines
5	$28,410	$28,729
6	$32,570	$32,512
7	$36,730	$36,971
8	$40,890	$41,017
9 or more	$40,890	$49,079

Data taken from the HHS website 2015 Poverty Guidelines (https://aspe.hhs.gov/2015-poverty-guidelines) and from U.S. Census Bureau Preliminary Estimate of Weighted Average Poverty Thresholds for 2015.

Table 5.6 Households by Household Income

Household Income	No. of Households	Percent
<$15,000	9,385	12
$15,000 - $25,000	8,990	12
$25,000 - $50,000	20,545	26
$50,000 - $75,000	15,748	20
$75,000 +	23,123	30
Total	77,791	100

Data taken from EJScreen 2008 – 2012 ACS estimate.

A.5 Limited English Proficiency

State agencies are required to provide a full array of services to persons who are not proficient in the English language.[37] Limited English proficiency (LEP) populations overlap with "minority (a protected category under Environmental Justice), race, color and national origin" populations and are protected by the Title VI statute.[38] The TCUMP process considers LEP populations and accommodates these population groups during all planning phases.

Utilizing EJ Screen (2008-2012 ACS data), 94% of the Park population speaks English at home. Six percent of the Park population speaks another language at home, with only 1% of the population indicating that they speak English "Not Well" or "Not at All" ("Less than Well"). EJ screen reports that there are 40 languages spoken in the Park. The top four languages in the Park include English (94), Spanish (2%), French (1%) and German (0.43%).

Table 5.7 Population Age 5+ Years by Ability to Speak English

Language	Total Population	Percent (%)
Speak Only English	139,489	94
Non-English At Home	8,627	6
Speak English Very Well	5,842	4
[2]Speak English "Well"	1,567	1
[3]Speak English "Not Well"	992	1

[37] EO26 *Statewide Language Access Policy*
[38] Ibid.

Table 5.7 Population Age 5+ Years by Ability to Speak English

Language	Total Population	Percent (%)
[4]Speak English "Not at All"	226	0.16
[3+4]Speak English "Less than Well"	1,218	1
[2+3+4]Speak English "Less than Very Well"	2,784	2

Data taken from EJScreen using ACS 2008 – 2012 estimates

Updated U.S. Census data (American Community Survey (ACS) 2014 5-year estimates for Age by Language Spoken at Home by Ability to Speak English (Table B16004)) suggests that little has changed in the Park with regard to limited English proficiency. The data for each of the Park's twelve counties are shown in Table 5.9.

Table 5.8 Percent of Adirondack Park Population that Speaks English "Less than Well" by County

County	Total Population Estimate	Speak English "Less than Well"	Percent (%) ("Less than Well") of Total County
Clinton	16,086	166	1.0
Essex	37,418	633	1.7
Franklin	15,892	87	0.55
Fulton	11,998	21	.018
Hamilton	4,627	12	.026
Herkimer	4,176	14	.033
Lewis	3,548	5	0.14
Oneida	575	0	0
St. Lawrence	3,757	10	0.26
Saratoga	6,673	15	0.23
Warren	22,338	87	0.39
Washington	2,575	9	0.36
Total	99,391	1059	1.1

U.S. Census Bureau ACS 2014 5-year data Table B16004

Similar ACS datasets include *Household Language by Household Limited English Speaking Status* (Table B16002). This data set indicates that 0.6% of the Park population have limited English proficiency. This is slightly lower than the EJ Screen estimate and ACS 2014 data table B16004. LEP data for the twelve counties are shown in Table 5.10.

Table 5.9 LEP Population Estimates by County (in-Park population only)

County	No. LEP persons	Percent (%) of County's In-Park Population
Clinton	31	0.54
Essex	110	0.71
Franklin	55	0.79
Fulton	4	0.07
Hamilton	10	0.6
Herkimer	3	0.15
Lewis	0	0
Oneida	0	0
St. Lawrence	0	0

Table 5.9 LEP Population Estimates by County (in-Park population only)

County	No. LEP persons	Percent (%) of County's In-Park Population
Saratoga	5	0.1
Warren	97	1.0
Washington	3	0.27
Total	319	0.6

Both data sets suggest that the highest percentage of limited English speaking populations in the Park can be found in Essex, Clinton and Franklin counties.

A.6 School Districts and Community Facilities

A.6.1 School Districts

In the twelve county Adirondack Park, there are 28 school districts wholly within the Park and 32 school districts divided by the Blue Line (see Table 5.11). Of all currently enrolled K-12 students in Adirondack Park school districts, over 6,500 live within the Park boundary.[39]

Table 5.10 Adirondack Region School Districts

Within the Blue Line	Divided by the Blue Line
Raquette Lake	Adirondack
Piseco	Harrisville
Putnam (K-6)	Galway
Inlet (K-6)	Beaver River
Edinburg (K-6)	Edwards/Knox
Long Lake	Oppenheim/Ephratah
Newcomb	Queensbury
Lake Pleasant (K-6)	Hudson Falls
Minerva	Chateaugay
Wells	Remsen
Keene	Parishville/Hopkinton
Bolton	South Lewis
Schroon Lake	Gloversville
Westport	Whitehall
Crown Point	Johnstown
Willsboro	Wheelerville (K-8)
Elizabethtown/Lewis	Malone
Clifton/Fine	Dolgeville
Johnsburg	Peru
Northville	Poland
North Warren	Fort Ann
Lake Placid	St. Regis Falls

[39] Data on school districts within the Adirondack Park were taken from 2014 *Adirondack Park Regional Assessment.*

Table 5.10 Adirondack Region School Districts

Within the Blue Line	Divided by the Blue Line
Moriah	Northern Adirondack
Warrensburg	Webb
Ticonderoga	Broadalbin/Perth
Tupper Lake	Mayfield
Saranac Lake	Corinth
	Lake George
	Saranac
	Hadley/Luzerne
	Ausable Valley

School districts in the Adirondack region have experienced a 9% decline in enrollment over the past ten years. This number is higher for school districts within the Blue Line. According to the Adirondack Park Regional Assessment:

- 10 districts had losses of 30% or more,
- 21 districts had losses of 20 – 30%,
- 22 districts had losses of 9 – 20% and
- 7 districts had losses of less than 9%.

Two districts, Newcomb and Lake Pleasant, showed enrollment gains.[40]

Travel corridors provide access for these school systems.

A.6.2 Community Facilities

Community Facilities include fire and police protection, EMS, Hospitals, Places of Worship, licensed daycare centers, group homes, nursing homes or retirement communities. Impacts on community facilities will be discussed in capital projects.

B. Guidance

DOT TEM

C. Corridor Management Objectives

- Adopt a standard source for demographic data within the Adirondack Park (e.g. APA, AATV or ANCA). Utilize this source as a reference for future planning activities.

[40] Adirondack Park Regional Assessment (2014).

D. Corridor Management Actions

- Review existing sources for Adirondack Park demographics and seek to identify a source that provides regularly updated and relevant demographic statistics.

E. Alternatives Discussion

Under both alternatives, social groups and community facilities would continue to be addressed using existing federal and state guidance (including but not limited to the DOT TEM).

The preferred alternative will not affect social groups including elderly and disabled, transit-dependent, low-income minority and ethnic and LEP. In addition, the Master TCUMP will not impact community facilities. Potential impacts to social groups and community facilities will be addressed as capital projects are developed.

5.8 SECONDARY AND CUMULATIVE IMPACTS

SEQR regulations require that the scale and context of an action and all its components be considered and the possibility for direct and secondary (indirect) impacts as well as long-term and cumulative impacts be assessed.

Per DEC's SEQR Handbook: "**A secondary (indirect) impact** is one which is reasonably foreseeable, occurs at a later time or at a greater distance, and is likely the result of the action." For instance, improvement of a local road which is an alternative to a major road may lead to increased development of lands along the local road.

Per both the DEC SEQR Handbook and consistent with the Council on Environmental Quality's NEPA guidance: "**Cumulative impacts** occur when multiple actions affect the same resource(s). These impacts can occur when the incremental or increased impacts of an action, or actions, are added to other past, present and reasonably foreseeable future actions. Cumulative impacts can result from a single action or from a number of individually minor but collectively significant actions taking place over a period of time. Cumulative impacts do not have to all be associated with one sponsor or applicant. They may include indirect or secondary impacts, long term impacts and synergistic effects." One example is development of a new boat launch followed by a new trail head, both with parking needs and impacts at the same location.

The SEQR Handbook considers the analysis of both secondary and cumulative analysis to be particularly important in a Final Generic EIS such as this.

- "While primary (direct) impacts are usually too dependent on site-specific conditions to be discussed adequately at the generic level, secondary (indirect) impacts should receive particular attention in a generic EIS" and
- "Similarly, a generic EIS which examines actions that will occur over a long period of time, sequentially, in phases, or under a proposed master plan or program, should emphasize long term over short-term impacts"

Secondary and cumulative impacts analysis for this Final Generic EIS considers the preferred alternative (as defined in §2.3.1) holistically in the broad context of transportation components described in Section 4 and social, economic and environmental factors in Section 5. In a sense, it looks at sustainability of the preferred alternative and anticipated changes in management "trends"[41].

The Preferred alternative is not expected to result in significant negative secondary or cumulative environmental impacts. In fact, it is anticipated that the preferred alternative will foster a trend towards planning, design, construction and operation of Park facilities and infrastructure in a manner that preserves park-like character while enhancing user experience, recreational opportunities and economic development. Specific objectives and actions anticipated to support this trend and yield positive secondary, cumulative and synergistic effects include:

- Develop and deliver training (improved awareness, preparedness)
- Expand/ refine Park-specific guidance (informs planning, design, construction, operations)
- Coordinate permits/ activities across jurisdictions (time, cost savings, unified purpose)
- Expanded use of Technical Work Groups (bring knowledge, experience, focus to the table)
- Maintain scenic and park-like character (an over-arching goal and theme across topics)
- Build/ refine/ maintain asset management databases (helps prioritize needs, track progress)
    - Seek to standardize data sources (e.g. – for Demographic data within the Park)
- Identify Locations for Further Study (efficient allocation of resources, improves focus of future projects and other actions)
- Targeted public outreach (improves responsiveness of individual actions and programs e.g.: before the installation of audible roadway delineators)
- Coordinate Activities with Adjacent Land Uses (important for consistency, indirect effects)
- Apply and/or develop BMPs (improves effectiveness of activities, minimizes impact to physical features e.g.: topsoil conservation; seeding, planting to support native vegetation)
- Develop Libraries of documents and treatments (fosters easy access to information and supports context-sensitive solutions to, e.g.: slope, wall treatments, branding)
- Develop Decision Trees (Provides logical approach to recurring challenges - e.g. for surface water management, invasive species control)
- Address gaps in knowledge regarding ROW--including type of possession – easement, fee, highways-by-use (helps to clarify coordination and outreach needs efficiently)
- Improve understanding of Park natural areas and systems (Helps ensure preservation of park-like character; e.g. waterbody discharge points to improve stormwater management)
- Support needs inventories (e.g.: informs provision for bike/ped facilities, public access)
- Evaluate cost-effectiveness of treatments (to invest funds wisely and efficiently e.g. lighting alternatives).
- Involve agencies and other stakeholders early (improves mutual feedback, public awareness and understanding, responsiveness of projects to all needs)
- Coordinate across jurisdictional boundaries (improves resource sharing, and consistency - e.g. Operations Program)

[41] Texas DOT Cumulative Impact Analysis Guidelines https://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/720-03-gui.pdf

- Clarify roles (more effective coordination, time/ cost savings, ability to respond e.g.: emergency response; lead contacts and contributors for scenic quality)
- Resource planning and allocation (e.g. helps determine skills, systems, and capabilities for emergency response)
- Improve communications with utilities (critical, e.g.: for sound vegetation management)
- Develop programs (e.g.: for the enhancement of public amenities at rest areas).
- Collaborate to set priorities (e.g. recreational corridor crossing needs for bridges)
- Participate in research, pilot programs, studies (e.g.: for habitat connectivity; to find "brown guide rail" alternatives)
- Promote consistency where appropriate (for "green and yellow" signage, interpretive signs)
- Reduce, reuse, recycle (e.g. – surplus material from ditching, pavement reconstruction, etc.)
- Develop community surveys (to inform activities in hamlets or villages) and outreach (e.g. snowmobile infrastructure needs)
- Support user experience (e.g. - educational material on physical features, interpretive signage for Unique Geological Features)
- Support measures to protect critical habitats, foster wildlife movement (e.g. sensitive culvert treatments)
- Develop interagency response plans (address recreational resource, public access needs)

These positive secondary and cumulative effects will result from coordinating and integrating the planning and programming responsibilities of those with a statutory responsibility for travel corridors in partnership with all other stakeholders. This will be based on a "park-wide approach" to understanding the issues and employing improved asset management, training, and best management practices.

While it proposes no specific projects, the Final Generic EIS sets the stage for specific proposals whose environmental impacts, including secondary and cumulative impacts, will be addressed in the route-specific corridor plans.

5.9 VISITOR CONTACT FACILITIES (NON-DOT)

A. Background and Existing Conditions

Throughout the Park, non-DOT visitor centers are present and may be managed by chambers of commerce, municipalities, private entities, non-profit groups or other state agencies. Visitor information is also offered by educational/interpretive centers associated with specific attractions or places of interest (e.g.: Wild Center, Adirondack Ecological Center at Newcomb). Visitor contact facilities offer information (such as trail maps, campground locations) and services (docents, restrooms, etc.). They also provide wayfinding and encourage return or extended visits. DOT and DEC support these efforts through established programs such as: community grants, signage, trail development, highway work permits, capital improvements, etc.

B. Guidance – none identified.

C. Corridor Management Objectives

- Support visitor contact facilities, where possible.

D. Corridor Mangement Actions

- Identify opportunities and incorporate specific recommendations in the individual TCUMPs
- Cultivate partnership opportunities

E. Alternatives Discussion

The null alternative would continue to address the needs of visitor contact facilities (non-DOT) on a case-by-case basis, but without formalized collaborative guidance, processes or prioritization. This can result in missed opportunities and inefficiencies.

The preferred alternative supports a more comprehensive, corridor-level approach to visitor contact facilities based on safety and user need. It promotes synergy between the operators of visitor contact facilities (non-DOT) and state agencies.

5.10 ADIRONDACK PARK BRANDING

A. Background and Existing Conditions

"Branding" originated as a business marketing term, derived from brand names. It involves a strategy to distinguish one's product through logos, packaging and advertising. The intent is boost sales while making customers feel part of something distinctive, special and more likely to purchase a product repeatedly or recommend it to others. The term has come into broader usage to connote a strategy to market any valuable commodity with a clearly identifiable theme,

including communities, tourist destinations and even states (e.g.: "I Love NY"). Branding is an appropriate term to apply to such places, as they compete in the "market" to attract businesses, and tourist dollars. But it is also a means for those who live and work in those destinations to affirm a unique identity and engender pride of place.

The Adirondacks itself is a natural brand in the sense that "…a destination's brand is the visitors' experience and perception of that experience" and "…the unique mix of mountains and lakes and rivers, and the outdoor recreational activities they offer – are the primary driver of visitation to the region." The visitors' experience is directly related to travel corridors.

The challenge for achieving consistent Adirondack region branding is that it is an amalgam of public and private lands, with diverse individual businesses, institutions, hamlets and towns. The need for partnerships is summarized well by this quote:

> *"We should work toward diminishing the lines that splinter the region, so that the Adirondacks within the Blue Line are clearly defined by all state agencies as one region and that we recognize that environmental protection can increase economic vitality. If the current pieces that comprise the Adirondack region's fragmented puzzle were one, complete picture, it would go a long way toward achieving a consolidated, cohesive approach to hamlet revitalization and sustainable tourism."*[42]

Branding Opportunities: In the Adirondack Park, numerous planning efforts have reflected the principles of branding, though the term may not have been overtly used. Most pertinent to travel corridors, The Adirondack Highway Council (AHC) has had a consistent focus on such treatments and activities as brown and yellow gateway signage and the use of rustic rail. Recently, branding as an overt marketing strategy has become widely accepted. Tourism and economic development groups such as Park Futures describe intentions to "Leverage unique historical, cultural and natural features to maintain their own unique character and appeal, while increasing identification with broader Adirondack brands. A unified brand experience makes it clear to visitors that they are in a special place."[43] These efforts are well-recognized and considered significant to the social, economic and environmental integrity of the park.

Figure 5.2 Adirondack Highway Council developed Adirondack Park Entrance Signs.

[42] Kimberly Rielly: "Understanding The Adirondack Brand", *The Adirondack Almanac* (Online) Wednesday, November 16, 2011

[43] PARK futures Workgroup 6 2014 meeting notes: Lani Ulrich *Creating a regional identity*

Figure 5.3 Adirondack Park Brown and Yellow Signage.

Branding can be implemented at many scales and in many iterations, from something as simple as applying a distinctive logo to something as complex as a set of design guidelines for the form and character of a building. Like "context sensitive solutions", branding is an overriding philosophy used appropriately by designers and planners whenever the opportunity presents itself. Branding opportunities for Park travel corridors are realized in the design, detailing and placement of features (many of which are discussed in other sections of this document) such as:

- Guide signs, gateway signs, and community/hamlet gateway treatments
- Identification of the Forest Preserve
- Interpretive signage, kiosks
- Lamp posts, bollards and other site furnishings
- Guiderail treatments (subject to all safety considerations)
- Bridge, wall and parapet treatments – (natural stone or formliners)
- Rest areas, scenic overlooks and safety parking areas
- Visitor contact facilities
- Planting

Currently, there is no uniform guide for branding in the Park. Branding themes and desired characteristics (for branded elements) that emerge include: compatibility, uniformity, consistency (style or "signature"), rustic, harmonious with the natural environment, not detractive, distinctive, welcoming, and unique.[44] The travel corridors provide an opportunity to facilitate the development of a guide for branding and applying these themes. This must be done in collaboration and partnership with Park stakeholders.

5.10.1 **Signage And Branding**

A. Background and Existing Conditions

Adirondack Park signage is an element consistently cited as key to successful branding along travel corridors. Aesthetic considerations have included: the prevention of unwanted signs, using signs to support a distinctive "signature" and controlling sign clutter. The MUTCD recognizes three categories of signs: regulatory, warning and guide. MUTCD regulatory and warning signs (e.g.: stop, yield signs) have strict requirements which, for safety purposes, cannot be varied. These are

[44] References include, APSLMP, The Green Book and various other Adirondack tourist and advocacy websites.

described in §4.4.8.1 *Highway Signs*. Guide signs have slightly more flexibility, offering the opportunity for "branding".

Within the Blue Line, the State has regulated commercial highway [guide] signage since the mid-1960s in a manner similar to the federal Highway Beautification Act and has developed and used a distinctive, yellow-on-brown color scheme for all its own guide signage.

Prevention of Unwanted Signs: ARTICLE 9, TITLE 3 of the Environmental Conservation law (Section 9-0305 Signs and advertising in Adirondack and Catskill parks) states that to preserve the natural beauty of the Adirondack Park for: "…recreation, pleasure, air, light and enjoyment, to keep [it] open, safe, clean, and in good order for the welfare of society, and to protect and conserve the investment of the state in forest lands, campsites and other interests…", no person shall erect or maintain within its boundaries any advertising sign, structure or device of any kind without written permission. This 1972 legislation introduced a measure of aesthetic control critical to Park branding by reducing the proliferation of unwanted signs and set the stage for consistency in signage.

Use of Guide Signs for Branding: Since its inception in 1972, the APSLMP has specifically stressed the importance of signage as a critical component of travel corridor plans. The 1975 Adirondack Highway Council (AHC) study developed a plan to create a unique Park guide sign color scheme. This concept, brown signs with yellow text, was eventually adopted for the Adirondack Park, after extensive efforts by the AHC. These included meetings and approvals with FHWA in Washington, DC. This unique signage remains the only exception of its type in the country. The color scheme and the guide signs to which it can be applied are included in the New York State supplement to the federal MUTCD.

The brown and yellow sign color scheme has become a highly-regarded identifying element contributing to park-like character and sense of place. The scheme is often referred to as an important component of Park branding and has been widely adopted by public and private entities for signs and other features.

Control of Sign Clutter: The clarity of branding efforts can be compromised by visual and informational sign "clutter". Controlling clutter requires raising awareness and coordinated efforts among all public and private stakeholders, to control the placement and use of all types of allowable signage. Clutter is not only an aesthetic issue, but has been recognized by FHWA as being of concern for safety. Individual TCUMPs will need to address these concerns at the local level and in some instances, case-by-case.

Figure 5.4 Sign Clutter.

5.10.2 **Adirondack Park Gateways**

A. Background and Existing Conditions

Adirondack Park gateways are defined as the intersection of the Park boundary (Blue Line) with a state roadway. Park entrances are fundamental to the overall experience and sense of place. There are 33 Park gateways associated with 23 state roads (see Figure 5.2, Figure 5.3 and Table 5.12) in the Adirondack Park. Most locations have signs.

The entrance experience into the Adirondack Park has long been recognized as significant to tourism and valuable in promoting the Adirondack Park experience. Before the 1980 Winter Olympics, the AHC, along with DEC and APA, developed a standard Park entrance sign. The sign is constructed of wood in the shape of the park and traditionally held in place by timbers and a wooden cross arm (see Figure 5.2). DOT maintenance facilities have assisted with sign upgrades by repairing and painting the signs during the winter months.

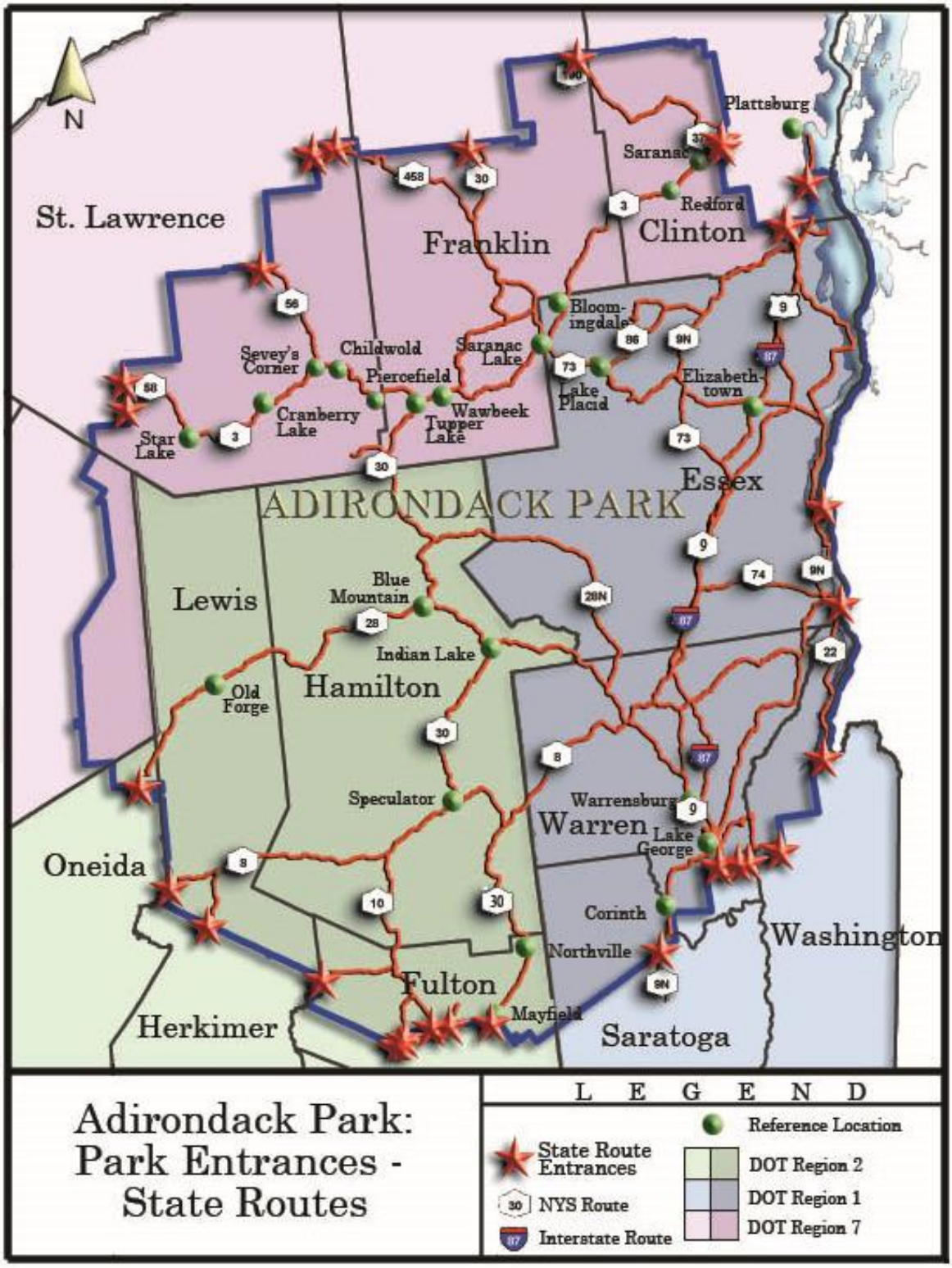
These standard park entrance signs are the signature branding feature at Adirondack Park gateways, signifying the visitor's entrance into the Park. Individual TCUMPs will inventory existing park gateways for conditions, needs and consistency, and provide recommendations as appropriate. Where appropriate, opportunities to enhance gateway treatments will also be discussed.

Figure 5.5 Iconic Adirondack Park Entrance Sign

Table 5.11 Adirondack Park Entrance Locations Along State Roads

County	Roadway	Reference Marker
Clinton	3	3-7108 -1165
	9	9-7114-1064
	22	22-7110-1035
	374	374-7102-1232
	442	442-7101-1038
	I87	87I-7105-1041
Essex	910L	910L-1201-1040
Franklin	374	374-7201-1053
	190	190-7201-1004
	30	30-7209-1555
Fulton	10	10-2104-1060
	29	29-2102-1160
	10A	10A-2101-1017
	29A	29A-2102-1189
	309	309-2101-2032
	30	30-2105-1101
Herkimer	365	365-2302-1000
	8	8-2308-1073
	29A	29A-2301-1054
Oneida	28	28-2607-1238
St. Lawrence	11B	11B-7501-1168
	11B	11B-7501-1136
	72	72-7501-1149
	56	56-7501-1156
	58	58-7501-1041
	3	3-7504-1080
Saratoga	9N	9N-1501-2119
Warren	9	9-1710-2049
	I87	87I-1710-1085
	149	149-1701-1031
	9L	9L-1701-1048
Washington	149	149-1802-1035
	22	22-1808-1547

Figure 5.6 Adirondack Park: Park Entrances - State Routes



B. Guidance

APA; Green Book.

C. Corridor Management Objectives [for all of branding]

- Support branding for travel corridors to enhance park-like character and sense of place

D. Corridor Management Actions

- Identify and work with stakeholders to:
    - Develop a library of branding standards and treatments
    - Conduct or initiate branding research
    - Provide technical support to communities in developing and implementing consistent branding standards and treatment
- Consider branding opportunities at scenic vistas, overlooks and other visually important areas
- Ensure that the brown and yellow color scheme and applicable standards are implemented appropriately and consistently throughout the Park
- Develop and include branding treatments in capital projects, as appropriate

E. Alternatives Discussion

The null alternative would continue to address branding requests on a case-by-case basis (relying on but not limited to, those items listed in B, above), but without formalized collaborative guidance, processes or prioritization. This can result in missed opportunities enhance park-like character and sense of place .

The preferred alternative develops a state highway branding "program" that supports a more comprehensive approach for branding the Park's travel corridors.

5.11 INTERPRETATIVE SIGNAGE

A. Background and Existing Conditions

Interpretive signs are used to communicate information that can be instructive (location maps), educational (historical site or event), or explanatory (natural regeneration areas). Interpretive signs are distinct from traffic signs, which are placed by an authority, public body, or official(s) having proper jurisdiction, to regulate, warn or guide all users of a transportation system, both motorized and non-motorized.

Interpretive signs are critical to user experience. DOT, APA and DEC have each developed general guidelines for the structural form, sign placement, materials and color and text formats for interpretive signs, displays and kiosks placed within the Park. Variations in these guidelines can lead to inconsistencies in the design, and placement of these elements. DOT may provide and install interpretive signs, panels or kiosks as part of DOT maintenance and capital projects (e.g.: as "betterments") . The funding for "betterment" signs may originate from other state agencies, local governments or NGOs. Community groups or other organizations can also install interpretive signs on state highway ROW with DOT authorization.

Figure 5.7 Interpretative Sign. Near Route 86 in the Cascade Lakes area.

Roadside parking areas in the Park are under various state or local jurisdictions. These areas provide opportunities to interpret environmental, historic, scenic, recreational and cultural information. Signs, panels or kiosks at parking areas should be located to avoid detracting from the natural setting or a prominent viewing point. In addition, these interpretive signs, panels or kiosks should never create sight distance restriction for uses of the adjacent State highway facility and shall only be installed at locations which allow the motorist to safely exit their vehicle.

Figure 5.8 Interpretative Kiosk. On Route 28 east of Indian Lake.

Cultural and natural resources surround the Park's travel corridors. Incorporating interpretative information signage along the corridors benefits the Park and Adirondack communities and provides unique educational opportunities. Consistency in the design of interpretive signs within the Adirondack Park contributes to branding (community or Park-wide) and ensures uniformity and high aesthetic quality. Public outreach during the travel corridor planning process suggests that the public is receptive to and supports the installation of interpretative signs. Existing interpretative signs need to be cataloged and inspected for updating and repair.

B. Guidance Documents

APSLMP, NYS Supplement to the Manual of Uniform Traffic Control Devices (MUTCD); New York State Scenic Byways Sign Manual (HDM Chapter 11, Appendix A).

C. Corridor Management Objectives

- Have a coordinated and consistent interpretative sign program for the Park and the communities within

D. Corridor Management Actions

- Identify interpretational signage opportunities along the travel corridors
- Strive to achieve interpretive sign programs that are consistent and synergistic
- Establish partnerships with state agencies, municipalities, NGOs and other stakeholders for interpretative signage along the Park's travel corridors

E. Alternatives Discussion

The null alternative would continue to address informational signage requests on a case-by-case basis (relying on, but not limited to those items listed in B, above). However, the goal of providing consistency for all interpretative signs in the Park's travel corridors may not be realized.

The preferred alternative develops a broad-based interpretative sign "program" that benefits the Park and Adirondack communities and provides unique educational opportunities. Such a program contributes to a larger, Park-wide branding effort that ensures quality and consistency.

5.12 PHYSICAL FEATURES (Climate, Geology, Soils, Hydrology)

A. Background and Existing Conditions

Climate: In the Adirondack Park, mean annual precipitation ranges from 35 to 50 inches; mean annual temperature ranges from 40 to 45 degrees F; and the mean annual frost-free days ranges from 90 to 130 days. Elevation ranges from approximately 600 to 5,300 feet above sea level.

Climate change is an emerging issue in the Park. In the Adirondacks, climate change related impacts include changes in:

- the movement of wildlife to find forage and nesting sites,
- plant species mix,
- hydrology, including increased flooding, etc.

Though there may be limited mitigation measures to climate change impacts on a regional basis, it is important to promote public awareness.

Geology: Topographically, the Adirondacks are divided into the Central Highlands and Southeast Lowlands, with the Highlands largely controlled by highly erosion resistant bedrock and the Lowlands largely controlled by weakly resistant bedrock. Throughout the Park, the type of and depth to bedrock influences surface and subsurface characteristics, including slope, soil type, and depth to groundwater.45

Figure 5.9 Geological Features. Bedrock and soils, provide information relevant to issues such as utilities, recreation and tourism.

The Adirondack region has a diversity of rocks and minerals, and geologic features. At some localities, these geologic features such as the high peaks are of vital economic importance. They attract visitors to the Park.

The Adirondack Mountains are very different in shape and content from other mountain systems. Unlike elongated ranges like the Rockies and the Appalachians, the Adirondacks form a circular uplifted dome, 160 miles wide and 1 mile high with 46 separate mountain peaks from 3,820 to 5,344 feet high, the highest of which is Mt. Marcy. These mountains are listed in Attachment A. The rocks forming the Adirondack region are millions of years old. The dome was formed underneath 15 miles of overlying rock and gradually uplifted over the eons and is still uplifting two to three millimeters per year. The rock itself is gneiss, a granitic rock that resists erosion and does not store water. It provides little or no buffering capacity for precipitation and runoff.

Figure 5.10 Ice Meadows along the Hudson River. These meadows have been scoured for thousands of years.

The Adirondack Mountains were impacted in the past by glacial movement and ice formation. As the glacier moved over the land surface, it scraped, dislodged and carried with it rock fragments and fine particles of sand and silt. When the glacier finally melted, these rock materials were deposited on ground surfaces forming glaciated land forms such as eskers, kames, moraines, erratics, outwash plains and cirques.

Soil: The soil composition along Adirondacks travel corridors is vastly different from the bedrock beneath. The soils are mostly derived from glacial deposits that

[45] New York State Adirondack Park Agency ;Development in the Adirondack Park (DAP), Revised 2013
An Advisory Publication for the Design and Review of Projects in the Adirondack Park

have been moved and deposited as glaciers advanced and retreated. Soils vary widely in degree of slope, depth to bedrock, stoniness and drainage. General meso-soil maps for the planning area are available from the Adirondack Park Agency. These depict broad soil associations relative to a particular landscape type. The maps portray soil associations as patterns of similar soils based on their properties and constituents and will provide base information for individual TCUMPs. The soils and associated ecosystems which predominate along Adirondack travel corridors are particularly vulnerable to damage by traffic, construction, and from human activities. Additional soil investigations will be carried out as needed for transportation activities or projects.

Hydrology: The Adirondack Park has abundant fresh water, both above and below ground. The Park contains the state's highest mountain peaks and the headwaters of five major drainage basins: Lake Champlain and the Hudson, Black, St. Lawrence, and Mohawk Rivers. In total, the waters of the Adirondack region include 2,800 lakes and ponds, 1,500 miles of rivers, and an estimated 30,000 miles of brooks and streams which account for approximately 15% of the "Adirondack State Park" jurisdictional area. This huge base of water resources is threatened by acid rain, mercury contamination, aquatic invasive species, climate change, and water diversions.

Corridor Unit Management Plans rely on base information regarding climate, soils, geology, and hydrology to identify potential opportunities to maintain/ improve park-like character and the transportation system. Geology and soils would be important, for instance, to a decision on whether or not to convert above-ground utilities to underground.

B. Guidance

USDA Soil Surveys; APA Soil meso-data; USGS subsurface geology mapping

C. Corridor Management Objectives

- Ensure that transportation activities preserve physical features where possible along travel corridors in order to retain park-like character and support a natural-looking corridor.

D. Corridor Mangement Actions

- Develop BMPs for all transportation activities to minimize impact to physical features (e.g.: topsoil conservation, retention of stormwater for site infiltration)
- Develop mechanisms to support user experience such as educational material and interpretive signage for physical features

E. Alternatives Discussion

Under the null alternative, activities will continue to meet statewide goals and standards based on current guidance documents (including but not limited to those items listed in B, above).

The preferred alternative provides additional opportunities to respond to the Adirondack context and develop user experience of the physical features that create park-like character, attract visitors to the park and benefit the regional economy. An increased awareness of the Park's physical

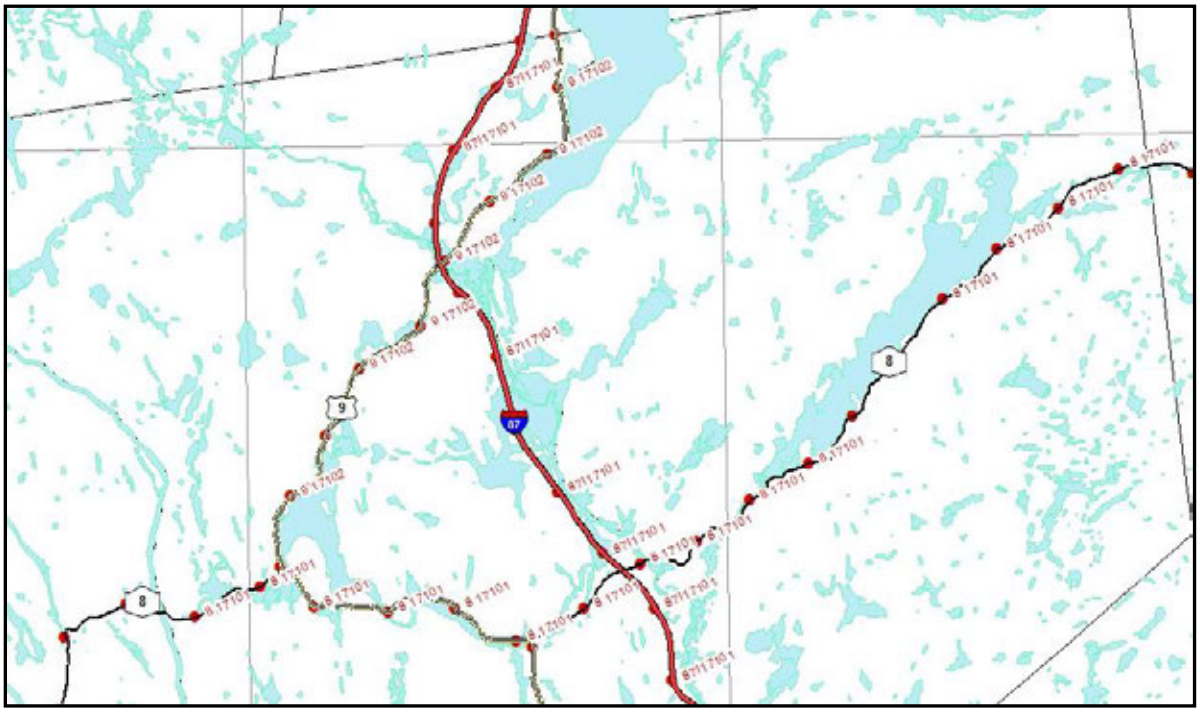
features informs decisions and activities at all levels, including corridor planning, design, maintenance and operations.

5.13 WETLAND SYSTEMS

A. Background and Existing Conditions

Freshwater wetlands are an integral part of the unique scenic, aesthetic, wildlife, recreational, open space, ecological and natural resources of the Adirondack Park. In their capacity to receive, store, and slowly release rainwater and melt-water, wetlands protect water resources by stabilizing water flow and minimizing erosion and sedimentation. Many natural and anthropomorphic pollutants are removed from water entering wetland areas. Also, because they constitute one of the most productive habitats for fish and wildlife, wetlands afford abundant opportunities for fishing, hunting, trapping, and wildlife observation. The wetlands serve as important habitats for a number of wildlife species listed as threatened or species of special concern which may be present. For visitors, the expanses of open space that wetlands provide offer a visual contrast to the heavily forested character prevalent in most of the Park.

Figure 5.11 Wetland Mapping in the Adirondack Park. The blue represents water and wetlands. By area, the Adirondack Park has more water and wetlands than any other geographic region in the State. Thus, DOT activities are more likely to interface with these types of natural resources in the Park.



New York has an estimated 2.4 million acres of wetlands. The wettest ecological regions are the Lake Plains and the Adirondacks, which together have about 74% of the wetlands in New York

State. The Adirondacks are unique in that the natural wetland systems are almost entirely intact when compared to systems in other state ecological zones.

Table 5.12 Characteristics and Distribution of Wetlands in New York

	Ecological Zones					State Totals
	Lake Plains	Appalachian Highlands	Adirondacks	Hudson Valley	Coastal Lowlands	
Estimated acres of wetland in this ecoregion	883,000	423,000	904,000	170,000	21,000	2,401,000
% of area in wetland in this ecoregion	12.3	3.6	12.4	4.4	2.3	7.2
% of total number of wetlands in New York state that fall within this ecoregion	36.8	17.6	37.6	7.1	0.9	
% of wetlands that are forested covertype	75.4	57.5	72	61.9	65.3	69.9
% of wetlands that are shrub/scrub covertype	14.2	22.4	13.8	20.9	3.1	15.9
% of wetlands that are emergent covertype	7.9	11.8	9.4	11.6	8.3	9.1
% of wetlands that are open water covertype	3.3	8.3	4.7	5.6	23.3	5.1

Transportation-related activities in wetlands and their buffer areas are reviewed by qualified DOT staff and may be subject to federal and state regulations. Beyond permit requirements, the individual TCUMPs should determine if the transportation infrastructure has the potential to influence wetland systems and if either agency (DOT, DEC or APA) can employ Corridor Management Actions. Examples include; stormwater diversion into wetlands, wetland sedimentation, road salt for winter snow-melt, and fragmentation of wetlands by the road bed, and hydrological modifications.

For guidance regarding maintenance ditch cleaning, culvert cleaning, bank stabilization/scour protection activities and associated cofferdam use, refer to the DOT Environmental Handbook for Transportation Operations. Also see guidelines for maintenance operations in the Adirondack Park found in TEM Section 6.2 – DOT Guidelines for the Adirondack Park.

B. Guidance

Green Book; DOT Environmental Handbook for Transportation Operations; DOT TEM; DOT HDM Chapter 8

C. Corridor Management Objectives

- Strive to preserve and improve wetland benefits, where practicable, along Park travel corridors

D. Corridor Mangement Actions

- Develop best management practices to avoid and minimize transportation-related impacts
- Provide technical support for development of a wetland banking agreement for the Park.
- Support and expand partnerships; evaluate additional streamlining measures for wetland permitting

E. Alternatives Discussion

Under the null alternative, activities will continue to meet state and federal regulatory standards and guidance (including but not limited to those items listed in B, above).

The preferred alternative provides additional opportunities to improve wetland benefits (stormwater management, pollution removal, habitat, recreation, visitor experience), raise institutional awareness, enhance park-like character and increase efficiencies during corridor planning, design, maintenance and operations.

5.14 SURFACE WATER RESOURCES (STREAMS AND LAKES)

A. Background and Existing Conditions

Bridges and culverts that carry the travel corridors across surface waters and where transportation infrastructure is immediately adjacent to surface waters may affect aesthetics, habitat connectivity and ecological integrity. Surface water considerations are part of multiple sections of this document. See related topics below.

Lakes in the Adirondack were formed by the erosive force of ancient glaciers, support aquatic life, and are highly valued for their recreational, aesthetic, scenic, and water-supply qualities. Adirondack lake ecosystems are fragile; they can undergo rapid environmental changes. The Adirondack lakes are exposed to external effects from the atmosphere (acid rain and mercury deposition). Human activities may further accelerate the rate of these environmental changes. As a result, their watershed and groundwater are monitored by various federal, state and local

agencies. Travel corridors have a close relationship to streams and lakes. Refer to Section 1.5.1 for additional information.

Reservoirs or impoundments are human-made lakes that are designed to control the flow and distribution of surface water and in many ways performs the same functions as a lake. Most reservoirs are constructed in stream valleys; therefore, they have some characteristics both of streams and lakes. Like streams, reservoirs can have widely fluctuating levels, bank storage can be significant, and they commonly have a continuous flushing of water through them. Like lakes, reservoirs can have loss of water by evaporation, cycling of chemical and biological materials within their waters, and biogeochemical exchanges of solutes with organic sediments. In general, reservoirs serve the same recreational functions as a natural lake and are impacted by the same human caused environmental factors.

Figure 5.12 A View of Brant Lake from Route 8

Individual TCUMP will discuss transportation activities potential affects on lake/impoundment ecosystems, the following are some factors to consider:

- Climate: Temperature, wind, precipitation and solar radiation all affect hydrologic and chemical characteristics, and indirectly affect the composition of the biological community.
- Atmospheric inputs (direct and indirect): Precipitation, such as acid rain, and dry particles can be sources of contamination.
- Bedrock and soils: The soil type affects runoff and erosion potential. The physical characteristics of the bedrock determine the extent, nature, and quality of groundwater inflows and outflows.
- Physiography: Surface-water runoff and the nature of chemicals and sediments are affected by the characteristics of the watershed, including surface topography, upstream waterbodies, land use, altitude and the watershed's slope.
- Land use: The type, location, extent, and history of land cover/land use (such as agriculture, rural, and urban developed areas) including transportation facilities.
- Morphology and biochemistry: Size, shape, and depth characteristics are critical in determining currents and mixing of the waters, as well as its thermal and chemical stratification characteristics.

Lakes and impoundments are subject to a variety of environmental problems that travel corridors may exacerbate.

- Algal blooms
- Sedimentation/turbidity
- Oxygen depletion
- Excessive growth of aquatic plants
- Water-level changes
- Introduction of invasive species

Streams, rivers, and creeks, are all names for water flowing on the Earth's surface and these names are very much interchangeable. However, typically creeks are the smallest of the three, with streams being in the middle, and rivers being the largest. The area of land that collects precipitation is a watershed or drainage basin. The amount of precipitation that becomes overland flow or infiltrates into the soil depends on a number of factors, including soil depth and porosity, percent of impervious cover, and existing degree of soil saturation. In undeveloped watersheds with vegetated, permeable soils most precipitation normally soaks into the ground to recharge surficial and groundwater aquifers, some of which can then seep back into riverbeds. Some amount of precipitation that infiltrates into the soil is also taken up by plants and evapotranspired. In watersheds with thin soils or a high percentage of impervious surface, or where soils are already saturated or rainfall rates are especially intense, much precipitation may run off the surface as overland flow directly into stream channels. In addition, streams, like lakes and impoundments, are highly valued for their recreational, aesthetic, scenic, and water-supply qualities

Individual TCUMP will discuss transportation activities potential affects on riparian ecosystems, the following are some factors to consider:

- Runoff from rainfall and snowmelt
- Changes in vegetative cover
- Groundwater
- Sedimentation
- Stream channelization
- Restoration of wetlands
- Land-use changes
- Stormwater outfalls

Many of the Adirondack streams/stream segments have been protected by the NYS Wild and Scenic Rivers Act. Refer to 5.6.5 for additional information.

B. Guidance

DOT TEM 4.4.1 Surface Waters, Including Wetlands; DOT TEM 4.4.3 Wild, Scenic and Recreational Rivers; Green Book

C. Corridor Management Objectives

- Strive to improve aquatic habitat and water quality
- Manage surface water resources in a manner that retains ecological integrity and park-like character

D. Corridor Management Actions

- Develop and adopt best management practices for transportation activities that have an affect on surface waters and related resources
- Develop a "decision tree" for the management of surface water resources related to travel corridors

Figure 5.13 Fly Fishing Area along Route 86.

E. Alternatives Discussion

Under the null alternative, activities will continue to meet state and federal regulatory standards and guidance (including but not limited to those items listed in B, above).

The preferred alternative provides additional opportunities to conserve, protect and improve surface waters and their benefits (e.g. aesthetic, habitat connectivity, recreation, visitor experience) raise institutional awareness and increase efficiencies during corridor planning, design, maintenance and operations.

5.15 GROUNDWATER RESOURCES (AQUIFERS)

A. Background and Existing Conditions

When rain falls to the ground some seeps into the ground, moves downward through empty spaces r cracks in the soil, sand, or rocks until it reaches a layer of impermeable rock. The water fills the empty spaces and cracks above that layer. The level of water in the soil, sand, or rocks is called the water table and the water that fills the empty spaces and cracks is called groundwater.

Groundwater is an important natural resource. Groundwater provides public water supply, domestic wells and is a source of some irrigation water. It is a principal reserve of fresh-water, contributes to the flow in surface waters and contributes to wetland habitats.

Water seeping down from the land surface adds to the groundwater and is called recharge water. Groundwater is recharged from rain water and snowmelt or from water that percolates from other sources.

A review of the EPA-designated Sole Source Aquifer Areas Federal Register Notices, Maps, and Fact Sheets indicates that no Sole Source Aquifers exist in the Adirondack Park. No federal review and/or approvals are required pursuant to Section 1424(e) of the Safe Drinking Water Act.

DEC aquifer GIS data files indicate that there are no identified Primary Water Supply or Principal Aquifer Areas within the Adirondack Park. No further investigation for DEC designated aquifers is required.

Unregulated aquifers in the Adirondack Park are made up of consolidated rocks of sedimentary, igneous, and metamorphic origin. The aquifers sometimes consist of carbonate rocks (primarily limestone, dolomite, and marble) or sandstone (including some associated conglomerate, siltstone, and shale). Some others times it may consist of crystalline rocks of igneous or metamorphic origins. These consolidated rocks yield water primarily from bedding planes, fractures, joints, and faults, rather than from intergranular pores. Carbonate rocks generally yield more water than other types of consolidated rocks because carbonate rocks are subject to dissolution by slightly acidic groundwater. Dissolution along openings, such as bedding planes, fractures, and joints, has enlarged these openings and increased the permeability of the carbonate rocks regardless of whether they are limestone and dolomite or have been metamorphosed to marble.

The chemical quality of the water in each of the major aquifers and aquifer systems of the Adirondacks generally is suitable for most uses, including human consumption. Water quality, however, differs among aquifers as a result of natural conditions and human activities that, locally, might prevent the use or require treatment of the water.

Transportation activities and projects have the potential to influence groundwater. For example, wetlands that occupy depressions in the land surface are vulnerable to transportation activities that affect groundwater such as drainage, ground compaction, road embankment, and hydrologic changes.

Groundwater quality is the result of dissolved material in the water and is primarily related to the (1) mineral composition and solubility of the rocks that make up the aquifer, (2) time that the water is in contact with the rock, (3) surface area of rock exposed to the water, (4) chemistry of water moving into the aquifer from other aquifers, and (5) introduction or induced movement of contaminants. Each of these factors influences groundwater quality.

Crystalline-rock aquifers consist of almost insoluble igneous and metamorphic rock. These aquifers are characterized by shallow fracture systems that store and transmit water. The shallow fracture systems with small surface areas and rapid water movement along short flow paths in crystalline aquifers only allow minimal dissolution of the rocks. Water in crystalline-rock aquifers is similar in quality to water in aquifers of the surficial aquifer system. Locally, excessive concentrations of iron, manganese, and sulfate are present. The susceptibility of the crystalline-rock aquifers to contamination from the land surface is greatest where they are exposed at the land surface.

B. Guidance

DOT TEM 4.4.7 Aquifers, Wells and Reserviors; Green Book; DOT Environmental Handbook for Transportation Operations; EPA-designated Sole Source Aquifer Areas Federal Register Notices, Maps, and Fact Sheets

C. Corridor Management Objectives

- Avoid and reduce impacts on groundwater

D. Corridor Management Actions

- Develop and adopt best management practices for transportation activities that have an affect on groundwater

E. Alternatives Discussion

Under the null alternative, activities will continue to meet state and federal regulatory standards and guidance (including but not limited to those items listed in B, above).

The preferred alternative provides additional opportunities to conserve, protect and improve groundwater resources and their benefits (e.g.: public water supply, wells, water quality; aquatic systems) and raise institutional awareness during corridor planning, design, maintenance and operations.

5.17 FLOOD PLAINS AND FLOODWAYS

A. Background and Existing Conditions

A floodplain is an area of land adjacent to a stream or river that stretches from the banks of its channel to the base of the enclosing valley walls and experiences flooding during periods of high discharge. It includes the floodway, which consists of the active stream channel and adjacent areas that actively carry flood flows downstream, and the flood fringe, which are areas inundated by the flood, but which do not experience a strong current. In other words, a floodplain is an area near a river or a stream which floods when the water level reaches flood stage.

Development in these floodplains and floodways, including transportation activities, is regulated to ensure that there are no increases in upstream flood elevations. Encroachments are activities or construction within floodplains and floodways including fill, new construction, substantial improvements, and other development. It must be demonstrated through hydrologic and hydraulic analyses that the proposed encroachment would not result in any increase in flood levels.

In the Adirondack Park, most streams fall steeply through narrow v-shaped channels in the shallow soil and bedrock, therefore, floodplains and floodways in the Adirondack Park tend to be narrow, with reduced capacity for water storage. Transportation facilities have the potential to influence the floodplain and therefore increase water velocity during a flood event.

It is DOT policy to address floodplain and floodway concerns resulting from transportation activities by complying with applicable state and federal regulations. In addition DOT, DEC and APA work to strengthen New York's preparedness for climate change, in accordance with the Community Risk and Resiliency Act (CRRA). Under CRRA state agencies take into account future physical climate risks from storm surges, sea-level rise or flooding in their decision making. The Master TCUMP does not include specified facility-siting, permitting and funding programs included in CRRA.

The TCUMP planning process does not impact floodplains or floodways. Nor does it increase future physical climate risks from storm surges, sea-level rise or flooding.

B. Guidance

River and Harbors Act of 1899; Executive Order 11988: Floodplain Management; DOT TEM 4.4.5 Floodplains

C. Management Objectives - None identified

D. Corridor Management Actions - None identified

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to those items listed in B, above) for floodplain management.

5.17 COASTAL RESOURCES/CONSISTENCY

A. Background and Existing Conditions

The State Coastal Management Program was developed under the federal Coastal Zone Management (CZM) Act of 1972. This act established the national policy to preserve, protect, develop and, where possible, restore or enhance the resources of the Nation's coastal zone. The specific waterbodies included in the Coastal Area and designated inland waterways are listed in NYS Executive Law Article 42 §911. Park has inland coastal zone managed under the statewide CZM program (See Attachment N). The inland coastal zone boundary is 1,000 feet from the shoreline in non-urbanized areas and 500 feet or less from the shoreline in urbanized areas and other developed locations along the coastline.

DOT is required to certify to DOS that agency actions, including TCUMPs, are consistent with state coastal policies. State coastal policies vary by location and are described in Local Waterfront Revitalization Program (LWRP) documents. LWRPs are locally prepared, comprehensive land and water use plans for the community's natural, public, working waterfront for its developed resources.[46] The legal basis for the development of an LWRP is explained in NYS Executive Law Article 42, §915. The approved program contains policies on the management of land, water and man-made resources. LWRP areas can be located either in the Coastal Area or along Designated Inland Waterways. DOT actions that are not consistent with state coastal policies or with an approved LWRP are not undertaken. Refer to Table 5.14 for a list of LWRPs in the Adirondack Park and Attachment O for the state Coastal Assessment Form for the Master TCUMP.

Table 5.13 Local Waterfront Revitalization Plans (LWRP) in the Adirondacks

Resource	County	Municipality	LWRP
Ausable River	Hamilton, Essex	Town of Wilmington	Yes (2005)
Lake Champlain	Essex, Clinton, Warren	Essex Whitehall (outside Park) Port Henry	Yes (2003) Yes (2006) Yes
Lake George	Warren	Lake George	Yes
Salmon River	Franklin	Malone (outside Park)	Yes

DEC has created the Coastal Erosion Control Permit Program to ensure construction and other activities in coastal areas meet specific standards. Since the Adirondack Park contains no designated coastal areas (only designated inland waterways), there are no mapped coastal areas that are particularly susceptible to erosion within the Adirondack Park.

[46] Town of Essex Local Waterfront Revitalization Program (2003).

B. Guidance:
TEM 4.4.3 Wild, Scenic and Recreational Rivers

C. Management Objectives - none identified.

D. Corridor Management Actions - none identified.

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to those items listed in B, above) for coastal zone management.

5.18 STORMWATER MANAGEMENT

A. Background and Existing Conditions

The pristine quality of water resources in the Adirondack park, which contains the headwaters of numerous river systems (e.g. Hudson River) contributes to ecological integrity, park-like quality and visitor experience. The quantity of stormwater runoff generated on site is influenced by surface cover and the intensity, frequency and duration of rainfall. The quality of stormwater runoff is affected by season, weather, surface cover, land use along with length and steepness of slopes. As stormwater runoff flows over impervious surfaces, it collects and transports a host of contaminants which have accumulated on impervious surfaces during dry periods such as oil, grease, pesticides, fertilizers, animal waste; heavy metals. A portion of contaminated stormwater eventually finds its way into streams and lakes. As an example, stormwater runoff flowing to Lake George has been extensively studied and found to contain all these contaminants and human waste. Lake George water quality is significantly reduced near stormwater outfalls following storm events.

Sedimentation is a major aspect of improper stormwater management which results in a distinct set of problems. Sedimentation has altered the character of streams, wetlands and near-shore areas of the lakes within the Adirondack Park. Major deltas have formed at stream mouths and storm sewer outfalls. The deposited silts and sands may overlay rock and gravel substrate which affects spawning habitat and creates habitat for nuisance and invasive species such as Eurasian milfoil.

DOT is committed to providing environmentally sound transportation options and adheres to DEC criteria for stormwater discharges. The standards and specifications in DEC's New York State Standards and Specifications for Erosion and Sediment Controls provides criteria on minimizing erosion and sediment impacts from transportation activities involving soil disturbance. These standards protect the waters of the state from sediment loads during runoff events and ensure that transportation decision-making incorporates environmental values. As an example, DOT develops a soil erosion and sediment control plans on capital construction projects.

The TCUMP process provides further opportunities to support the connection between travel corridors and water quality.

B. Guidance

DOT TEM, New York Standards and Specifications for Erosion and Sediment Controls (a.k.a. The Blue Book), New York State Stormwater Management Design Manual, SPDES General Permit for Construction Activities;APSLMP; Green Book

C. Management Objectives

- Support the management of stormwater in the Adirondack Park in a manner that sustains water quality, wildlife habitat, sensitive ecological areas and recreation.

D. Corridor Mangement Actions

- Seek opportunities to improve, develop and implement best management practices for stormwater management in the Adirondack Park.
- Identify and study existing drainage patterns, and discharge points to targeted waterbodies (including wetlands) to support the development of a park-wide approach to stormwater management improvements.

E. Alternatives Discussion

Under the null alternative, activities will continue to meet state and federal regulatory standards and guidance (including but not limited to those items listed in B, above).

The preferred alternative supports enhanced stormwater management commensurate with the importance of the Park's water resources, raises institutional awareness and increase efficiencies during corridor planning, design, maintenance and operations..

5.19 AIR

A. Background and Existing Conditions

Air pollution can harm human health and damage the ecosystem. Air pollutants that affect the Park can be generated from activities undertaken both within and outside the Park. In general, most pollutants, including greenhouse gases, come from industrial manufacturing, use of vehicles and power equipment and operation of energy facilities that burn oil, gas, or coal.47

DOT activities within the Park typically do not exceed existing federal and state thresholds. DOT capital projects seek to avoid, minimize, or mitigate air pollutant emissions and are reviewed on a project specific basis.

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[47] New York State Adirondack Park Agency ;Development in the Adirondack Park (DAP), Revised 2013
An Advisory Publication for the Design and Review of Projects in the Adirondack Park

B. Guidance Documents

TEM 4.4.16 Air Quality;

C. Corridor Management Objectives - none identified

D. Corridor Management Actions - none identified

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to those items listed in B, above) for air quality.

5.20 THREATENED AND ENDANGERED SPECIES

The Master TCUMP does not affect threatened and endangered species (T&E species). Individual TCUMPs will note any related concerns and recommendations. Capital projects will perform the required analysis for T&E species and ongoing operations activities will continue to implement best management practices.

A. Background and Existing Conditions

Federal and state laws protect certain species of plants, fish, and wildlife that are listed or proposed for listing as threatened or endangered, as well as their designated critical habitat.

T&E species of wildlife and plants are of importance due to their aesthetic, ecological, educational, historical, recreational, and scientific value to the Nation. Even though extinctions occur naturally, scientific evidence strongly suggests that the current rate of extinction is much higher than the natural or background rate of the past. The main force driving this higher rate of loss is habitat loss. Over-exploitation of wildlife for commercial purposes, the introduction of harmful exotic (non-native) organisms, environmental pollution, and the spread of diseases all pose serious threats to the World's biological heritage.

The New York Natural Heritage Program (NYNHP) maintains a database of protected flora and fauna species (including Rare, T&E species) listed by state rank and scientific, common and group name. Attachment P provides a complete list of Rare, T&E species in the Adirondack Park, extracted from the NYNHP database. Table 5.15 (below) provides a summary of these species in broad categories.

Table 5.14 Threatened and Endangered Species in the Adirondack Park

Species Group	Threatened	Endangered	Total T & E Species
Vascular Plants	81	126	207
Birds	9	28	37
Mammals	1	1	2

Table 5.14 Threatened and Endangered Species in the Adirondack Park

Species Group	Threatened	Endangered	Total T & E Species
Fish	3	1	4
Reptiles	2	1	3
Moths	--	1	1
TOTAL	96	158	254

This table shows that the vast majority of T&E species in the Park are vascular plants (207 species out of a grand total of 254 species). The second largest category is birds (37 species). The remaining categories of species (mammals, fish, reptiles and moths) are in single digits.

Individual TCUMPs will consider the protection of T&E Species and their habitat on state-owned land. Special considerations may include for example, mowing restrictions and tree removal.

B. Guidance

Web pages on this subject for DEC and US Fish and Wildlife; Green Book; DOT TEM 4.4.9.3

C. Corridor Management Objectives

- Ensure consideration of T&E species and their habitat when planning transportation activities
- Support issues relevant to Adirondack Park T&E species

D. Corridor Mangement Actions

- Develop BMPs for all transportation activities to minimize impact to T&E species and their habitat
- Support measures to protect critical habitats for T&E species
- Participate in research, pilot programs and associated studies that support the preservation and protection of T&E species (e.g. round white fish in the Cascade Lake) as practicable

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to those items listed in B, above) for Threatened and Endangered Species.

5.21 CRITICAL ENVIRONMENTAL AREAS (Including Unique Geological Features)

A. Background and Existing Conditions

"Critical Environmental Areas" (CEAs) are areas in the state designated by a municipality or a local or state agency, pursuant to SEQRA, recognizing a specific geographical area with one or more of the following characteristics:

- A feature that is a benefit or threat to human health;
- An exceptional or unique natural setting;
- Exceptional or unique social, historic, archaeological, recreational or educational values; or
- An inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any physical disturbance.

It is important to note that designation of CEAs does not confer any restriction or regulation on land use; it simply ensures that the environmental significance of the area is considered in SEQR review.

Table 5.15 Designated Critical Environmental Areas within the Adirondack Park

County	Feature	Designating Agency
Essex	Waters and Wetlands of Lake George	Lake George Park Commission
St Lawrence	Great South Woods of the Wilderness	Town of Colton
Warren	Round Pond	Town of Queensbury
Warren	Rush Pond	Town of Queensbury
Warren	Glen Lake and Surrounding Area	Town of Queensbury
Warren	Marl Fen at the Floyd Bennett Memorial Airport Including a 100 Foot Buffer	Town of Queensbury
Warren	Waters and Wetlands of Lake George	Lake George Park Commission
Washington	Waters and Wetlands of Lake George	Lake George Park Commission

It is important to know the unique characteristics that resulted in the designation of the CEA in order to evaluate whether an activity could possibly impact the CEA. The wide variety of reasons for forming a CEA makes it difficult to apply a one-size-fits-all approach to evaluating potential impacts.

Unique Geological Features: These are one-of-a-kind formations or remnants of past geologic or meteorological actions which are listed by DEC on their website as subject to SEQR review. Examples of these features include unique geologic deposits and glacial features such as eskers and kettleholes. These areas are often focal points in the landscape for local citizens to visit for recreation. While public access to these features is not required on private land, it is important to

maintain the quality of these features. Since these features are not duplicated throughout the landscape and cannot be replaced, their destruction or alteration should be avoided.

> "The Adirondack Mountains are more than 5,000,000 years old and are a monument to the shifting, irrepressible powers of the last ice age. Towering above New York's diverse landscape, the Adirondacks detail a history when small alpine glaciers carved their way through what is now the Adirondack Region, and glacial erratics – stones deposited by the glacier – were scattered across the landscape. Massive chunks of ice broke away from the glacier, and were buried beneath sand and gravel washed from the ice. As these ice chunks melted, depressions, called kettle holes, were formed. When a kettle hole extended below the water table, a pond was created. Many of the small, circular ponds you see while hiking in the high peaks began as kettle holes."[48]

CEAs or unique geological features may warrant special considerations in the travel corridors. A more detailed assessment will be made by individual travel corridor plans.

In addition to the SEQR designated CEAs, the APA Act, in §810, also identifies critical environmental areas which serve as a basis for jurisdiction, project review and the CEAs are subject to applicable §809 approval criteria. CEA jurisdiction varies, depends on the private land use classification, and generally involves all new land use and development and all subdivisions of land within the following critical environmental areas:

- Within ¼ mile of designated study rivers;
- wetlands;
- areas at elevations of 2500 feet or more;
- within 1/8 mile of areas classified wilderness, primitive or canoe;
- within 150 feet of state or federal highway in Rural Use land classification;
- within 300 feet of state or federal highway in Resource Management land classification; and,
- county highways designated as major travel corridors by the Agency or a local government.

In addition to the CEAs established in the Agency Act, the development considerations provided in §805 identify additional critical resource areas including: rare plant communities; habitats of rare, threatened and endangered species, key wildlife habitats, alpine and sub-alpine life zones; and, unique features, including gorges, waterfalls and geologic formations.

B. Guidance

DEC and APA: Critical Environmental Area; DOT's Project Development Manual; Development in the Adirondack Park - Revised 2013/Last updated 2016.

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[48] http://visitadirondacks.com/about/mountains

C. Corridor Management Objectives

- Ensure consideration of CEAs and Unique Geological Features when planning transportation activities

D. Corridor Management Actions

- Develop mechanisms to support user experience such as wayfinding and interpretive signage for CEAs and Unique Geological Features
- Develop BMPs for all transportation activities to minimize impact to CEAs and Unique Geological Features

E. Alternatives Discussion

Under the null alternative, activities will continue to meet state and federal regulations and guidelines (including but not limited to those items listed in B, above).

The preferred alternative provides additional opportunities to respond to the Adirondack context and develop user experience of critical environmental areas and Unique Geological Features. An awareness of these areas informs decisions and activities at all levels, including corridor planning, design, maintenance and operations.

5.22 GENERAL ECOLOGY AND WILDLIFE RESOURCES

Overview

The Adirondack region is a combination of mountains, forests, wetlands, streams and lakes unique to eastern North America. It supports a rich diversity of flora and fauna. The Region differs geologically and climatically from surrounding environments. As a result, it functions as a distinct ecosystem. The Region's mountains also affect weather patterns, which have helped to develop unique ecology, habitats and alpine zones. Thanks to the variance in habitat and climate, the Adirondacks host diverse species of migratory birds.[49]

The Adirondack Region is heavily forested. The Region lies in the transition zone between the eastern deciduous and boreal forest biomes.[50] Above 2600 feet, conditions are too poor for hardwoods to thrive, so the forest becomes mixed with or replaced by fir and spruce. A fraction of the area above the tree line is classified as having an alpine climate.

[49] http://visitadirondacks.com/about/mountains
[50] http://www.esf.edu/AEC/Parks/

5.22.1 **Natural Communities within The Park**

A. Background and Existing Conditions

The Adirondack Park's biogeography (occurrence of fauna and flora) is influenced by temperature, geology and soils, rainfall, vegetation, elevation and topography, aspect, drainage, and past land uses.

The Park's natural communities serve as habitats for a wide range of plants and animals, both rare and common. Natural communities provide ecological value and services. The conservation of these high-quality natural communities will help ensure that the Park's native plants and animals are preserved. New York State has put in place many policies to maintain wildlife habitats.

The New York Natural Heritage Program (NYNHP) maps only "significant natural communities" (also known as natural ecological communities) which they define as "rare or high-quality wetlands, forests, grasslands, ponds, streams, and other types of habitats, ecosystems, and ecological areas". The criteria for documenting significant natural communities include:

- Natural community types that are rare in New York State;
- Natural community types that are high-quality example and meets specific, documented criteria for state significance in terms of size, undisturbed and intact condition, and the quality of the surrounding landscape.[51]

The NYNHP defines a natural ecological community as:

> *"…an assemblage of interacting plant and animal populations that share a common environment; the particular assemblage of plant and animal species occurs across the landscape in areas with similar environmental conditions. For example, freshwater wetland, estuarine, and upland natural communities are classified according to their dominant vegetation and their physical setting; and aquatic, marine, and cave natural communities are classified according to their physical setting and their dominant flora and fauna."*[52]

An analysis of data provided by the NYNHP indicates that there are about eighty-six (86) different significant natural communities in the Park. There may be other natural communities not represented (because they don't meet the NYNHP criteria). Forty-four of the eighty-six significant natural community types are classed as Upland/Terrestrial communities (Attachment Q); while the remaining forty-two are classed as Wetland/Aquatic communities (Attachment R). Most, if not all, of these community types are described on the NYNHP web page.[53]

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[51] New York State Natural Heritage Program Website http://acris.nynhp.org/communities.php
[52] Ibid
[53] Ibid

In the Park, APA contributes to the protection of fish and wildlife habitats through air, land and water quality regulatory programs. These include administration of the Freshwater Wetlands Act which limits draining of water grounds that are feeding and nesting areas of many species. They also protect habitats of endangered species through the Private Land Use and Development Plan.

Figure 5.14 Turtle Barrier Fencing. Used to redirect migrating turtles away from road and to safe turtle passage.

Individual TCUMPs will consider the protection of significant natural communities (i.e. forests, wetlands, grasslands, etc.) on state-owned land.

B. Guidance – Green Book, DOT HDM 28

C. Corridor Mangement Objectives

- Support the protection of significant natural communities located adjacent to travel corridors

D. Corridor Mangement Actions

- Develop BMPs for all transportation activities to minimize impact to significant natural communities
- Participate in research, pilot programs and associated studies that support the preservation and protection of significant natural communities, as practicable

E. Alternatives Discussion

Under the null alternative, activities will continue to meet state and federal regulatory standards and guidance (including but not limited to those items listed in B, above).

The preferred alternative provides additional opportunities to improve the handling of significant natural community issues, raise institutional awareness and increase efficiencies during corridor planning, design, maintenance and operations.

5.22.2 **Wildlife Management Areas and Bird Conservation Areas**

A. Background and Existing Conditions

Wildlife Management and Conservation Areas are lands owned by the State, under the jurisdiction of NYSDEC and acquired primarily for the purposes of habitat enhancement and protection. Secondarily, they provide diverse opportunities for public recreation, provided wildlife are not unduly impacted. Travel corridors provide public access to these areas.

Wildlife Management Areas (WMAs): DEC Wildlife Management Areas provide habitat for wildlife and recreational opportunities for people. Habitat is provided for birds, mammals, reptiles and amphibians. Waterfowl, fish, game species and non-game species all benefit from the forests, open fields, streams, ponds, and wetlands located in these areas. People who want to hunt, fish, hike and/or watch wildlife are welcome to enjoy these areas.

Wildlife Management Areas within the Park are:

- Clinton County
  - Ausable Marsh - 576 acres, upland, wetland, hiking trails, boat access, parking lot, bird watching, snowshoeing, hunting fishing and trapping
  - Lewis Preserve - 1,356 acres, upland, wetland, hiking trails, parking lot, bird watching, cross-country skiing, snowshoeing, hunting, fishing and trapping
- Essex County
  - Putts Creek - 114 acres, upland, wetland, hiking trails, scenic vistas, bird watching, cross-country skiing, snowshoeing, hunting, fishing and trapping
  - Wickham Marsh - 862 acres, upland, wetland, hiking trails, boat access, parking lot, scenic vistas, bird watching, cross-country skiing, snowshoeing, hunting, fishing and trapping
  - Pauline Murdock - 68 acres, upland, hiking trails, parking lot, bird watching, cross-country skiing and snowshoeing

- Washington County
    - East Bay - 38 acres, wetland, parking lot, scenic vistas, bird watching, hunting, fishing and trapping

Bird Conservation Areas (BCAs). The New York State Bird Conservation Area Program was established in 1997 to safeguard and enhance bird populations and their habitats on State lands and waters. The goal of the BCA Program is to integrate bird conservation interests into agency planning, management and research projects, within the context of agency missions.

Bird Conservation Areas within the Park are:

- Adirondack Sub-Alpine Forest Bird Conservation Area: This BCA includes Adirondack Mountain summits above 2,800 feet in Clinton, Essex, Franklin, Hamilton and Warren counties. Surveyed and confirmed nesting locations for Bicknell's Thrush include: Mount Marcy, Algonquin Peak, Blue Mountain, Cascade Mountain, Giant Mountain, Kilburn Mountain, Hurricane Mountain, Lower Wolfjaw Mountain, Lyon Mountain, Mount Haystack, Phelps Mountain, Porter Mountain, Rocky Ridge Peak, Santanoni Peak, Snowy Mountain, Vanderwhacker Mountain, Wakely Mountain, Whiteface Mountain and Wright Peak

- Crown Point Bird Conservation Area: The Crown Point BCA is part of the Crown Point State Historic Site in Essex County. It is located at the tip of Crown Point peninsula. Jutting northward into Lake Champlain and bordered on the west by Bulwagga Bay, the peninsula serves as a natural migrant trap, especially in spring. Crown Point State Historic Site is also an Audubon Important Bird Area.
    - Over 180 bird species have been observed at the Crown Point BCA. Many of these are spring migrants, with 47 species of Neotropical migratory songbirds and 18 species of forest dwelling Neotropical migrants having been observed in spring. A bird banding station has been operated at Crown Point since 1976. During that time 13,442 birds of 97 different species have been banded.

- Lake Champlain Marshes Bird Conservation Area: This BCA includes six Wildlife Management Areas (WMAs) along the western shore of Lake Champlain (Kings Bay, Montys Bay, Wickham Marsh, Ausable Marsh, Putts Creek, East Bay) from near the Canadian border to the southern tip of the lake. These WMAs all include shoreline wetland complexes. Most include large marshes, forested swamps, and shrub swamps; as well as some upland forests, grasslands, and shrub-lands. They provide habitat for a wide variety of bird species for breeding and during migration. They also provide important migration stopover areas for a tremendous diversity of water and land birds.

- Valcour Island Bird Conservation Area: Valcour Island BCA is a 1,100 acre forested calcareous outcrop that supports the largest great blue heron rookery on Lake Champlain. This rookery is currently the largest in New York State, and the third largest rookery in the Great Lakes region. Valcour Island is the largest of the seven islands in the Champlain Islands Management Complex administered by the DEC. It has also been designated as an

Audubon Important Bird Area. The island is accessible by boat for camping, hiking, wildlife viewing and hunting.

- Bald eagles (threatened) have been observed in the vicinity of Valcour Island; and the cliffs on the south end of the island were once a peregrine falcon (endangered) eyrie, although there has not been any nesting there for several decades. Historically, the island supported substantial populations of long-eared owl. The area also provides breeding and migratory habitat for a variety of waterfowl, shorebird, and songbird species.

B. Guidance

DEC web pages on this subject, Green Book

C. Corridor Management Objectives – none identified

D. Corridor Management Actions – none identified

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to those items listed in B, above) for Wildlife Management Areas and Bird Conservation Areas.

5.22.3 **Habitat Connectivity**

A. Background and Existing Conditions

"Habitat connectivity is the degree to which the landscape facilitates animal movement and other ecological flows. Wildlife need to move – Mobility is the key to survival for many wildlife species. Animals need to move from place to place for food, protective security cover, and in response to seasonal conditions. Sometimes long distance movements are critical for finding mates or establishing a territory in vacant habitat. Urban areas, busy roads, and other alterations to the landscape can create barriers to animal movements."[54]

Figure 5.15 Wildlife Migration Paths. An awareness of wildlife movement patterns assists in managing or mitigating impacts.

[54] http://www.wsdot.wa.gov/NR/rdonlyres/6FD6F8A9-A73D-49E5-A29B-626B639FC7F/0/HabitatConnectivity.pdf

The Adirondack Park's high quality wildlife habitat merits special attention to habitat connectivity issues. Roads in the Park often bisect areas with diverse wildlife populations. These roads, because they are distant from large human population centers, usually have low traffic volumes. Most species are successful at crossing these low traffic volume roads. However, despite the low traffic volume, the sheer number of wildlife crossings in some locations results in collisions. Moose (*Alces alces*) are of particular concern as their population is expected to increase. With increased moose population, conflicts with motorists are likely to increase. Safety to the traveling public is integral to DOT's mission; measures that can reduce conflicts with wildlife movement are warranted.

Figure 5.16 Bridge Spans with Upland. Provides greater habitat connectivity.

Habitat connectivity is supported by highways designed to provide for wildlife crossing. For example, both aquatic and terrestrial species benefit from larger openings at bridges and culverts, also know as "critter crossings". These offer the opportunity to include measures for wildlife movements, such as low flow channels, upland benching, fish ladders, fencing to guide movement, alteration to rip rap placement, plantings and stream grade retainers etc. which can be incorporated into structures while improving hydraulic efficiency. Wildlife species such as Bobcat (*Lynx rufus*), Black bear (*Ursus americanus*), Fisher (*Martes pennanti*) and Red Fox (*Vulpes vulpes)* that commonly travel in riparian corridors will use these measures. Table 5.17 is an example of a crossing analysis system.

Aquatic species are more sensitive to obstructions (permanent or seasonal) resulting from the transportation infrastructure because they have less ability to move around or over most barriers. These barriers are typically increased height barriers, dropoffs or increased water velocity that the species can not traverse.

Figure 5.17 Precast Concrete Box Culvert. A box culvert that presents a barrier to wildlife (left), compared to a box culvert that allows for habitat connectivity, by including a natural bottom and placed below stream grade (right).

Measures that support wildlife also support transportation systems. For instance, larger structure openings (with upland areas) can facilitate bridge maintenance activities by providing a dry work area adjacent to the water feature. Larger openings also can accommodate greater flow passage during storm events, with an understanding that a hydraulic analysis is needed to be sure downstream flooding is not increased.

Travel corridor planning concerning habitat connectivity and integrity benefits from sharing among experts in various agencies and States. The Northeast Transportation and Wildlife Conference www.netwc.org is one important event that promotes the sharing of knowledge between States. From NETWC: In an increasingly interconnected world, the array of issues confronting transportation and wildlife officials have increased dramatically both in terms of frequency and complexity. Maintaining road infrastructure and wildlife populations cannot occur in isolation. Every time a stream flows through a culvert or a moose crosses the median, we see another example of how these networks converge in complex ways and with significant implications to the public's interests in fish and wildlife conservation as well as a safe, reliable transportation system.

Figure 5.18 Wildlife Friendly Culvert Replacement. A cooperative agency effort (APA, DEC and USFWS) which provided a wildlife friendly culvert replacement on Rte. 28N near Long Lake. The solution included baffles in culvert lining and a stream grade retainer (large stones) to raise water levels.

Table 5.17 Massachusetts DOT River and Stream Crossing Analysis[55]

Rating Score	Passage Classification	Remarks
0 to 1	Severe Barrier	The structure is considered a barrier to most aquatic and terrestrial wildlife.
2	Moderate Barrier	The structure may provide some passage for aquatic wildlife, and is likely a barrier to terrestrial wildlife. Further investigation is required to determine the extent to which it provides aquatic passage.
3 to 5	Minor Barrier	The structure is likely to provide aquatic wildlife passage, but has limited capacity for non-aquatic species.
6 to 8	Meets General Standards	The structure provides aquatic and terrestrial passage consistent with the General Standards of the Massachusetts River and Stream Crossing Standards.6
9 to 10	Meets Optimum Standards	The structure provides aquatic and terrestrial passage consistent with the Optimum Standards of the Massachusetts River and Stream Crossing Standards.

B. Guidance

Green Book; web pages on the subject for DEC, USFWS and FHWA

C. Corridor Management Objectives

- Maintain or improve habitat connectivity where practicable through DOT activities and projects

D. Corridor Management Actions

- Identify key species to use in the development of best management practices and a library of treatments
- Develop an analysis system for habitat connectivity based on the MassDOT model
- Foster interagency partnerships related to this topic
- Participate in research, pilot programs and associated studies that support habitat connectivity, as practicable

[55] MassDOT

E. Alternatives Discussion

Under the null alternative, activities will continue to meet state and federal guidance (including but not limited to those items listed in B, above) and best management practices.

The preferred alternative provides additional opportunities to identify habitat connectivity needs and increase efficiencies during corridor planning, design, maintenance and operations.

5.22.4 **Native Vegetation**

A. Background and Existing Conditions

Native species are defined in 6 NYCRR Part 575 as "…*with respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem or in New York State*." Re-establishing roadsides with native plant material is a federal directive (*Memorandum on Environmentally Beneficial Landscaping*) and state mandated for some land uses described in the APSLMP. Environmentally beneficial landscaping utilizes techniques that complement and enhance the local environment and seek to minimize adverse effects. Using native plants benefits the environment and generates long-term cost savings by reducing fertilizer, pesticide, and maintenance demands and costs.

> *"There will be no intentional introduction in wilderness areas of species of flora or fauna that are not historically associated with the Adirondack environment, except: (i) species which have already been established in the Adirondack environment, or (ii) as necessary to protect the integrity of established native flora and fauna. Efforts will be made to restore extirpated native species where such restoration appears feasible."*
>
> excerpt: Adirondack Park State Land Master Plan

In the Adirondack Park, upland native vegetation includes spruce, fir, beech, birch, and maple. Aquatic habitats such as palustrine system (non-tidal, perennial wetlands) are characterized by emergent vegetation. The riverine vegetative system (linear, flowing non-tidal waters with a discrete channel) contains persistent emergent vegetation and may include areas with abundant submerged or floating-leaved aquatic species. Finally, lacustrine systems (ponded waters situated in topographic depressions or dammed river channels) are often vegetated with persistent emergent vegetation and may also include areas with abundant submerged or floating-leaved aquatic vegetation.

Re-establishing native plants on the state rights-of-way after a construction or maintenance event is critical. Roadsides in the Park tend to be pioneer, transitional communities available for animals and non-forested native plants. Native plants are uniquely adapted to support native fauna,

including pollinators. Re-vegetating roadsides with natives is considered a sustainable practice and can be documented under DOT's GreenLITES program.

Protecting and promoting certain native species, such as Little Blue Stem (Schizachyrium scoparium var scoparium), switch grass and carex flava can reduce mowing frequency and support native wildlife where safety and sight distance is not an issue. The result is that operating costs can be contained or reduced without affecting safety or functionality.

Figure 5.19 Little Bluestem. Re-introduced seeding of native Little Bluestem (*Schizachyrium scoparium*) grass.

Adirondack Park's travel corridor's rights-of-way contain a unique mix of vegetation cover types, consisting of native plants, non-native plants or a combination. This is a result of past planting activities, roadway construction, maintenance activities and the existing or adjacent environmental conditions. Roadway construction (including re-construction) and maintenance can;

- Remove or disturb native topsoil, plants and seed sources
- Introduce non-native soil, plants and seeds
- Change topography
- Alter site hydrology
- Eliminate or modify microclimates
- Remove canopy plant material

Not all disturbances result in negative impacts. Some disturbances can create an opportunity for native plants to re-establish, either through the dispersal of seeds from adjacent plant or existing seed banks in the soil.

Plant nativity should be considered within a context of scale[56]. Plants are native to a nation, state, region, ecosystem and/or habitat. The Adirondack Park's unique geomorphology creates distinct microclimates, ecosystems, and habitats. Plants contained in these areas may not exist elsewhere in the state or region. Similarly, plants that are native to the state and region may not be adapted to conditions in the Park. The distinct requirements of the Park's roadside environment should be considered when re-vegetating.

B. Guidance

FHWA's Roadside Use of Native Plants; Green Book; DOT HDM Chapter 28

C. Corridor Management Objectives

- Promote the use and preservation of native vegetation, where feasible, throughout all travel corridors

D. Corridor Mangement Actions

- Support the use of seed mixes tailored for the Adirondack Park
- Develop BMPs for seeding, planting, mulching and construction inspection
- Develop a section on native plants in the proposed Adirondack Park Vegetation Management Plan
- Identify locations of native plants to maintain with alternative vegetation management practices
- Require the use of native vegetation, when appropriate, by third parties engaged in permitted activities (e.g. Utilities work)

E. Alternatives Discussion

The null alternative recommends re-vegetation strategies that utilize native plants in accordance with state and federal guidance (including but not limited to those items listed in B, above).

The preferred alternative increases opportunities to develop tools encouraging the use and preservation of native plants. In addition, the preferred alternative proposes a section in the Adirondack Park Vegetation Management Plan that supports the establishment and maintenance of native plants along the roadside.

[5656] *Roadside Use of Native Plants*

5.22.5 **Invasive Species**

A. Background and Existing Conditions

Invasive species are defined as non-native organisms that cause measureable harm to the environment, economy or human health. Invasive species can be plants, animals, fungi and even pathogens. They affect both terrestrial and aquatic habitats, can cause significant changes to ecosystems (through competition, suppression, and displacement of native species), upset the ecological balance (through the alteration of ecosystem functions such as nutrient cycling and hydrology), and cause economic harm to our Nation's transportation, agricultural and recreational resources. Those species that are likely to harm the environment, transportation safety, human health, or economy are of particular concern. The prevention of new invasions, early detection and monitoring of infestations of invasive species and the effective control of established invasions

Figure 5.20 Terrestrial Invasive Plant Species. Present challenges along travel corridors.

through area-wide partnerships have been identified as key objectives in a national strategy for invasive species control.

Transportation systems facilitate the spread of plant and animal species outside their natural range. Invasive plant or animal species move on vehicles (trucks, construction equipment, autos, boats, etc.) and in the loads they carry. Invasive plants can be transported between sites during construction, ditch cleaning, mowing and spraying operations. Weed seed may be inadvertently introduced into a travel corridor on construction and/or maintenance equipment and through the use of landscape materials including mulch, imported soil, gravel, and sod. New York State highway rights-of-ways (ROW) are adjacent to public and private lands. When adjacent lands are infested with invasive plant species, the ROWs, which are frequently disturbed, provide corridors for further spread. Terrestrial invasive plant species have the potential to affect sight distances, alter highway drainage, pose a safety hazard to highway maintenance workers, and negatively impact bio-diversity.

In the Adirondack Park, aquatic and terrestrial invasive species management is critical to ensure long-term protection of the Park's biodiversity, ecological and recreational resources. Invasive plants and animals put these resources at risk, compromising conservation efforts, agricultural and forest productivity, human health and safety, property values, recreation and tourism and more.[57] As a result, the demand and need for invasive species management in the Park is greater than highway corridors in other parts of the State.

Figure 5.21 Invasive Plant Inventory. DOT staff inventorying Japanese knotweed (*Fallopia japonica*) along Route 8, adjacent to West Canada Creek.

DOT has longstanding involvement with invasive species control in the Adirondacks. The Department continues to pro-actively partner with agencies and non-government stakeholders, a process that lead to a 2004 National Environmental Excellence and Exemplary Ecosystem Award from the FHWA.

Ongoing invasive species control activities within the Adirondack Park spurred the New York State Legislature to formalize the State's involvement in invasive species issues (Chapter 324 of the Laws of New York, 2003) with the creation of the Invasive Species Task Force. DOT was among the Task Force's sixteen member agencies. The Task Force defined the invasive species issue in New York State and provided key recommendations. These recommendations culminated in the development of Environmental Conservation Law (ECL) Article 9 Title 17, or the New York State Invasive Species Council Act. In turn, the act established the New York Invasive Species

Figure 5.22 Boat Inspections. Travel corridors present opportunities to educate the boating public (bringing watercrafts into the Park) on measures to prevent the spread of aquatic invasive species in the Park's waterbodies and to enforce clean boating practices.

Council (the Council), the Invasive Species Advisory Committee (ISAC) and Partnerships for

[57] Adirondack Park Invasive Plant Program (2016).

Regional Invasive Species Management (PRISMs). Each entity assesses the nature, scope and magnitude of the environmental, ecological, agricultural, economic, recreational and social impacts caused by invasive species in New York State. DOT is one of five members on the Council and DOT staff are actively involved with the eight PRISMs. The overall goal is to help prevent or minimize the harm caused by invasive species on New York's environment, economy and the health and well-being of the State's citizens. The PRISM for the Adirondack Park is the Adirondack Park Invasive Plant Program (APIPP). APIPP partners include DEC, DOT, APA, The Nature Conservancy (TNC), Paul Smith's College, Lake Champlain Basin Program, Adirondack Lakes Alliance, Lake George Park Commission, National Grid, Cornell Cooperative Extension, the Lake Champlain Sea Grant and a host of non-governmental organizations (not-for-profits) focused on the ecological health of the Adirondack Park. The APIPP maintains lists of invasive species deemed injurious to the Adirondack Park ecology. DOT continues its strong tradition of invasive species management in the Park by participating in programs such as iMapInvasives, Boat Inspections and Don't Move Firewood!

B. Guidance

Green Book; APIPP; DOT *Best Management Practices For Roadside Invasive Plants In The Adirondack Park*; Web pages on the subject for DEC, NYS Agriculture and Markets and US Agricultural Plant Health Inspection Service (APHIS)

C. Corridor Management Objectives

- Continue to support invasive species control measures along travel corridors
- Continue to support measures preventing the introduction of invasive species not yet present in the travel corridors

D. Corridor Mangement Actions

- Support early detection and rapid response efforts throughout the Park
- Institute a culture of awareness, continuous learning and best practices regarding invasive species
- Continue to partner with APIPP for invasive species efforts including annual strategic plan, education and outreach
- Support efforts to reduce existing populations of invasive species including funding research and eradication efforts where feasible
- Develop a framework and strategy for analysis and decision-making (prioritizing needs and actions)

    - Progress innovative design solutions to reduce opportunities for the introduction or spread of invasive species

E. Alternatives Discussion

Under the null alternative, DOT will continue to be active in the control of invasive species in support of federal and state executive orders, policies and guidance (including but not limited to those items listed in B, above).

The preferred alternative provides additional opportunities to improve DOT's response to invasive species, raise institutional awareness and increase efficiencies during corridor planning, design, maintenance and operations.

5.22.6 **Management of Nuisance Wildlife Problems**

A variety of wildlife species can become a nuisance when numbers exceed tolerance levels or an animal otherwise poses a risk to human health or safety. Some species of wildlife may become habituated to human's presence, causing property damage or risking transfer of disease to humans or pets (zoonosis). DOT will work with DEC and local officials to help prevent or to address situations where wildlife may present a public nuisance or threaten public health and safety.

5.22.6.1 Beaver Management

A. Background and Existing Conditions

The habitat near travel corridors in the Park is conducive to beaver (*Castor canadensis*) occupancy, although densities along individual corridors may vary. In many situations the highway embankment is elevated where crossing wetlands (or riparian areas) creating the basis of a potential dam. Beaver often only have to create a small section of dam around a culvert or bridge opening to create an impoundment upstream. Thus, occasional problems with beavers are to be expected. Where conditions are optimum, these problems can become chronic. Individual TCUMPs will identify locations where beaver problems are chronic.

Figure 5.23 Beaver Impacts. Beavers have plugged a culvert forming a large water impoundment and creating a potential safety hazard.

Beavers can cause serious damage to roads by plugging culvert pipes and creating dams that impound water which may flood or wash out roads. Upstream and downstream impoundments must be monitored and removed as necessary to prevent washouts of culverts and embankments. Damage also occurs when a roadbed becomes saturated with water and settles. The overall stability of the road decreases as the pavement becomes stressed and potholes form. Nuisance

beaver and beaver dam management are essential to maintain the integrity of the highway system. Timely control reduces flooding and improves the integrity and extends the life of the highway system.

Figure 5.24 Beaver Impacts. Beaver complexes create high water which can impact the transportation infrastructure.

Figure 5.25 Beaver Deceiver. A deep water fence (or "Beaver Deciever") was installed as part of this DOT training.

Management of beaver population is the responsibility of DEC and involves balancing the positive effects that beavers have on the environment with the damage that they cause. Where damage outweighs the benefit to the environment, DEC provides guidance and manages the permit program. In general, landowners including DOT are responsible to control and/or repair damage. Various control techniques include: deep water fences, water level control devices, and culvert grates. These have proven effective as alternatives to beaver trapping and dam removal.

B. Guidance

Green Book; DEC's "Managing Nuisance Beavers Along Roadsides" and "Beaver Damage Control Techniques Manual.

C. Corridor Management Objectives

- Conduct beaver management to balance infrastructure and ecological concerns.

D. Corridor Management Actions

- Install beaver control devices where applicable to reduce the need for trapping and continued maintenance
- Develop a site assessment /protocols with decision tree to reduce the number of chronic beaver problem locations in the Park

E. Alternatives Discussion

The null alternative would continue current practice in the Park (based on, but not limited to, those items listed in B, above), which is that managing entities would be reactive to beaver-related incidents. Chronic locations would not be formally or systematically identified or tracked. This would lead to higher costs and safety concerns, inconvenience to the traveling public, as incidents would continue to be addressed only on an emergency basis.

The proposed alternative achieves the objective of providing beaver management, with the benefit of increasing safety, reducing costs, avoiding emergencies and reducing delays to the traveling public. A pro-active approach avoids or minimizes potential ecological effects such as minimizing winter habitat impacts, wildlife mortality, disruption of waterfowl nesting and release of sediment downstream.

5.23 AGRICULTURAL RESOURCES

A. Background and Existing Conditions

Laws exist at both the federal and state level to ensure that impacts to agricultural districts and agricultural lands with highly productive soils are integrated into the project and operations decision making process. In the Adirondacks, there are designated agricultural districts and there may be some agricultural lands with highly productive soils. However, their acreage within the Park is small, a result of the harsh weather, short growing seasons, limited soils and rugged terrain.

Table 5.18 Agricultural Districts within the Adirondack Park

County Name	Ag Distr.	Date Created	Town Affected	Total Acres	Farmed Acres	Crop Acres	Acres Owned	Acres Rented	No. Farms
Clinton	5	4/12/78	Peru, Ausable, Plattsburgh	13565	13327	8478	10702	2625	33
	10	7/24/88	Ellenburg, Clinton, Chazy, Altona	30242	19640	8445	17863	1777	51
	12	8/7/89	Saranac Schuyler Falls, Plattsburgh	4329	4329	1228	4167	162	21
Fulton	1	8/7/77	Broadalbin, Ephratah, Mayfield, Johnstown, Oppenheim, Perth	26020	20556	6716	17177	3379	267

Table 5.18 Agricultural Districts within the Adirondack Park

County Name	Ag Distr.	Date Created	Town Affected	Total Acres	Farmed Acres	Crop Acres	Acres Owned	Acres Rented	No. Farms
Essex	1	7/7/92	Chesterfield, Crown Point, Elizabethtown, Essex, Jay, Keene, Lewis, Moriah, North Elba, St. Armand, Ticonderoga, Westport, Willsboro, Wilmington	61383	45633	30139	34655	10978	162
Franklin	1	9/12/88	Bangor, Bellmont, Bombay, Brandon, Brighton, Burke, Chateaugay, Constable, Dickinson, Duane, Ft.Covington, Franklin, Harrietstown, Malone, Moira, Waverly, Westerville.	94788	66983	34913	58991	7954	422
Herkimer	6	5/13/96	Fairfield, Herkimer, Manhein, Newport, Norway, Ohio, Salisbury, Schuyler, Russia	9482	9058	0	5168	55	25
Saratoga	2	11/17/74	Ballston, Charlton, Clifton Park, Galway, Greenfield, Hadley, Malta, Milton, City of Saratoga Springs.	52482	31326	7631	23484	7842	160

Table 5.18 Agricultural Districts within the Adirondack Park

County Name	Ag Distr.	Date Created	Town Affected	Total Acres	Farmed Acres	Crop Acres	Acres Owned	Acres Rented	No. Farms
St. Lawrence	2	8/22/74	Brasher, Canton, Hopkinton, Lawrence, Lisbon, Louisville, Madrid, Massena, Norfolk, Parishville, Pierrepoint, Potsdam, Russell, Stockholm, Waddington	305652	205092	99180	145464	19836	665
Washington	2	7/22/85	Putnam	4185	2734	N/A	N/A	N/A	11
	7	5/26/74	Fort Ann, Granville, Hartford, Hebron, Salem	48282	32990	18168	24305	8685	32

Historically, most of the land in the Adirondack Park was logged or mined. In fact, the earliest European settlers thought this mountainous and swampy region was unsuitable for agriculture. Settlers struggled to raise crops in order to feed their families. The hard work required the labor of the entire family in order to cultivate the stony land. Not surprisingly, agriculture in the area declined as the result of greater productivity elsewhere and improved transportation and preservation methods.

However, farming in the region has not ceased. For example, in the Champlain Valley and Northern Franklin County, use of agricultural lands has continued throughout history. The majority of farmers within the Adirondack Park are found in low lying areas where the snow tends to melt sooner and the climate is a little less challenging. However, there are still farms located within the High Peaks region that are able to produce a number of crops. The current Adirondack farmer, much like the historic one, is faced with a number of hardships. Farmers often have to pursue other forms of work in order to support themselves and their families especially through the long winter months.[58]

Maple trees and sugar bushes dot much of the forest across the Adirondack Park supporting another agricultural resource, maple syrup. New York State is the second largest producer of maple syrup in the United States, with the Adirondack Region accounting for nearly one third of the State's production. New York's finest agricultural tradition culminates during Maple Weekend, one of the top Adirondack Festivals in spring. This state-wide "Liquid Gold" celebration opens sugar shack doors for tours, educational treks and enjoyment of all things maple. Held the last two weekends in March, this event spans the Adirondack's six-million acres, from mountains to

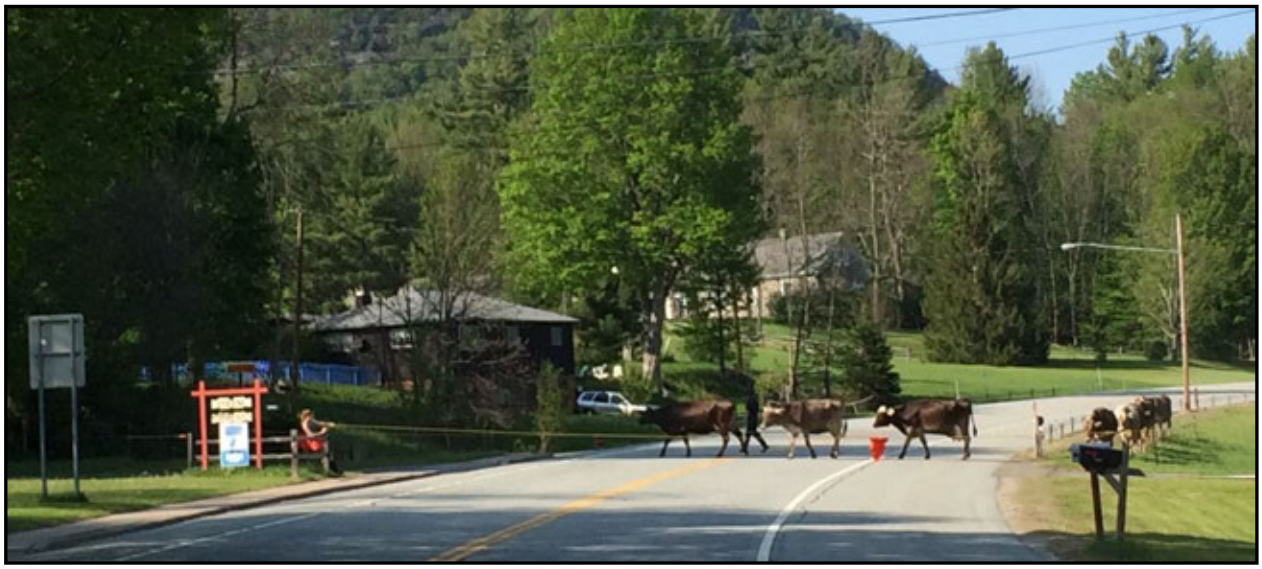
[58] Adirondack Journal

valleys.[59] New York State Maple Producers Association provides information on producers and events.

Transportation, marketing, and sales are important to agriculture. Travel Corridors are the means to carry people and goods from one place to another. DOT activities within the Park typically will not have an impact on agricultural land or access to transportation for farmers. DOT capital projects seek to avoid, minimize, or mitigate agricultural impacts and are reviewed on a project specific basis.

Individual TCUMPs will identify agricultural districts and agricultural lands with highly productive soils along the corridors.

Figure 5.26 Cattle Crossings. Cattle crossing Route 9 near Jay, NY.



B. Guidance Documents

DOT TEM 4.4.15 Farmland

C. Management Objectives - none identified.

D. Corridor Management Actions - none identified.

[59] http://visitadirondacks.com/attractions/maple-sugaring-the-adirondacks

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to the DOT TEM) for agricultural resources.

5.24 SCENIC AND AESTHETIC RESOURCES

A. Background and Existing Conditions

The Adirondack Park is a mosaic of land uses that includes residential, industrial, commercial, transportation, recreation, agricultural, mineral and forest resource extraction, among others. It is endowed with natural beauty reflected in its varied topography, mountains, rock outcrops, rivers,

Figure 5.27 View of Adirondacks from Route 28.

lakes and vegetation. The Park is a visual resource and is managed to preserve its scenic qualities. The challenge is how to accommodate all land uses while retaining its park-like character; this is particularly challenging along travel corridors.

Transportation activities such as constructed elements, demolition, signs, vegetation management and earthwork, can have visual effects on the surrounding built and natural environments. These effects can be positive or negative. Undesirable effects to avoid include (but are not limited to): obscuring desirable views, introducing discordant elements and sign clutter. Transportation activities also offer an opportunity to eliminate visual "eyesores", enhance views and introduce well-designed features that support the Park's sense of place.

NEPA and CEQ's implementing regulations identify aesthetics as one of the elements or factors in the human environment that must be considered in determining the effects of a project. At the

state level, SEQRA identifies visual quality as an environmental resource to be protected. Both NEPA and SEQRA require that scenic views, unique or unusual land forms, and impacts on aesthetic resources be evaluated on an individual project basis. It is DOT's practice to ensure that adverse impacts to significant visual resources are avoided wherever practicable. Where it is not practicable to avoid adverse impacts, they should be minimized and/or mitigated to the fullest extent practicable.

The APA Act Section 805(4) Development Considerations refers to scenic and aesthetic resources as having the potential to be adversely impacted. They are to be considered before any significant new land use or development is undertaken in the Park.

Article 49 Title 1 of the ECL - Natural and Man-Made Beauty calls for the preservation, enhancement and promotion of NYS's scenic beauty. This article acknowledges the contribution of scenic beauty to the enjoyment of people who live and work in the State, as well as the millions of visitors who come to the State each year.

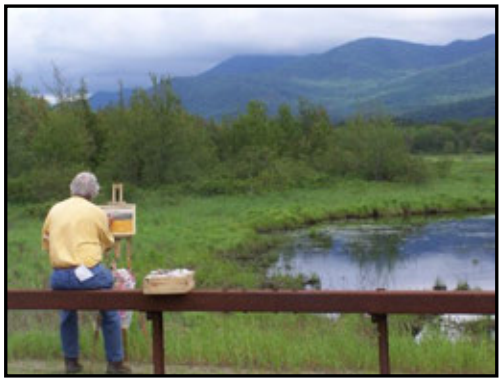
A.1 **Travel Corridor Aesthetics**

Travel corridors should reflect the history, heritage, and unique qualities of the communities and landscapes they traverse. The overall goal in the Park is to promote park-like character by preserving and incorporating patterns, colors, forms and textures that reflect local character into aesthetic considerations. The relationship of the roadway to its surroundings is a key factor in the corridor's aesthetics.

Consideration of aesthetics in corridor planning requires an understanding that aesthetic quality is not objective but depends on the perception of users interacting with their environment. As individuals move along, or otherwise interact with corridors, their perceptions change as the character of roadway and the surrounding landscape changes. Travel corridor aesthetics is comprised of three components:

1. Internal Aesthetics: Consideration of elements directly within the roadway.
2. Relational Aesthetics: The visual relationships between a travel corridor and the specific elements of its surroundings.
3. Environmental Aesthetics: Aesthetics of the total affected environment.

Figure 5.28 Artist Painting a Scenic Viewshed.

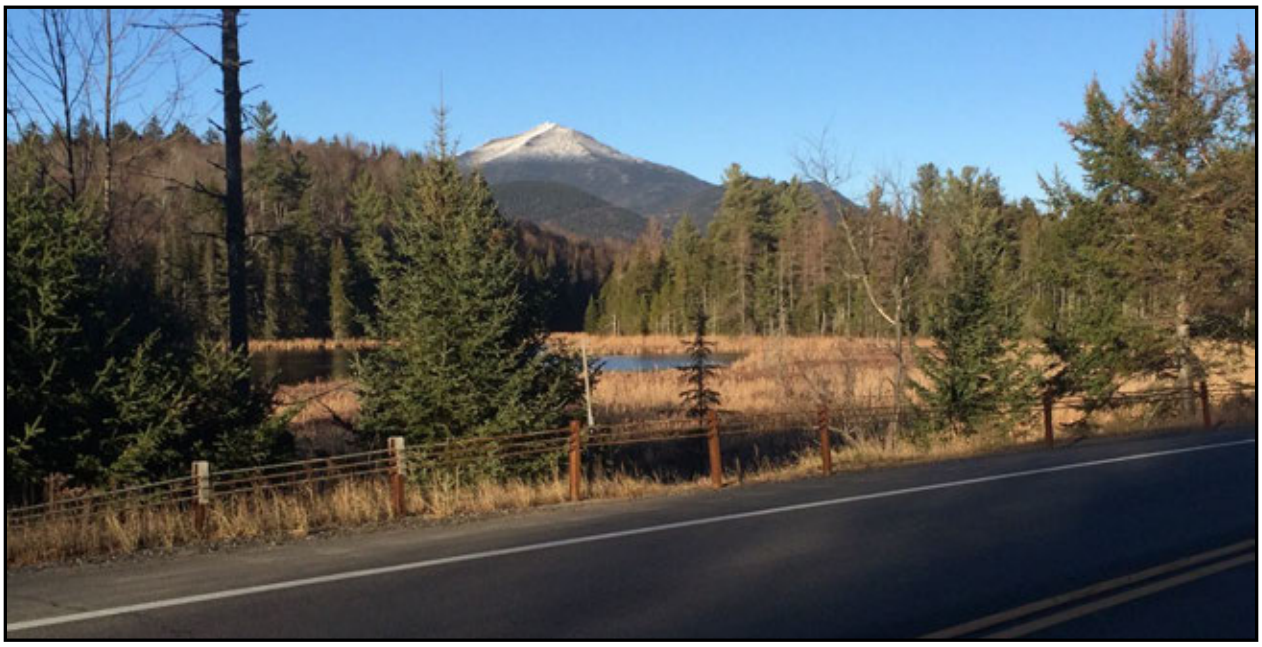


The viewshed experienced by travel corridor users is dynamic and is determined by corridor speed, views, topography and edge treatments. Hikers and cyclists traveling at low speeds can appreciate foreground, middle ground and distant views and the details of edge treatment. As speed increases, the viewshed experienced by the user/driver becomes more limited; concentration is directed more toward the travel lane and away from side views; nearby details become less important.

The forest and other natural communities are aesthetic resources. The management of travel corridors at the interface with these resources has a potential to affect aesthetic and scenic character. Similarly, constructed elements such as sidewalks, curbs, gutters, signs, lighting, fences, barriers, retaining walls, surface finishes etc., are important considerations for travel corridor aesthetics. Finally, plant material can blend travel corridors with the surrounding environment.

DOT, in partnership with DEC, APA and SUNY-ESF, initiated a Visual Resources Assessment (VRA) in 2008. This effort developed a data dictionary to characterize scenic qualities and performed an initial inventory of visual resources throughout the Park. Individual TCUMPs should use the VRA to identify needs related to the scenic and aesthetic context and resources of each corridor.

Figure 5.29 View of Whiteface Mountain along Route 86



A.2 Scenic Vistas and Overlooks

Forests line most of the travel corridors in the Adirondacks and panoramic vistas are surprisingly few and far between. There are 37 official vistas identified in the APSLMP. Because most of the vistas in the park have more than one property owner, the scenic vistas are extremely vulnerable to changes in land use or management. Placement of a structure in the foreground; use of highly reflective materials or obtrusive shapes in the mid or background can severely degrade the scenic beauty of a vista.[60]

There are 37 official vistas Parkwide noted in the APSLMP. Those on state highway ROW are shown in table 5.19. There are additional vistas and potential overlook opportunities throughout the Park which will be identified and evaluated in the individual TCUMPs. The APSLMP suggests that: "All overlooks should be furnished with information about the natural and cultural history of the area. They should also be integrated within a Park-wide interpretive overlook system…."[61] However, the provision of amenities and/or development of additional overlooks are dependent on the availability of adequate resources and plans.

Table 5.19 Adirondack Park Scenic Vistas[62]

Town	Location
Bellmont	• 1 mile west of Owl's Head
Bolton	• Two on Federal Hill Road
	• One on Coolidge Hill Road
Corinth	• Approximately 0.5 miles east of Daly Creek Road and 0.1 miles north of West Mountain Road
Dannemora	• 0.5 miles west of Village of Dannemora on State Route 374 • 0.25 miles east of Merrill Road • 2.75 miles northeast of Village of Dannemora on French Settlement Road • 1 mile northeast of hamlet of Standish on road from Standish to Lyon Mountain
Ellenburg	• Approximately 6.5 miles north of Upper Chateaugay Lake and approximately 1/4 mile west of West Hill School
Essex	• 1.5 miles northeast of Whallonsburg on Christian Road • 0.75 miles southwest of Whallon Bay (Lake Champlain) on Lake Shore Road
Fine	• Approximately 1.25 miles south of hamlet of Fine
Harrietstown	• Approximately at intersection of State Routes 86 and 192-A
Hopkinton	• Whites Hill
Indian Lake	• On State Route 30 overlooking Lake Abanakee

[60] Windows on the Park- Scenic Vistas of the Adirondacks, Adirondack Council, 1991
[61] Ibid.
[62] APSLMP

Table 5.19 Adirondack Park Scenic Vistas[62]

Town	Location
Indian Lake	• 2.5 miles east of Lake Abanakee overlooking Lake Snow
Johnsburg	• 3 miles south of hamlet of North Creek • 3 miles south of North River on Barton Mine Road • Approximately 0.5 miles southeast of Bakers Mills
Keene	• Intersection of Route 73 and 9N
Lake Pleasant	• On southeast shore of Lake Pleasant
Newcomb	• On State Route 28N approximately 0.75 miles south of Campsite Road • 3 miles east of hamlet of Newcomb on State Route 28N
North Elba	• 0.5 miles east of Village of Lake Placid on State Route 86 • Near intersection of State Route 73 and Heart Lake Road in North Elba
Ohio	• Intersection of West Canada Creek Road and State Route 8 at hamlet of Nobleboro
Santa Clara	• Two miles west of Keese Mill on Keese Mills Road • On State Route 30 at Pelky Bay on Upper Saranac Lake
Saranac	• 3.25 miles east of Picketts Corners near Hardscrabble Road • 2 miles southeast of hamlet of Saranac on Burnt Hill Road • At intersection of Chazy Lake Road and Chateaugay Branch of the Delaware and Hudson Railroad • Two miles northwest of Clayburg on Clayburg to Standish Road
Tupper Lake	• At intersection of road east of Sunmount Developmental Center and State Routes 3 and 30 • Approximately 1.5 miles west of the Railroad Station on State Route 3
Willsboro	• 1.5 miles south of Willsboro on County Route 22-M • 4.5 miles northeast of Willsboro on County Route 27 on Willsboro Point
Westport	• 4.0 miles north of Westport

A.3 Scenic Easements

When a conservation easement includes the goal of preserving desirable views of an area, it is said to have a scenic conservation purpose. If preservation of scenic resources is the sole purpose of the conservation easement, it may be referred to as a scenic conservation easement or simply a scenic easement. The primary function of an easement is to limit or eliminate future development and undesirable land uses on a property, while allowing for continued private ownership and

Figure 5.30 Scenic Vista. Scenic vista identified in APSLMP as, "*Tupper Lake – Approximately 1.5 miles west of Railroad station on State Route 3*"

traditional management. A scenic easement is a voluntary, but permanent and legally enforceable restriction on the use of land that maintains it in a more-or-less natural state. When the Adirondack Northway (I-87) was built in the late 1960's, the state used federal funds to purchase scenic easements in the immediate vicinity of several interchanges with the Park. Contact DOT Region 1 Office for additional ROW information.

A.4 Other Scenic Resources

Adirondack Park Trail Plan for the North Country National Scenic Trail (NC-NST)
The plan routes the projected 4,600-mile National Scenic Trail (see Figure 5.32) through the middle of the Adirondack Park. The trail supports recreation and tourism but was established under a national program based on scenic qualities. The NC-NST traverses the northern tier of the United States between Crown Point State Historic Site on Lake Champlain and Lake Sakakawea State Park on the Missouri River in North Dakota. About 2,700 miles of the trail have been completed so far. Within the Adirondack Park, the trail is expected to be about 158 miles long when complete, between Forestport in Oneida County and Crown Point.

The approved NC-NST plan for the Adirondack Park prefers a central route that avoids the High Peaks and uses about 81 miles of existing foot trails; another 39 miles of trail will need to be built. An estimated 27 miles of road walking will make what are hoped to be temporary connections

between trailheads. There is a notable gap in the trail between North Creek and the Vanderwhacker Mountain Wild Forest.

The trail route intersects eight Adirondack Forest Preserve management areas: Black River Wild Forest, West Canada Lake Wilderness, Moose River Plains Wild Forest, Jessup River Wild Forest, Siamese Ponds Wilderness, Vanderwhacker Mountain Wild Forest, Hoffman Notch Wilderness and Hammond Pond Wild Forest. Where new trail segments are needed, the proposed route is expected to be incorporated into future UMPs for these management units. The route is also expected to cross four conservation easement tracts: the North Lake Tract, Perkins Clearing – Speculator Tree Farm Easements, and the Lyme Easement in Crown Point.

Figure 5.31 Location of North Country National Scenic Trail

B. Guidance

APSLMP; APA Visual Impact Assessment; *Guidelines for the Visual Impact Assessment of Highway Projects* (FHWA-HEP-15-029); DOT HDM Chapter 28, Flexibility in Highway Design, (FHWA-PD-97-062)

C. Corridor Management Objectives

- Balance transportation activities to retain and enhance park-like character for the benefit of users and stakeholders
- Maintain or improve current level of access to scenic and aesthetic resources as appropriate in consultation with APA and DEC

D. Corridor Management Actions

- Develop an online library of constructed elements that promote park-like character including patterns, colors, forms and textures that reflect local character
- Identify common or key priorities and needs to be addressed in the Master or individual TCUMPs regarding scenic and aesthetic resources
- Identify lead contacts, contributors and implementation mechanism for key priorities and needs
- Ensure that the Visual Resource Assessment is readily available and widely used as a tool for applicable transportation activities

E. Alternatives Discussion

The null alternative continues to address visual and scenic resources on a case-by-case basis as required by state and federal law and guidance (including, but not limited to, those items listed in B, above).

The preferred alternative supports a comprehensive approach to addressing the Park's visual and scenic resources in a manner that enhances park-like character and sense of place.

5.25 HISTORIC AND ARCHAEOLOGICAL RESOURCES

A. Background and Existing Conditions

The history of the Adirondacks has been shaped and influenced by many forces. Native American use, logging, mining, farming, tourism and even medicine have all played roles in the development of the region. In the early 1800's, towns like St. Regis, Paul Smiths and Old Forge sprang up taking advantage of the huge timber resources and iron ore deposits. In the central Adirondacks, pioneers cleared the large tracts of land for farming creating the first settlements. And beginning in the late nineteenth century, the Adirondacks became a popular destination for the rich and famous. Known as the "Gilded Age", this period is famous for the construction of huge rustic compounds called Great Camps.[63] The Adirondacks history also includes the battlegrounds for three wars and home to two Winter Olympic Games.

Historic Context Studies are components of the TCUMPs for each travel corridor within the Adirondack Park. The information contained in the historic context studies is used to guide transportation activities with consideration of natural and historic resources, including enhancement opportunities of these resources. A primary objective of the Historic Context Study is to document the history of the particular travel corridor, including the origin and location of roads comprising its original route and later changes to the route. A second objective is to document the historic themes which shaped settlement and community growth in the travel corridor. The study is designed to highlight noteworthy and representative historic resources for potential future enhancement. Resources identified included:

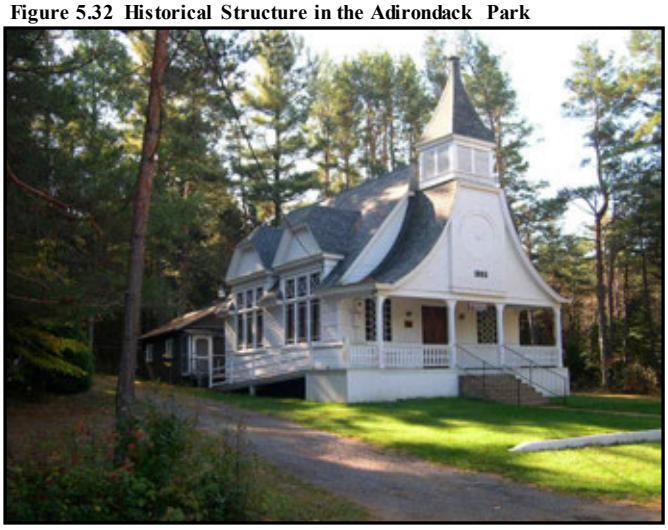
- prehistoric and historic archaeological sites;
- historic highway alignments;
- bridges, and roadside features; and
- buildings representing industrial, public, religious, commercial, agricultural, and residential use.

[63] http://adirondackmuseums.com/

The TCUMP planning process does not propose the destruction, alteration or introduction of visual elements of all or part of a site or property or its setting which is listed on or has been nominated for inclusion on the state or national register of historic places or as a listed or unlisted archaeological site.

DOT capital projects are reviewed on a project specific basis and will follow all applicable federal and state regulations and laws.

Figure 5.32 Historical Structure in the Adirondack Park



B. Guidance

NYS Education Department and NYS OPRHP websites; DOT TEM

C. Corridor Management Objectives – None identified

D. Corridor Mangement Actions - None identified

See the individual TCUMP documents.

E. Alternatives Discussion

The null and the preferred alternative meet state and federal regulations and guidance (including but not limited to those items listed in B, above) for historic and archaeological resources.

5.26 OPEN SPACE AND RECREATIONAL RESOURCES

The Park is a unique natural habitat that is well-suited for outdoor recreation. It has diverse ecosystems including forest, rivers, streams, lakes, ponds, wetlands, marshes, and meadows. Most of these ecosystems (lakes, ponds, wetlands, marshes, etc.) by definition are open spaces. Open space plays an important role in the State's pattern of spatial development, economic activities, culture, environmental vitality and quality of life.

Recreation and tourism are regional economic components of the Adirondack economy. The Adirondack Park is open year-round for recreation, with annual visitation of about 10 million people. Recreational assets include over 2,000 miles of trails, over 3,000 lakes and ponds and 1,200 miles of rivers, hundreds of miles of ski and snowmobile trails and 42 state campgrounds. Travel corridors are used by these visitors, as well as residents, to gain access to open space and recreational areas.

Other recreational opportunities include motorcycling, golfing, rock/ice climbing, whitewater rafting, birding, snowshoeing, ice skating, and ice fishing.
The APA Act §802, Definition (44) defines open space recreational use as "any recreation use particularly oriented to and utilizing the outdoor character of an area including: snowmobile, trail bike, jeep or all-terrain vehicle trail; cross-country ski trail; hiking and backpacking trail; bicycle trail; horse trail; playground; picnic area; public park; public beach or similar use".

DOT supports recreational activities through its operation and maintenance of travel corridors. In many cases DOT has constructed or participated in the development of amenities, such as parking areas which are integral to recreational facilities.

Figure 5.33 White-water Rafting on the Hudson River. Access to the river is provided from Route 28.

5.26.1 **Recreational Resources**

A. Background and Existing Conditions

Legislative findings leading to the creation of the APA recognized that the Park's abundant natural resources and open space character on both the public and private lands are unique to New York and the eastern United States. The protection and preservation of these resources is considered essential and basic to maintaining the unique character of the Park. The amount and variety of land and water in the Park also provides for a wide spectrum of recreational opportunities of national and international significance. Through careful planning and management, the use and enjoyment of the public lands, state easements and private lands should be encouraged so long it is within the lands capacity to withstand the use and, the resources are not degraded.

The TCUMP planning process will not result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan, the 2009 NYS Open Space Conservation Plan or the 2014 Draft Open Space Conservation Plan. DOT actions are reviewed individually or on a project specific basis and follow all applicable federal and state regulations and laws.

The individual TCUMPs will address interfaces between the recreational facilities and the state highway travel corridors as well as identify recreational resources adjacent to state routes. The

following are some of the key facilities and activities which interface with state highway travel corridors:

- Trails/Hiking
- Hunting
- Fishing
- Camping
- Bicycling
- Snowmobiling
- Winter recreational areas
- Attractions

Individual TCUMPs should discuss

- Winter Maintenance and access
- Informal recreational uses within the highway ROW
- Safety considerations
- Site amenities (kiosks, maps, picnic tables, etc.)

Figure 5.34 Recreational Access for Hunting. A need along travel corridors.

B. Guidance

The New York State Statewide Comprehensive Outdoor Recreation Plan (SCORP) 2014 – 2019; NYS Open Space Conservation Plan (2009); 2014 Draft Open Space Conservation Plan; DOT TEM Section 4.4.13; NYS Local Open Space Planning Guide (2004); APSLMP

C. Corridor Management Objectives

- Support recreational opportunities along state highway travel corridors

D. Corridor Mangement Actions

- Follow guidance in the NYS SCORP
- Develop an interagency response plan to address recreational resource needs where an individual TCUMP has not yet been adopted.

E. Alternatives Discussion

The null alternative continues to address recreational opportunities and open space resources on a case-by-case basis following state and federal regulations and guidance (including but not limited to those items listed in B, above).

The preferred alternative supports a corridorwide approach to addressing the Park's recreational opportunities and open space resources in a manner that enhances park-like character and sense of place.

5.26.2 **Public Access**

A. Background and Existing Conditions

Parking areas, road side parking and trailheads along state highways are access points that can be used by the public to access DEC State Lands/ Forest Preserve and other recreational areas.

Fishing Access Parking Areas
Fishing access parking areas or fishing access sites allow for motorists to pull safely off of the highway to park their vehicles and gain access to:

- Rivers and streams where DEC has acquired public fishing access rights on private lands
- State-owned lands where formally designated launches or fishing access sites have been approved as part of an adopted unit management plan

In some instances, these areas may be improved with universally accessible trails and fishing access sites. Fishing and car-top boating access sites may occur within the State highway right-of-way or may occur on municipal or private lands by easement. Recreational boating may also occur from these locations.

Figure 5.35 Access to Outdoor Recreation. Travel corridors play an important role in guiding and identifying access points to outdoor recreation.

Fishing access parking areas should be designed for long term (day long or overnight depending on the anticipated use) parking. Parking space should be provided, where appropriate and possible, for recreational vehicles and vehicles with camping or small boat trailers. However, where space is limited, providing a safe place to park for even a few cars may be appropriate.

Trailhead Parking Areas

Trailhead parking areas allow motorists to pull safely off of the highway to park their vehicles and to gain access to nearby hiking, biking, skiing, snowmobiling or horse trails. Trailhead parking areas on State Forest Preserve land require DEC and APA involvement to determine whether the size and location of these parking areas are in conformance with the APSLMP, UMPs and the land's capacity to withstand use. If a need is identified for new or expanded trailhead parking areas, consideration would include, but not be limited to: safety, environmental impacts and carrying capacity, in coordination with DEC, DOT and APA.

Figure 5.36 Trailhead Sign

Similar to fishing access parking areas, trailhead parking areas should be designed (where appropriate) for long term parking. Parking space should be provided, where appropriate and possible, for recreational vehicles and vehicles with camping trailers.

Individual TCUMPs should discuss:

- Parking capacity, including any issues with carrying capacity as provided by DEC (e.g. a problem at popular trailheads on peak weekends and holidays, overuse of a wilderness trail, parking along roadsides, illegal parking),
- Terrain constraints that would limit location and expansion of parking facilities.
- Ingress/ egress conditions at parking areas (e.g. on blind curves, little advance visibility for motorists).
- Any recommendations noted in DEC state lands/Forest Preserve UMP

Figure 5.37 Carrying Capacity. Understanding the Park's carrying capacity issues informs management decisions regarding public access.

B. Guidance

DOT HDM; Green Book; DEC UMPs; APSLMP

C. Corridor Management Objectives

- Support appropriate public access to public lands and conservation easements in consultation with APA and DEC

D. Corridor Mangement Actions

- Develop an interagency response plan to address public access needs where an individual TCUMP has not yet been adopted
- Identify public and/or private partners to plan, construct and maintain public access sites along the travel corridors
- Assess and prioritize locations within the Park where improved or additional access to forest preserve/State lands would be appropriate to support public recreation and the objectives of the APSLMP
- Assess and prioritize locations for new and improved facilities accessing conservation easement lands where they adjoin the DOT ROW
- Identify any alternatives to parking or trailheads available, such as shuttles
- Close or rehabilitate parking areas, roadside parking and/or trailheads as appropriate to support roadside safety and the UMPs and Recreation Management Plans (RMPs) for state lands and easement lands adjacent to state highway travel corridors
- Erect signage alerting motorists to upcoming trailheads or parking area along state highway travel corridors Work with local government and State Police to establish no-parking zones adjacent to road shoulder parking facilities to reduce unsafe parking as needed

E. Alternatives Discussion

The null alternative continues to address public access on a case-by-case basis following state and federal regulations and guidance (including but not limited to those items listed in B, above).

The preferred alternative supports a corridorwide approach to addressing the Park's public access needs.

5.26.3 **Snowmobile Trail and Infrastructure**

Figure 5.38 MUTCD Approved Snowmobile Warning Signs.

A. Background and Existing Conditions

Snowmobiling in the Park is a significant recreational activity and of great economic importance to towns and businesses within the Park. A 2003 study funded by OPRHP[64] indicated that the largest percentage of snowmobiling in New York State occurs in the Adirondack region. Total direct spending by snowmobile owners in

[64] "*2003 Snowmobile Owners Survey*"

Figure 5.39 Branding Signage. Town of Ohio sign that includes snowmobiling

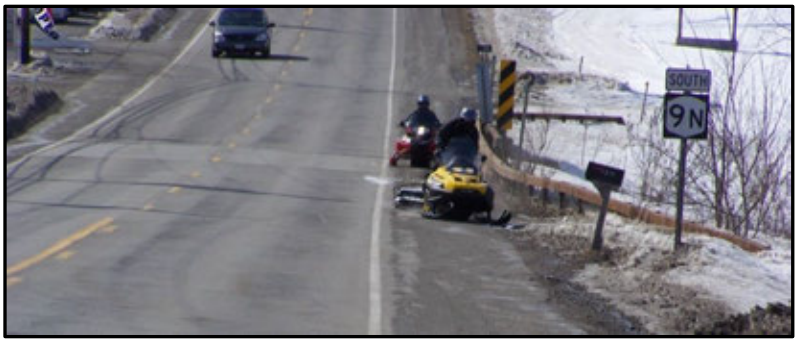
New York State during 2010-2011 was approximately $434 million; when indirect spending is factored in, the economic benefit to the State doubles.

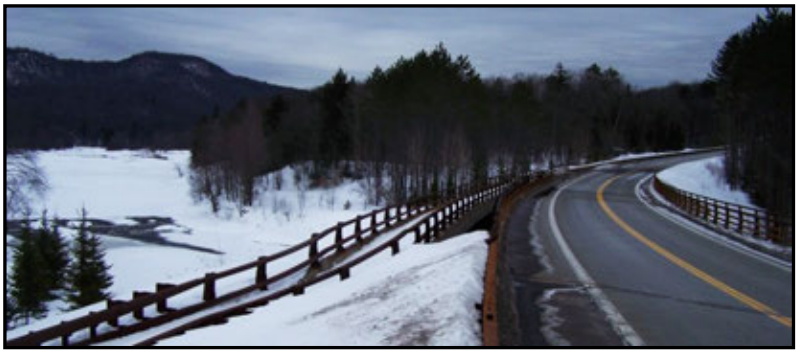
The snowmobile trail system is administered by OPRHP, maintained by snowmobile clubs and funded, in part, by a portion of snowmobile registration fees. All snowmobiles operated in New York State must be registered with the New York State Department of Motor Vehicles (DMV), even if it is registered in another state or province. A portion of each registration fee goes to the Snowmobile Trail Development and Maintenance Fund. This fund supports the public snowmobile trails in New York State, snowmobile safety education programs and enforcement of NYS snowmobile laws.

The snowmobiling trail system intertwines with travel corridors. Key considerations include:

- Trail crossings across highways
- Bridge/culvert crossings
- Safety considerations (Light glare; rutting of the pavement; conflicts with vehicles, tracking of snow/icing on the roadway)
- Pavement conditions at trail crossings
- Use and amenities on DOT ROW
- Adjacent/parallel trail sections
- Seasonal effect on local economy

Figure 5.40 Access Issues for Snowmobilers. One solution is to separate the snowmobilers from the traffic lanes.





Bridge accommodations and thermal plastic crossing markings are other considerations for snowmobiles. Parking opportunities (including winter maintenance) for snowmobilers exist along the travel corridors. A more in depth study could reveal further opportunities to promote snowmobile activity within the Park.

Figure 5.41 Thermoplastic Treatment for Snowmobile Crossing. The photo on the left shows a degraded treatment. The photo on the right shows an intact treatment.

B. Guidance

MUTCD and NYS Supplement for Snowmobile Issues; Snowmobile Plan for the Adirondack Park/Final Generic EIS

C. Corridor Management Objectives

- Support an appropriate snowmobile infrastructure in the Park when such infrastructure intersects with highway rights of way.

D. Corridor Management Actions

- Identify key travel corridors/routes along which snowmobiling is important
    - Assess corridor needs related to snowmobiling (e.g.: trail locations (formal and informal), crossing locations, culvert crossings, parking, etc.
- Improve transportation infrastructure, where feasible, to support snowmobiling
    - Encourage links between snowmobile trails and destinations
- Work with OPRHP on funding/construction for stable crossings or other needed amenities in the travel corridors.
- Improve outreach and communication with stakeholders including communities, snowmobile clubs and other interested parties.

Figure 5.42 Transportation Infrastructure that Support Snowmobile Recreation.

E. Alternatives Discussion

The null alternative continues to address snowmobile trail and infrastructure needs on a case-by-case basis following state and federal regulations and guidance (including but not limited to those items listed in B, above).

The preferred alternative supports a corridorwide approach to addressing the Park's snowmobile trail and infrastructure needs.

5.27 SCENIC BYWAYS

A. Background and Existing Conditions

Figure 5.43 Scenic Byway Sign

DOT manages the State's Scenic Byways Program which is composed of both state and nationally designated byways. A designated Scenic Byway is a public road with intrinsic qualities, such as scenic, historic, recreational, cultural, archeological and/or natural that is recognized as such through legislation or some other official declaration.

- The National Scenic Byways Program was established in Title 23, Section162 of the United States Code (USC), and is part of the U.S. Department of Transportation (USDOT), FHWA
- In 1992, the State Legislature created the New York State Scenic Byways Program (NYS Highway Law, Article 12-C, §349aa-dd)

There are nine New York State designated Scenic Byways within the Adirondack Park (refer to Figure 2.4). Refer to Table 2 in Section 2.1.2.1 for a list of designated Scenic Byways within the

Adirondack Park and links for descriptions and Scenic Byway Corridor Management Plans (SBCMP). In the Adirondack Park, community groups such as the Adirondack North Country Association (ANCA) are critical partners and facilitators for the Byways program.

A SBCMP is a written plan that lays out a strategy for achieving the Byway's purpose. It describes how a Byway's intrinsic qualities will be managed, improved and preserved and encourages economic development through tourism and recreation. Two Scenic Byways, the Blue Ridge Road (Boreas) and the Roosevelt-Marcy Trail, do not have SBCMPs. All other Adirondack Park Byways have SBCMPs. These are available on DOT's Scenic Byways website, which also includes contact information for the DOT Scenic Byways Coordinator.

There are forty one (41) state routes that require TCUMPs in the Adirondack Park. Eleven of these corridors are part of the Scenic Byway program; over half of the road miles in these 41 corridors are covered under SBCMPs. See Table 5.20.

Table 5.20 Scenic Byways in the Adirondack Park

Scenic Byway	State Rtes in Park	Counties in Park	Overall Length (mi.)	Length w/in Park (mi.)
Adirondack Trail	30 & 30-A	Franklin, St. Lawrence, Hamilton, Fulton	188	153
Lakes to Locks Passage	9, 11	Clinton, Essex, Franklin	190	89
Blue Ridge Road (Boreas Road)	28N, 84	Essex	17	17
Central Adirondack Trail	9, 28, 12, 365	Oneida, Herkimer, Hamilton, Warren	153	109
Dude Ranch Trail (First Wilderness)	418, 9N	Warren, Saratoga	40	40
High Peaks Byway	73, 9N	Essex	30	30
Olympic Trail	86, 3, 9N	St. Lawrence, Franklin, Essex, Clinton	170	117
Roosevelt-Marcy Trail	28N	Hamilton, Essex, Warren	40	40
Southern Adirondack Trail	8	Herkimer, Hamilton	112	45

Scenic Byways sometimes traverse multiple routes, or portions of roadways with dual designations. While not a major issue, this distinction does differentiate the Scenic Byway process from the TCUMP process, which focuses exclusively on one corridor. In addition, a single corridor may be part of one or more designated scenic byways and under the management of more than one SBCMP (e.g. NY Route 28 is discussed in both the Adirondack Trail and the Central Adirondack Trail SBCMPs). See Table 5.21 for additional information.

Table 5.21 Routes in the Adirondack Park with Multiple Scenic Byways Designation

Primary Route Number	Secondary Route Numbers	DOT Region	Counties	Roadway Length (mi)	Scenic Byways			
					Name	Length	Percent	CMP
NY28	NY30	1,2	Hamilton, Herkimer, Warren, Oneida	97.25	Adirondack Trail Central Adirondack	108.36	*111.42%	Yes Yes
NY28N	NY30	2	Hamilton, Warren, Essex	50.84	Adirondack Trail Roosevelt-Marcy	50.87	100%	Yes No
NY3	NY30, NY 86	7	Franklin	110.97	Adirondack Trail Olympic Trail	77.71	70%	Yes
NY30	NY8	2, 7	Hamilton, St. Lawrence, Franklin, Fulton	153.83	Adirondack Trail	153.83	100%	Yes
NY418		1	Warren, Washington	3.37	Dude Ranch Trail/First Wilderness	3.37	100%	Yes
NY73	NY9N	1	Essex	27.55	High Peaks Byway	27.55	100%	Yes
NY74		1	Essex	18.87	Lakes to Locks Passage	1.6	8%	Yes
NY8	NY9N	1, 2	Warren, Hamilton, Herkimer	104.01	Adirondack Trail Southern Adirondack Trail	45.73	44%	Yes Yes
NY86		1,7	Franklin, Essex	39.12	Olympic Trail	26.67	68%	Yes
US9	NY22, NY8, NY9N	1, 7	Clinton, Essex, Warren	100.66	Lakes to Locks Central Adirondack High Peaks	25.86	26%	Yes Yes Yes
NY9N		1, 7	Warren, Essex, Clinton	130.76	Lakes to Locks Dude Ranch Olympic Trail	58.22	45%	Yes Yes Yes

* NY 28 is entirely within the Adirondack Trail and part of the Central Adirondack Trail, or 111.42% covered by SBCMPs.

The Scenic Byway Program has developed standards that benefit travel corridors. Most notable is the New York State Scenic Byways Sign Manual, which provides guidance to the DOT's Regions, Byway Management Organizations (BMOs) and municipalities along the Byways. The manual is included as Appendix A to Chapter 11 of the DOT's Highway Design Manual (HDM). Other opportunities to align the goals and objectives of SBCMPs with TCUMPs exist including, but not limited to strategic planning, improving access, multi-modal trails, supporting tourism and economic development. These, and others, will be explored in greater detail in individual TCUMPs.

Note: Along Scenic Byways, off-premise advertising signs are prohibited.

B. Guidance

Green Book; New York State Scenic Byways Nomination Handbook and Sign Manual; NYS Scenic Byways Advisory Board; FHWA web pages related to Byways

Figure 5.44 View of Raquette Lake and the Blue Mountains from Route 28 (Central Adirondack Trail)

C. Corridor Management Objectives

- Align and support the shared goals and objectives of the TCUMP and the SBCMPs.

D. Corridor Management Actions

- Improve communication and collaboration with all stakeholders (state agencies, local governments, community organizations, etc.)
  - Conduct regular meetings with stakeholders of the Scenic Byways Program in the Adirondack Park to foster a regular on-going dialogue
- Identify resource sharing and synergistic planning opportunities

E. Alternatives Discussion

The null alternative continues to manage TCUMPs and SBCMPs independently, following state and federal regulations and guidance (including but not limited to those items listed in B, above). Coordination and efficiency opportunities might be missed.

The preferred alternative supports a coordinated approach to the management of TCUMPs and SBCMPs.

5.28 WILD, SCENIC AND RECREATIONAL RIVERS

A. Background and Existing Conditions

Wild Scenic and Recreational Rivers (WSRR) possess outstanding scenic, ecological, recreational, historic, and scientific values and are protected by the State's Wild Scenic and Recreational Rivers Act. The State's policy is to preserve designated rivers in a free-flowing condition, protecting them from uncontrolled development and use. This preserves the rivers' enjoyment and benefits for present and future generations.

The regulations implementing the Wild Scenic and Recreational Rivers Act affect management, protection, enhancement, and control, of land use and development on all designated river areas in New York State. Within the Adirondack Park, DEC oversees WSSR areas on public lands and APA oversees them on private land.

- Wild rivers are generally five miles or more in length, free of diversions and impoundments, and accessible only by water, foot or horse trail. Their river areas are primitive and undeveloped in nature. In general the minimum distance from the river to a public road or a private road open to the public is one-half mile. Management of wild river areas will be directed to the perpetuation of their wild condition.
- Scenic rivers are generally free of diversions or impoundments with limited road access. Their river areas are essentially primitive and undeveloped or are used for agriculture, forest management and other dispersed human activities which do not in themselves substantially constrain public use and enjoyment of these rivers and their environs. Management of scenic river areas will be directed to preserving and restoring their natural scenic qualities.
- Recreational rivers are generally readily accessible, and may have a significant amount of development in their river areas and may have been impounded or diverted in the past. Management of recreational river areas will be directed to preserving and restoring their natural, cultural, scenic and recreational qualities, except in areas delineated by the department as communities, which will be managed to avoid adverse environmental impacts and loss of existing river corridor values.[65]

The Adirondack Park State Land Master Plan (ASLMP) also includes a classification system and the recommended guidelines for wild, scenic and recreational rivers. This system and guidelines are designed to be consistent with and complementary to both the basic intent and structure of the WSRR legislation. Regulations apply to the designated rivers and lands adjoining them, generally up to 1/4 mile from the edge of the river. The river regulations seek to protect water quality and aesthetics include but are not limited to:

[65] 6 NYCRR Part 666 (666.4 Classes of rivers and management objectives for river areas)

- Establishing a 100-foot buffer strip
- Regulating bridge and road building
- Prohibiting structures (such as dams) and activities (such as dredging) which would alter the river's natural flow
- Allowing continuation of lawfully existing nonconforming uses, but requiring permits or variances for expansion or change in use
- Prohibiting certain "non-compatible" uses
- Prohibiting new structures in Wild River areas

Most recreational river shoreline and some wild and scenic river shoreline are privately owned.

WSRRs are important to travelers' Park experience and contribute to park-like character. The river corridors are part of travel corridors' viewsheds. WSRR management areas sometimes include parking and access. Where opportunities for future parking or access are consistent with applicable requirements, they should be considered.

The WSRR's classification should serve as a benchmark against which potential changes will be measured. Protection standards should be stringent enough to ensure that a designated river segment would not change from wild to scenic, or from scenic to recreational. Activities that may have a potential to affect WSRR character include (but are not limited to): emergencies repairs, sign placement, culvert repair/replacement, roadside vegetation control, guide rail etc.

Table 5.22 Wild and Scenic Recreational Rivers

River	Number of Miles Classified		
	Wild	Scenic	Recreational
Ampersand Brook		8.6	
Ausable -- Main Branch			21.7
Ausable -- East Branch		8.8	25.2
Ausable -- West Branch			31.8
Black		6.8	5.8
Bog		6.2	
Boreas		11.4	
Boquet			42.7
Boquet -- North Fork		5.9	
Boquet -- South Fork		5.0	
Blue Mountain Stream (Trib. of Middle Branch, Grasse River)		7.9	
Cedar	13.5	13.0	10.4
Cold		14.5	
Deer		5.7	
East Canada Creek		19.3	
Grasse -- Middle Branch		12.9	
Grasse -- North Branch		25.4	
Grasse -- South Branch		36.1	4.2
Hudson	11.2	11.8	55.1
Independence		24.5	

Table 5.22 Wild and Scenic Recreational Rivers

River	Number of Miles Classified		
	Wild	Scenic	Recreational
Indian (Trib. of Hudson River)			7.5
Indian (Trib. of Moose River -- South Branch)	15.1		
Jordan		15.7	
Kunjamuk	7.1	9.1	
Long Pond Outlet		16.3	
Marion		4.4	
Moose -- Main Branch		15.0	11.0
Moose – North Branch		5.3	11.6
Moose -- South Branch		33.6	
Opalescent	10.4		
Oswegatchie -- Main Branch	14.9		
Oswegatchie -- Middle Branch	13.0	22.7	
Oswegatchie -- West Branch		7.2	6.3
Otter River		8.8	
Ouluska Pass Brook	2.3		
Piseco Outlet	3.8		
Raquette		36.0	51.6
Red		8.0	
Rock		6.4	1.3
Round Lake Outlet		2.4	
St. Regis -- East Branch		15.4	6.3
St. Regis -- Main Branch		15.6	23.9
St. Regis -- West Branch		31.5	5.5
Sacandaga -- East Branch	11.3		12.6
Sacandaga -- Main Branch			28.5
Sacandaga -- West Branch	18.1		16.6
Salmon			11.6
Saranac			62.7
Schroon			63.9
West Canada Creek	7.4	17.1	9.1
West Canada Creek -- South Branch	5.7		9.1
West Stony Creek	7.4		7.7
Totals	**148.4**	**487.2**	**545.6**
Total Miles Classified			**1181.1**

B. Guidance

Adirondack Park State Land Master Plan (ASLMP); Green Book; DOT Environmental Handbook for Transportation Operations; DOT TEM 4.4.3 Wild, Scenic and Recreational Rivers; APA Citizen's Guide to Adirondack Park Land Use Regulations.

C. Corridor Management Objectives

- Ensure consideration of WSRR when planning, designing, constructing and maintaining transportation facilities.

D. Corridor Management Actions

- Develop Adirondack Park-specific design criteria for WSRR.
- Develop mechanisms to support user experience such as branding, wayfinding and interpretive signage for WSRRs
- Incorporate BMPs into all construction and maintenance activities in the vicinity of WSRRs including but not limited to:
    - Consult the WSRR Management Plan
    - Minimize areas of exposed soil
    - Maintain riparian buffer between roadway and river
    - Management Vegetation to promote native species and eradicates nuisance species
- Individual TCUMPs will identify specific opportunities and current attributes for WSRRs

E. Alternatives Discussion

Under the null alternative, activities will continue to meet state and federal regulatory standards and guidance (including but not limited to those items listed in B, above).

The preferred alternative provides additional opportunities to improve WSSRs, raise institutional awareness and increase efficiencies during corridor planning, design, maintenance and operations.

5.29 ENERGY

A. Background and Existing Conditions

New York State's Energy Plan calls for the State's transportation sector to be more energy efficient and sets goals for reducing consumption. An energy assessment is not required for the Master TCUMP as it is not expected to:

1. Increase or decrease VMT;
2. Generate additional vehicle trips;
3. Significantly affect land use development patterns;
4. Result in a shift in travel patterns; or
5. Significantly increase or decrease vehicle operating speeds.

Therefore, the Master TCUMPs will not significantly affect energy consumption. However, where appropriate, the plan may result in recommendations to improve energy efficiency and reduce the carbon footprint of activities in the Park. Energy assessments will be performed as required for individual DOT capital and operational projects along the corridors.

B. Guidance

NYS Energy Plan

C. Corridor Management Objectives

- Support recommendations to improve energy efficiency and reduce carbon footprint.

D. Corridor Management Actions

- Coordinate with affected stakeholders to identify additional opportunities to improve energy efficiency and reduce carbon footprint.

E. Alternatives Discussion

Under both the null and proposed alternatives, DOT will continue to implement New York State's Energy Plan.

5.30 NOISE

A. Background and Existing Conditions

Noise is defined as unwanted or excessive sound, and can interfere with sleep, work, relaxation, and/or recreation. The perception of noise is a function of a sound's characteristics, environmental factors, and the physical and mental sensitivity of the receptor. Sound characteristics include amplitude (loudness), frequency (pitch), impulse patterns, and duration. Environmental factors include distance, surrounding terrain, ambient sound level, time of day, wind direction, temperature gradient, and relative humidity.

The Park's natural soundscapes constitute valuable resources. Natural soundscapes include animal sounds, physical processes (e.g.: wind in trees) as well as human communities. Existing hamlets, travel corridors, and other more isolated developments all contribute sound.

Highway traffic is a dominant source of noise in urban and rural environments, and has been identified as an environmental issue of concern by local, state, and federal officials. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher travel speeds, and greater numbers of trucks. The loudness of traffic noise can also be increased by defective mufflers or other faulty equipment on vehicles. Any condition (such as a steep incline) that causes heavy laboring of motor vehicle engines will also increase traffic noise levels. In contrast, terrain, vegetation, and natural/manmade obstacles can reduce traffic noise levels.

In response to the issues associated with highway traffic noise, FHWA developed a highway noise regulation as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat. 1713). The noise regulation, "Procedures for Abatement of Highway Traffic Noise and Construction Noise" (23 CFR 772), requires highway agencies, such as DOT, to investigate traffic noise impacts in areas adjacent to all federal or federal-aid highway projects authorized under Title 23, and consider abatement if the agency identifies impacts. The noise regulation also requires highway agencies to maintain written statewide noise policies. Noise policies specify how each highway agency will implement the noise regulation, and must be approved by FHWA.

On July 13, 2010, FHWA issued a final rule to amend their noise regulation. The 2010 final rule required highway agencies to revise their current noise policies to demonstrate compliance with the amended noise regulation, obtain FHWA approval of the revised noise policies, and implement the policies by July 13, 2011. DOT's noise policy meets the requirements of the final rulemaking and has received FHWA approval.

It is DOT policy to address traffic noise concerns resulting from transportation projects by complying with FHWA regulations for federal-aid projects and by also applying the policy and procedures to state-funded projects. In accordance with 23 CFR 772.7(b), this Environmental Manual Section (Section 4.4.18) constitutes NYSDOT noise policy. This policy and accompanying procedures shall be reviewed every three years. Appropriate revisions shall be considered and adopted.

The TCUMP process will not increase noise.

B. Guidance

DOT TEM 4.4.18; APA's Development in the Adirondack Park (DAP) - Section II.5

C. Corridor Management Objectives

- To preserve the existing natural soundscapes of the Park.

D. Corridor Mangement Actions - None identified.

E. Alternatives Discussion

Under both the null and proposed alternatives, DOT will continue to follow state and federal regulations, policies and guidance (including but not limited to those items listed in B, above).

5.31 CONTAMINATED/HAZARDOUS MATERIALS

A. Background and Existing Conditions

Like many state roads, Adirondack Travel Corridors may traverse or be adjacent to sites of existing or historic commercial, industrial, agricultural or other uses with the potential to contaminate soils. Examples include: gas stations, dry cleaners, manufactured gasification plants, mine spoils, asbestos materials and fuel tanks.

Asbestos containing materials are frequently encountered by DOT as material used in the construction of bridges or in protective coatings for masonry or steel. Lead Paint which was used historically on bridges, is another hazardous material that may be found on state roads

Investigation for contaminated/hazardous materials is performed when transportation activities require:

- Property acquisition, excavation, or soil disturbances in areas that are suspected of being contaminated
- Relocation of utilities in suspect areas
- Buildings or structures to be demolished or substantially modified

The level of investigation required for a transportation activity is generally dictated by its complexity and characteristics.

B. Guidance

DOT TEM 4.4.20 Contaminated Materials and Hazardous Substances; DOT TEM 4.4.19 Asbestos

C. Corridor Management Objectives - none identified

D. Corridor Management Actions - none identified

Figure 5.45 Previous Gas Station Converted to New Use

E. Alternatives Discusssion

Under both the null and proposed alternatives, DOT will continue to follow state and federal regulations and guidance (including but not limited to those items listed in B, above).

5.32 UTILITIES

A. Background and Existing Conditions

Figure 5.46 Typical Utility Maintenance in the Park.

Utilities have always relied on, and been intertwined with, transportation infrastructure. Utilities include sewer, water, gas, communication, and power. Public utilities including telegraph, telephone, and electricity, were introduced to the Adirondack region beginning in the 1880's. Tourism was one of the driving forces behind the installation of utilities,

Article XIV establishing the Adirondack Park predated the common use of utilities. Therefore, utilities were not considered when the Article was drafted. This has resulted in longstanding confusion and conflicts. Early utilities in the Park were built in the ROW of existing highways or railroads with the consent of the State Conservation Commission (succeeded by the Department of Conservation in 1911). The ROW served as both a cleared area facilitating the construction and maintenance of utility lines, and a corridor that was removed from the Forest Preserve, exempting the early utilities from prohibitions on timber removal and land taking.

Figure 5.47 Utility Poles. To move this pole would require a constitutional amendment to Article XIV.

As utility systems evolved, their services became critical to the residents and visitors to the Park. And as this became true across the country, laws were established mandating that transportation entities allow public utilities to be placed in their ROW. While state and federal regulations (17NYCRR Part 131and 23CFR645, respectively) recognize that it is in the public interest to place utilities in the public ROW they do not include provisions for the stipulations of the NYS Constitution's Article XIV.

The impacts of utilities on the Forest Preserve became an issue with increasing development in the Adirondacks in the 1930's. In deciding whether to approve a permit for a utility, DEC considered including whether the utility was essential to the Forest Preserve and served a public

use, whether it affected the wild forest character of the Forest Preserve, and whether it represented a permanent taking of Forest Preserve land by a corporation.

Unlike other parts of the State, where DOT might only need to issue a work permit, the relocation and placement of new utility lines along state highway travel corridors in the Park require DOT, APA and DEC to evaluate the effect of utilities on park-like character and sensitive resources (e.g. visual, wetland and Forest Preserve) to determine if mitigation is necessary. Guidelines for the relocation of utility lines are found in the Green Book.

Generally, communication and power utilities pose the greatest challenges to travel corridor planning throughout the Park. Other utilities such as potable water, gas and sewer have less conflict with travel corridors because they are located within existing town, village, and hamlet infrastructure. The following are some considerations to incorporate into the TCUMP process with an eye toward preserving or enhancing park-like character:

- Appropriate vegetative management (each major utility is required by state regulations to have a long-range vegetation management plan – see the NYS Department of Public Service website).
- Avoiding visual impacts and enhancing scenic vistas including at bridge locations
- Improving or maintaining safety for the travelling public
- Regulations that control the use of DOT ROW and Forest Preserve
- Placing utilities underground (Undergrounding utilities include such factors as: cost, feasibility, constructability, reliability, and priority in relation to competing interests.)

Travel corridor planning can also foster partnerships with utility providers. These can have mutual benefits including: shared vegetation management responsibilities, invasive species control, streamlining of approvals and reduced visual impacts.

B. Guidance

Utility Vegetation Management Plans required by state law (available on the Public Service Commission website)

C. Corridor Management Objectives

- Balance accommodation of utilities (power, water, sewer, cable, gas, etc.) within state highway travel corridors while maintaining park-like character

D. Corridor Management Actions

- Strengthen partnerships with utility providers
- Work with utility providers to reduce impacts to park-like character
- Provide technical support as requested regarding ongoing efforts for a State Constitutional Amendment on Transportation in the Park that also includes local roads and utilities
- Consider a cooperative agreement(s) among state agencies and utility providers for vegetation management

E. Alternatives Discussion

The null alternative would continue to respond to utility impacts on a case-by-case basis following state and federal regulations and guidance (including but not limited to those items listed in B, above).

The preferred alternative would use enhanced partnerships to provide an Adirondack context for utility accommodation and better reduce impacts to maintain park-like character.

SECTION 6 – MANAGEMENT ACTIONS

The outcome of the Master TCUMP is a series of actions to support the overall Vision:

> *New York State Agencies, thru their collaborative efforts, will strive to sustain the integrity of the Adirondack Park as a world class natural resource. Understanding that transportation is a key component of the park experience, we will demonstrate leadership and ensure the incorporation of sustainable practices that benefit stakeholders, while satisfying functional requirements. From conception to completion, all transportation activities will consider the direct and indirect influences on the Adirondack Park's natural, built and social environment.*

Topic-specific corridor management actions and alternatives discussions appear throughout the preceeding sections. Some corridor management actions, however, recur across multiple topics including:

- Develop and deliver training
- Expand and refine Park-specific guidance
- Coordinate permits/ activities across jurisdictional boundaries
- Task Technical Work Groups with defining needs, identifying opportunities, and formulating strategies
- Maintain scenic and park-like character
- Build, refine and maintain asset management databases
- Identify Locations for Further Study
- Identify topics which require specific public outreach
- Coordinate Activities with Adjacent Land Uses
- Apply and/or develop BMPs
- Develop Libraries of Treatments
- Develop Decision Trees

The connection between these actions and select topics from Sections 3, 4 and 5 is summarized in Table 6.1. Recurring actions are shown as column headings, and topic sections as row headings. A checkmark indicates that the action applies to that topic. Column headings that reference Section text are linked. The remaining actions (without links) are described below along with an alternatives discussion. This discussion supplements alternatives discussions in preceding sections.

DEVELOP AND DELIVER TRAINING

See 3.4.6 for text.

Alternatives Discussion -

The null alternative continues to provide essential training for agency staff who work in the Park.

The preferred alternative expands training opportunities under all topics identified in Table 6.1.

EXPAND AND REFINE PARK-SPECIFIC GUIDANCE

Agencies, municipalities (including hamlets and villages) and others with a stake in the Adirondack Park maintain and follow various guidance documents. The extent to which these documents are tailored to meet the Park's needs vary. Some are exclusively applicable; others were written with broader mandate that may or may not have been adapted to address specific Park needs. A check in the "Park-Specific Guidance" column in the table below indicates one of the following conditions:

- Updates are needed to existing guidance,
- Adirondack-specific information is needed for an existing guidance, or
- New guidance documents are needed.

As guidance documents are revised or developed, authors should be mindful of related documents and cross-reference them to minimize duplication.

Alternatives Discussion

The null alternative maintains existing guidance documents including, but not limited to; The Green Book; DOT Context Sensitive Solutions; DOT TEM, DOT HDM; AASHTO's Flexibility in Highway Design; and the Complete Streets Act. Each document contains guidance that provides safe, efficient and environmentally sound travel corridors. However, except for the Green Book, none are tailored to meet specific Park needs or conditions. The null alternative doesn't address the unique needs and context of the Adirondack Park.

The preferred alternative makes provision for new and updated Adirondack-specific guidance (even the Green Book could benefit from expansion and refinement). The preferred alternative recognizes the Adirondack Park's unique character and provides appropriate, contextually sensitive technical guidance for travel corridors. It also ensures that relevant guidance is cross-referenced to work in tandem with higher efficiency and minimum duplication.

Both alternatives provide safety measures and protect the environment, however the preferred alternative is more protective of park-like character.

COORDINATE PERMITS/ APPROVALS ACROSS JURISDICTIONAL BOUNDARIES

Engage all agencies with jurisdiction (whether or not included in the Green Book) to:

- align permitting processes with the Master TCUMP's vision for State Highway Travel Corridors,
- coordinate permit reviews, and
- seek process improvements (streamlining)

while still meeting the permitting/approving entities' goals and ensuring sound environmental protection.

Alternatives Discussion

The null alternative continues the same permitting processes; activies are coordinated on a case-by-case basis.

The preferred alternative ensures that permitting processes across all agencies are aligned with each other and the Master TCUMP's vision and seeks process improvements (streamlining).

TECHNICAL WORK GROUPS

See 3.4.3 for text

Alternatives Discussion

The null alternative continues to use TWGs on a limited range of topics.

The preferred alternative would expand the use of TWGs and task them with defining corridor management objectives, identifying corridor management actions, and formulating strategies, as appropriate, for the topics indicated in Table 6.1.

MAINTAIN SCENIC AND PARK-LIKE CHARACTER

Topics checked under the action column "Scenic and Park-like Character" have corridor management actions that may have an effect on park-like character. Measures to achieve and maintain park-like character need to be evaluated and incorporated into that topic's corridor management actions.

Alternatives Discussion

The null alternative continues to ensure that scenic and park-like character is protected on a case-by-case basis.

The preferred alternative effectively allocates resources by evaluating and incorporating measures to maintain, protect and enhance park-like character holistically and applying these measures consistently across an entire travel corridor.

BUILD, REFINE AND MAINTAIN ASSET MANAGEMENT DATABASES

See text in section 2.4.3.5

Corridor Management Objectives

- Improve asset management for travel corridors in the Adirondack Park

Corridor Management Actions

- Define asset management needs, opportunities, recommendations and strategies for the various topic areas
  - Develop data dictionaries for Park topic areas that include information such as scenic qualities, access needs, snowmobiling considerations, signage recommendations, habitat connectivity, and other areas identified through outreach and input
  - Develop stand-alone assessment forms, where identified, that can be used off-line, in field applications and/or while the electronic data dictionary is under development
  - Establish Park technical working groups (TWG) as needed
- Develop a robust asset management system for the Park.
  - Conduct an inventory of existing assets
  - Prioritize needs and actions
  - Measure results and track progress over time

Discussion of Alternatives

The null alternative continues to support safety and decision-making based on information gathered from standard engineering inventories but do not address the Adirondack Park's unique assets and needs.

The preferred alternative expands existing asset management capabilities and provides information specific to the Park's environmental systems, aesthetics, social factors and context.

IDENTIFY LOCATIONS FOR FURTHER STUDY

Reserved

TOPIC-SPECIFIC PUBLIC OUTREACH

It is DOT's policy to have public involvement as an integral part of the project development process. Obtaining input from a full range of stakeholders affected by the Department's actions and using that input in the transportation decision-making process is fundamental to the way DOT operates.[66] As a result, all travel corridor unit management plans incorporate meaningful public involvement that includes a public comment period. However, some complex, multi-jurisdictional topics require a more focused and collaborative problem-solving approach. Oftentimes, these topics have dedicated and engaged stakeholder groups (e.g. New York Bicycling Coalition, ANCA, Adirondack Recreational Trail Advocates, etc.) that necessitate a more aggressive or targeted public involvement plan. The recommendations summary table indicates which topics are earmarked for targeted public involvement.

Alternatives Discussion

The null alternative continues to meet all DOT requirements for public involvement for projects and activities in the Park.

The preferred alternative brings an enhanced, focused and collaborative public involvement process to topics identified in Table 6.1.

APPLY AND/OR DEVELOP BEST MANAGEMENT PRACTICE (BMPS)

The term 'Best Management Practices', or BMPs, is used to describe management actions that are effective, accepted and practicable and can be implemented to promote desired results or objectives. One way DOT uses BMPs is to ensure staff, consultants and contractors maintain quality and achieve consistent results during work operations. A BMP can be a physical element that is installed on-the-ground. (e.g. runoff diversions, silt fence, stream buffers and groundcover vegetation over bare soil areas) or part of the "process" that is used to plan, conduct and close-out work operations. (e.g. marking stream buffers with paint or flagging, and locating streams on the site before you begin work). BMPs are sometimes used as an alternative to formal, adopted standards or where evolving science makes the adoption of new or revised standards difficult. BMPs evolve as improvements and innovations are discovered. The table below indicates where BMPs can (and should) be implemented. In some cases, BMPs already exist; in others, they need to be developed. Table 6.1 does not make this distinction.

[66] NYSDOT Public Involvement Manual.

Alternatives Discussion

Under both the null and preferred alternatives, all agencies continue to employ Best Management Practices in projects and activities. BMPs continue to evolve and adapt as improvements and innovations are discovered.

DEVELOP LIBRARIES OF TREATMENTS

A 'Library of Treatments" means a readily-accessible collection of examples and/or principles applicable to a work element. Examples include retaining wall or bridge abutment aesthetic treatments. The intent is to inspire and stimulate discussion on specific, practical solutions to design, construction and operations challenges. Ideally, the library should be web-based, open-sourced, logically organized and rich with graphics and supporting technical notes. Content can include recommended "standard" treatments, unique features and outstanding, successful examples of treatments from any source (including outside of the Park) with relevance and applicability to the Park's needs. A comprehensive library of treatments can benefit areas outside the Park as well.

Alternatives Discussion

The null alternative continues to employ context sensitive solutions (CSS) for projects and activities throughout the Park.

The preferred alternative develops an organized, readily-accessible (ideally web-based and open-sourced) collection of examples and/or principles for various project elements (e.g. bridge abutments, retaining walls, sidewalks etc.) to inform context sensitive decisions for the topics identified in Table 6.1. The library would would continually evolve and be adapted as necessary.

DEVELOP DECISION TREES

A Decision Tree, in the most generic sense, is a map of possible problem solutions and consequences and can involve highly complex statistics and probabilities. In this context a decision tree used simply and pragmatically. It involves a sequence of preferred solutions or treatments to be applied to design, engineering, environmental and operational actions that occur in the Park. An example is rock slope stabilization. The goal is to ensure public safety while retaining park-like character when unstable rock outcroppings pose a threat. The decision tree outlines, in preferential order, treatments that are sensitive to environmental and aesthetic issues, after taking into consideration safety issues, the rock formation's geological analysis, constructability and cost. The goal is to strike the best balance among safety, operational needs, budget and the preservation of park-like character. Decision trees also ensure consistency in the decision-making process that leads to an applied solution.

Alternatives Discussion

The null alternative continues to address problems and challenges arising along state highway travel corridors throughout the Park on a case-by-case basis.

The preferred alternative outlines a decision-making process that leads to treatments ordered preferentially from an environmental and aesthetic perspective. This process is to be applied in decisionmaking for all topics identified in Table 6.1. The decision trees provides streamlining and consistency and continually evolves and adapts.

OTHER

The column heading "Other" in the table below indicates an issue that is atypical to most topics or suggests a topic-specific recommendation. See the individual sections with an "X" in this column to see the topic-specific recommendations and the related alternative discussion.

Table 6.1 List of Actions

Sections which include Corridor Management Objectives and Corridor Management Actions	Develop and Deliver Training 3.4.6	Park-Specific Guidance		Coordinate Permits/Activities Across Jurisdictional Boundaries	Technical Work Groups 3.4.3	Scenic and Park-like Character	Asset Management 2.4.3.5	Identify Locations for Further Study	Topic-Specific Public Outreach	Coordinate Activities with Adjacent Land Uses	Apply and/or Develop BMPs	Develop a Library of Treatments	Develop Decision Tree	Other
		Update Agency Guidance	Green Book: New Sections or updates											
2.4.3.5 – Assessment Management					X									
3.4.6 – Cross Agency Training					X									X
4.2 Ownership and Control of the Travel Corridor							X		X					X
4.3.1 – Highway Safety Program	X	X			X				X					
4.3.1.2 – Roadside and Clearing Widths	X	X	X				X	X					X	
4.3.1.3 – Falling Rock and Slope Problem Areas	X	X	X		X	X	X				X	X	X	X
4.3.1.4 – Audible Roadway Delineators		X		X	X				X					
4.3.1.5 – Traffic Calming	X	X					X	X	X			X		
4.3.1.6 – Lighting		X	X				X				X			
4.3.2 – Capital Construction Program	X	X		X	X				X	X				
4.3.3 – Operations Program	X	X		X			X			X	X			
4.3.3.1 – Residencies, Sub-Residencies and Re-Load Sites	X	X	X		X		X				X	X		
4.3.3.2 – Winter Maintenance	X				X		X				X			X
4.3.3.3 – Snow Plow Turn-a-round					X		X				X			

Table 6.1 List of Actions

Sections which include Corridor Management Objectives and Corridor Management Actions	Develop and Deliver Training 3.4.6	Park-Specific Guidance		Coordinate Permits/Activities Across Jurisdictional Boundaries	Technical Work Groups 3.4.3	Scenic and Park-like Character	Asset Management 2.4.3.5	Identify Locations for Further Study	Topic-Specific Public Outreach	Coordinate Activities with Adjacent Land Uses	Apply and/or Develop BMPs	Develop a Library of Treatments	Develop Decision Tree	Other
		Update Agency Guidance	Green Book: New Sections or updates											
4.3.4 – Highway Work Permit Program	X	X	X	X	X									
4.3.5 – Emergency Response Program	X	X	X	X	X		X				X			X
4.3.6 – Integrated Vegetation Management Program	X	X	X	X	X	X	X				X	X	X	
4.4.1 – Pavement and Shoulders		X	X				X		X				X	
4.4.2 – Drainage System	X	X		X	X		X				X	X	X	
4.4.2.1 – Frost and Boulder Heaving	X			X	X		X							
4.4.3 – Rest Areas, Safety Parking Areas and Scenic Overlooks	X	X		X	X	X	X					X		X
4.4.4 – Bridges	X	X	X		X	X	X				X	X	X	X
4.4.5 – Culverts	X	X	X		X	X	X				X	X	X	X
4.4.6 – Fences and Walls	X		X			X	X					X	X	
4.4.7 – Barriers (Including Guiderail)	X	X	X		X	X							X	
4.4.8.1 – Highway Signs	X	X	X		X	X	X							
4.4.9 – Pedestrian Facilities	X	X		X	X		X		X	X				X
4.4.10 – Bicycle Facilities	X	X		X	X		X		X	X				X
4.5.1 – Surplus Material and Disposal	X	X	X	X	X	X	X				X		X	

Table 6.1 List of Actions

Sections which include Corridor Management Objectives and Corridor Management Actions	Develop and Deliver Training 3.4.6	Park-Specific Guidance		Coordinate Permits/Activities Across Jurisdictional Boundaries	Technical Work Groups 3.4.3	Scenic and Park-like Character	Asset Management 2.4.3.5	Identify Locations for Further Study	Topic-Specific Public Outreach	Coordinate Activities with Adjacent Land Uses	Apply and/or Develop BMPs	Develop a Library of Treatments	Develop Decision Tree	Other
		Update Agency Guidance	Green Book: New Sections or updates											
4.5.2 – Borrow Areas	X	X	X	X	X	X	X				X			
4.5.3 – Staging and Stockpile Areas	X	X	X		X		X				X			X
5.3 - Regional and Related Planning Efforts	X			X			X		X	X				X
5.4 - DEC Managed Staet Lands/Forest Preserve/State Land	X			X	X	X	X			X	X			
5.5 - Regional and Local Economies				X					X					X
5.6 - Community Cohesion and Character	X	X		X		X			X	X	X			X
5.7 - Social Groups Benefitted or Harmed				X					X					X
5.8 - Secondary and Cumulative Impacts														
5.9 - Visitor Contact and Centers		X		X		X	X		X		X	X		X
5.10 - Adirondack Park Branding		X	X	X	X	X	X		X			X		
5.11 - Interpretative Signage	X	X	X	X	X	X	X					X		X
5.12 - Physical Features						X	X				X			
5.13 - Wetland Systems	X	X	X	X	X	X	X				X			X
5.14 – Surface Water Resources	X					X	X				X		X	
5.15 - Groundwater Resources											X			

Table 6.1 List of Actions

Sections which include Corridor Management Objectives and Corridor Management Actions	Develop and Deliver Training 3.4.6	Park-Specific Guidance		Coordinate Permits/Activities Across Jurisdictional Boundaries	Technical Work Groups 3.4.3	Scenic and Park-like Character	Asset Management 2.4.3.5	Identify Locations for Further Study	Topic-Specific Public Outreach	Coordinate Activities with Adjacent Land Uses	Apply and/or Develop BMPs	Develop a Library of Treatments	Develop Decision Tree	Other
		Update Agency Guidance	Green Book: New Sections or updates											
5.16 - Floodplains and Floodway	X			X							X			
5.17 - Coastal Resources/Consistency														
5.18 - Stormwater Management	X	X	X	X			X				X			
5.19 - Air														
5.20 - Threatened and Endangered Species	X			X							X			X
5.21– Critical Environmental Areas (including Unique Geological Features)	X	X	X			X	X		X	X				X
5.22.2 - Wildlife Management Areas and Bird Conservation Areas	X	X	X			X	X		X	X				X
5.22.3 - Habitat Connectivity	X		X		X		X			X	X		X	X
5.22.4 – Native Vegetation	X	X	X		X		X			X	X			X
5.22.5 - Invasive Species	X	X	X	X	X	X	X		X	X	X			X
5.22.6.1 - Beaver Management	X	X	X		X		X				X		X	X
5.23 - Agricultural Resources														
5.24 - Scenic and Aesthetic Resources	X	X	X	X	X	X	X	X	X	X	X	X		
5.25 - Cultural and Archaeological Resources														

Table 6.1 List of Actions

Sections which include Corridor Management Objectives and Corridor Management Actions	Develop and Deliver Training 3.4.6	Park-Specific Guidance		Coordinate Permits/Activities Across Jurisdictional Boundaries	Technical Work Groups 3.4.3	Scenic and Park-like Character	Asset Management 2.4.3.5	Identify Locations for Further Study	Topic-Specific Public Outreach	Coordinate Activities with Adjacent Land Uses	Apply and/or Develop BMPs	Develop a Library of Treatments	Develop Decision Tree	Other
		Update Agency Guidance	Green Book: New Sections or updates											
5.26.1 - Recreational Resources	X			X		X	X			X				X
5.26.2 - Public Access	X			X	X		X			X				X
5.26.3 - Snowmobile Trail and Infrastructure	X	X	X	X	X		X		X	X	X			X
5.27 - Scenic Byways	X	X	X	X		X	X		X	X				X
5.28 - Wild, Scenic and Recreational Rivers	X	X	X	X		X	X		X	X	X			
5.29 - Energy														
5.30 - Noise						X								X
5.31 - Contaminated and Hazardous Materials	X									X				
5.32 – Utilities	X	X	X	X	X	X	X	X		X	X			X

SECTION 7: IMPLEMENTATION SCHEDULE

Introduction

The intent of this section is to identify those actions that can be progressed **short term** (one to three years) and by which agency with a focus on the highest priorities. **Intermediate** (three to five years) and **long-term** (over 5 years) actions should be reviewed in 5-year intervals with the intention of progressing them as resources become available. Some actions are **ongoing**, meaning that, though they may have short term, intermediate or long-term aspects, they are generally already in progress or recurring. All Corridor Management Actions will be considered in the context of priority and value added. The implementation plan presented below is based on multi-agency coordination and stakeholder input. Not all topics from the TCUMP are included in this 5-year implementation strategy. The remaining topics will be considered in future updates.

Level of Involvement

Level A- is typically achievable with primary input from DOT. Other Agencies, Local Government and Stakeholders may be included, but are not critical to achieving outcomes
Level B- is typically achievable with primary input from DOT, DEC and/or APA. Other Agencies, Local Government, and Stakeholders will likely have input, and this input is more critical to achieving outcomes
Level C- typically requires multiple agencies, local Government and Stakeholders to progress, and is only achievable with broad support.

The following table outlines a schedule for implementation of the proposed corridor management actions. Accomplishments are contingent upon sufficient staffing levels and available funding.

Section Number	Description	Recommendations	Time Frame	Level of Involvement	Lead Agency
7	**Section 7: Implementation Schedule**	• Annual Report	Annually	A	DOT
2.4.2	**Individual TCUMPs**	• Develop General Schedule for Individual TCUMP's • Schedule Route 3 Individual TCUMP • Schedule Route 28 Individual TCUMP	Short term	A	DOT
2.4.3.5	**Inventory and Asset Management**	• Use TWG resource, including multiple short duration TWG's to inform recommendation • Develop list of needed Inventory/Asset Management to further Individual TCUMP development • Determine existing data sources (e.g. GIS data, DOT Sign Inventory) and develop work plan for application • Update and/or develop Inventory/Asset Management with an emphasis on limiting duplication of existing sources	Intermediate	A	DOT
3.4	**Partnering and Communication**	• Continue to schedule and hold meetings as needed to support the TCUMP effort and supporting actions • Provide an update in annual report of accomplishments related to the TCUMP	Ongoing	B/C	DOT
3.4.5	**DOT Operations Meeting**	• Strive for an annual meeting with applicable DOT staff, scheduling additional meetings as necessary • Establish appropriate action items such as training needs • Provide outcomes and action item status as part of annual report	Ongoing	A	DOT
3.4.6	**Cross-Agency Training**	• Schedule and hold trainings as needed to support the TCUMP effort and supporting actions • Provide an update in annual report of accomplishments related to this topic	Ongoing	B	DOT
3.4.7	**DOT Adirondack Park & Forest Preserve Manager**	• Finalize Department Policy on Position	Short Term	A	DOT
4.3.2	**Administration of Capitol Construction Program**	• Establish annual forum to share Capital Program updates with agencies, stakeholders and interest from the public	Short Term	A	DOT
4.3.3	**Operations (Maintenance) Program**	• Implement a program for "Unique Maintenance Locations", defined as limited road sections with particularly unique or sensitive components-- which warrant an exception to routine operational activities • Identify those components (e.g.: no-mow areas; spoil areas) which need to be managed uniquely	Intermediate	A	DOT
4.3.3.1	**Residencies, Sub-Residencies and Reload Sites**	• Form TWG to develop work plan and set priorities	Short Term	A	DOT

Section Number	Description	Recommendations	Time Frame	Level of Involvement	Lead Agency
4.3.3.2	**Winter Maintenance-Snow and Ice Control**	• Form TWG to develop work plan and set priorities • Develop Inventory and Asset Management criteria for "Cold Spots" for use in Individual TCUMP's	Short Term	A	DOT
4.3.4	**Highway Work Permits**	• Develop training, tracking in SLMS, and deliver training • Update guidance in DOT Guidelines for the Adirondack Park	Short Term	A	DOT
4.3.6	**Integrated Vegetation Management Program**	• Develop a DOT Adirondack Park Vegetation Management Plan (Manual). o Form TWG and develop Plan Outline and work assignments - 2017 o Finalize Plan and incorporate in Green Book –2018 • Develop current scenic vista clearing guidance as part of an interagency TWG o Form TWG- develop work plan and proposed recommendations o Finalize guidance and approvals, incorporate in Green Book	Intermediate	A/B	DOT/ DEC
4.4.2	**Drainage System**	• Asset management and Inventory o Develop asset management and inventory protocols for state highway travel corridors to assist in sustainable drainage practice • Develop tailgate training module for on-going Operations training	Intermediate	A	DOT
4.4.4	**Bridges & 4.4.5 Culverts**	• Culvert & bridge, maintenance and construction projects within the Park will incorporate best practices to the extent practicable o Utilize TWG to define BMP's and o Develop Inventory and Asset management system which will 1) help streamline approvals, 2) improve dialogue with regulatory agencies, 3) Improve general awareness of environmental factors that may affect selected treatments and design elements. o Develop series of coordination materials with agencies to assist in project coordination and incorporating habitat connectivity values	Ongoing	A	DOT
4.4.9.	**Pedestrian Facilities**	• Utilize TWG to develop work plan for topic with recommendations	Intermediate	C	DOT/ APA
4.4.10	**Bicycle Facilities**	• Utilize TWG to develop work plan for topic with recommendations	Intermediate	C	DOT/ APA
4.5.1	**Surplus Material and Disposal**	• Develop Asset Management and Inventory protocols • Update GIS viewer for with all known locations for possible future disposal in the Park • Utilize TWG to develop work plan for topic with recommendations • Update guidance in DOT Guidelines for the Adirondack Park	Intermediate	A	DOT
4.6.1	**DOT Guidelines for the Adirondack Park**	• Form TWG, including DOT regional and main office staff, DEC and APA staff • Determine content for bi-annual update(s) • Issue bi-annual update(s) with first complete in 2019	Short Term	B	DOT/ DEC/ APA
5.4	**DEC-Managed State Lands/ Forest Preserve**	• Utilize TWG to develop work plan for topic with recommendations • Develop procedures for Carrying Capacity at access locations • Improve Signage for public access • Inventory and Asset Management developed for topic area	Intermediate	B	DEC
5.10	**Adirondack Park Branding**	• Utilize TWG to develop work plan for topic with recommendations • Develop branding treatment for state lands that adjoin travel corridors with appropriate input • Develop community branding treatments along travel corridors with appropriate input	Long Term	C	APA
5.10.1	**Signage and Branding**	• Utilize TWG to develop work plan for topic with recommendations • Systematically strive to build consistent signage and reduce unnecessary sign clutter corridor by corridor	Ongoing	A	DOT

Section Number	Description	Recommendations	Time Frame	Level of Involvement	Lead Agency
5.10.2	**Adirondack Park Gateways**	• Utilize TWG to develop work plan for topic with recommendations • Develop Asset Management and Inventory parameters to catalog gateways in the park • Complete inventory of locations with appropriate data collection • Install and repair current signage at gateways • Determine if a new approach and design should be considered, including stakeholder input	Intermediate	B	DEC
5.11	**Interpretative Signage**	• Develop Inventory and Asset Management Protocols • Utilize TWG to develop work plan for topic with recommendations • Partner with Scenic Byways, Communities and other stakeholders to look for opportunities to incorporate interpretative signage along travel corridors that inform the traveling public to the Parks History, Natural Resources, etc.	Intermediate	C	DOT
5.13	**Wetland Systems**	• Utilize TWG to develop work plan for topic with recommendations • Develop BMP's guidance to be included as part of future DOT Guidelines for the Adirondack Park • Develop a wetland banking agreement for the Park with APA at a minimum • Develop Asset Management and Inventory parameters to catalog wetlands adjacent to travel corridors	Intermediate	B	DOT
5.18	**Stormwater Management**	• Proactively, beyond regulatory requirements, improve water quality along travel corridors by methods such as outlet basins of ditches to waters • Utilize TWG to further defining and prioritizing this effort. • Provide update on improvements made as part of annual report	Long Term	B	DOT
5.22.2	**Habitat Connectivity**	• Utilize TWG to develop work plan for topic with recommendations • DOT occasional lead on Wildlife Conferences to facilitate input to TCUMP • Develop further guidance and information regarding this topic	Ongoing	B/C	DOT/ DEC
5.22.3	**Native Vegetation**	• Utilize TWG to develop work plan for topic with recommendations • Develop improved guidelines for landscape treatments in the Park • Develop Park-specific seeding specifications and guidance • Develop best practices and training for soil management including topsoil • Develop Inventory and Asset management protocols for this topic • Identify and protect existing populations of native vegetation on the right of way consistent with safety considerations • Establish native seed collection area along the Adirondack Northway (I-87)	Ongoing	A	DOT
5.22.4	**Invasive Species**	• Utilize TWG to develop work plan for topic with recommendations • Establish annual strategic plan as part of APIPP partnership • Develop metrics to measure the reduction of the area and/or number of locations of invasive species • Continue annual operational discussions between DOT and APIPP concerning invasive species control performance measures, the identification of priority invasive locations and what might be included in annual summer work plans.	Ongoing	C	DEC/ DOT
5.22.6.1	**Beaver Management**	• Utilize TWG to develop work plan for topic with recommendations • Develop Inventory and Asset management protocols for this topic • Reduce total number of chronic problem locations along travel corridors with long term management options that consider the transportation and environmental needs	Ongoing	B	DEC

Section Number	Description	Recommendations	Time Frame	Level of Involvement	Lead Agency
5.24	**Scenic and Aesthetic Resources- all sections**	• Utilize TWG to develop work plan for topic with recommendations • As part of an Inventory and Asset Management plan develop and implement a Visual Resource Assessment for the Park that expands beyond the current information in the APSLMP • Develop guidance for Scenic Vista's and Overlooks	Ongoing	B	DOT/ DEC/ APA
5.26	**Open Spaces and Recreational Resources- all sections**	• Utilize TWG to develop work plan for topic with recommendations • Identify opportunities and needs through stakeholder input • Develop an Inventory and Asset Management system to catalogue opportunities and needs • Work cooperatively with partners (e.g. DEC, Communities, Snowmobile Clubs) to continually improve access to these resources where feasible	Ongoing	C	DEC/ APA
5.27	**Scenic Byways**	• Utilize TWG to develop work plan for topic with recommendations • Look for synergy between both efforts to further common interests	Long Term	A	DOT
5.32	**Utilities**	• Utilize TWG to develop work plan for topic with recommendations • Participate in an annual meeting with Utilities to coordinate activities and opportunities	Long Term (meeting Ongoing)	C	APA

SECTION 8 – DEFINITIONS AND ACRONYMS

8.1 DEFINITIONS

Acquisition. The act of vesting of title, right or interest to, real property for a public use, benefit or purpose, by virtue of the condemners exercise of the power of eminent domain.

Adirondack Highway Council (AHC). In place between 1974 and 1985, the AHC was charged with merging common visions for transportation in the park.

Adirondack Park Agency (APA). Created by Article 27 of the Executive Law

Adirondack Park State Land Master Plan (APSLMP). A document mandated by §816 of the APA Act that sets the master plan for all state lands within the Adirondack Park.

Amenity. As distinguished from "facilities" (see that definition): Something that adds to a user's comfort, convenience or enjoyment [of a facility]. A concession stand in a ballpark is an amenity; the ballpark itself is a facility. Park amenities are typically open to the public.

Annual Average Daily Traffic (AADT). The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over a period of one year.

Average Daily Traffic (ADT). The total traffic volume during a given time period, ranging from 2 to 364 consecutive days, divided by the number of days in that time period, and expressed in vpd (vehicles per day).

Aquifer. An underground geological formation able to store and yield water (see artesian, confined, and unconfined aquifers).

Bridge. The term "bridge" applies to any structure whether single or multiple span construction with a clear span in excess of 20 feet when measurement is made horizontally along the center line of roadway from face to face of abutments.

Capital Program. A program that a proposed dollar amount (on infrastructure) to be used over the next year(s) to maintain or build state and local highways and bridges, intercity passenger and freight rail, suburban and upstate transit ports and airports. Plus recommends objectives and performance measures to determine the States investment in transportation

Channel Grade Control. A permanent structure to control channel slope and elevation, often used to raise the elevation of a channel that has incised downstream of a culvert. (US Forest Service). In the Adirondack Park, most channel grade controls are constructed of stone.

Clear Zone. The area which a driver might recover control and return to the roadway or at least achieve significant deceleration before striking a fixed object. DOT guidance (HDM Chapter 10) defines the Clear Zone as that portion of the roadside border width, starting at the edge of the through traveled way that the Department commits to maintaining in a cleared condition for safe

use by errant vehicles. FHWA defines clear zone as the unobstructed, traversable area provided beyond the edge of the through traveled way for the recovery of errant vehicles.

Confining layer. Geologic material with little or no permeability or hydraulic conductivity. Water does not pass through this layer or the rate of movement is extremely slow.

Conveyance. An instrument by which some estate or interest in lands is transferred from one person to another; such as by deed, mortgage, etc.

Critical Infrastructure. Defined by the Patriot Act of 2001, critical infrastructure are those "systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters."

Culvert. An enclosed channel open at both ends carrying water from a stream or water course through an artificial barrier such as a roadway embankment. The term "culvert" shall apply to any structure whether of single or multiple span construction with an interior width of 20 feet or less when measurement is made horizontally along centerline of roadway from face to face of abutments.

Culvert Profile. A graphic depiction which allows one to view various parameters such as slope as they change through the culvert alignment.

Deed. A duly attested written instrument, under seal, conveying real property or interest therein.

Design Speed. A tool used to determine geometric features of a new road during road design. The design speed chosen for a highway is a major factor in choosing superelevation rates and radii of curves, sight distance, and the lengths of crest and sag vertical curves. Roads with higher travel speeds require sweeping curves, steeper curve banking, longer sight distances, and more gentile hill crests and valleys. Lower speed roads can have sharper curves, less banking, less sight distance, and sharper hill crests and valleys.

Drainage. The natural or artificial removal of surface and subsurface water from an area. Examples of "artificial" removal: cross slope of pavement to provide surface drainage for a roadway; perforated underdrain pipe used to drain water away from the subgrade of a roadway.

Easement. A right acquired by public authority to use or control property for a designated highway purpose. An interest in land consisting of the right to do an act, otherwise unprivileged, on the land of another. Where the easement is restricted to the use of land, it is appurtenant to the designated land and will pass with a transfer of the land.

Emergency Preparedness. Activities, programs, and systems developed prior to an incident, disaster or emergency, which are used to support and enhance prevention, response and recovery. Good preparedness makes responses more effective and depends on the resources available to the emergency response provider including federal, state, local, and tribal emergency public safety, law enforcement, and fire departments, etc. Emergency response includes all activities that

address the short-term, direct effects of an incident. It includes immediate actions to save lives, protect property, and meet basic human needs; and may encompass the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes.

Endangered Species.
(Federal): Those species determined by the U.S. Department of the Interior to be in danger of extinction throughout all or a significant portion of their range, as defined in the Endangered Species Act of 1973, and as amended. All such species are fully protected, including their habitat.
(State): Those species determined by the New York State Department of Environmental Conservation (DEC) to be in imminent danger of extinction or extirpation in New York State, or are federally listed as endangered. All such species are fully protected under New York State ECL 11-0535.

Facility. As distinguished from "amenities" (see that definition), something built, installed or established to serve a particular purpose.

- Examples of operational facilities: residency, subresidency, rest area.
- Examples of recreational facilities: Overlook, campground, marina

Fee Simple. An absolute estate or ownership in property including unlimited power of alienation.

Game species. Species defined in Environmental Conservation Law §11-0103 as "big game", "small game", or "game bird" species. They may be indicated in state lists as "**GS",** meaning that there are seasons set for the species when they may be legally hunted, or "**GN"** indicating that, while classified under the law as a game species, there are no seasons set and the species may not be hunted or taken at any time in New York.

Groundwater. Water found in the spaces between soil particles and cracks in rocks underground located in the saturation zone. Cracks in rocks can be due to joints, faults, etc. Groundwater is a natural resource that is used for drinking, recreation, industry, and growing crops. U.S. Geological Survey Open File Report 93-643

Guiderail. A system designed to guide vehicles back to the roadway and away from potentially hazardous situations.

Highway Boundary. The division between a parcel of land and the highway easement or fee.

Highways by Use. All lands which shall have been used by the public as a highway for the period of ten years or more, shall be a highway, with the same force and effect as if it had been duly laid out and recorded as a highway, and the town superintendent shall open all such highways to the width of at least three rods.

Highway Cross Section. Taking a section at right angles to the centerline of highway profile.

Highway Profile. A view of the elevations of an exiting and or new roadway.

Highway Right of Way. See "Right of Way".

Highway (Street or Road). A general term denoting a public way for purposes of vehicular travel, including the entire area within the right of way (AASHTO).

Highway Work Permit. A written document that is needed for the work to be done when working within the highway limits.

Hydrology. Refers to the constant movement of water above, on, and below the earth's surface in a process termed hydrologic cycle. The concept of the hydrologic cycle is crucial to understanding of the occurrence of water and the development and management of water supplies. For simplicity, it is convenient to discuss the hydrologic cycle by starting with evaporation from vegetation, exposed moist surfaces including the land surface, and from the water bodies such as ocean, rivers, and lakes. This moisture forms clouds, which return the water to the land surface or oceans in the form of precipitation or rainfall. Rainfall occurs in several forms, including rain, snow, and hail. The first rain wets vegetation and other surfaces and when saturated, it begins to infiltrate into the ground. The rate of Infiltration varies depending on land use, the character and moisture content of the soil, and the intensity and duration of precipitation. When the rate of precipitation exceeds the rate of infiltration, overland flow occurs. Infiltration first replaces soil moisture, and thereafter, percolates slowly to the zone of saturation. Water in the zone of saturation moves downward and laterally to sites of groundwater discharge such as springs, or seeps in the bottoms of streams and lakes or beneath the ocean as base flow. Water reaching streams, both by overland flow and from groundwater discharge, moves to the sea, where it is again evaporated to continue the cycle

Involved Agency. A term used under SEQR. A public body which has jurisdiction by law to fund, approve or directly undertake an action. If there is only one involved agency that agency is the lead agency.

Lane-Miles. A lane mile is one lane of road for one mile. So a two-lane road has two lane miles per mile, and a four- lane highway has four lane miles per mile. Using lane miles is a better way to measure the amount of pavement that is on a road.

Lead Agency. A term under the State Environmental Quality Review Act (SEQRA). The Lead Agency is the involved agency responsible for coordinating the SEQR process so that when an action is to be carried out, funded or approved by two or more agencies, a single integrated environmental review is conducted.

Maintenance Responsibility. Responsibility for maintaining components of the transportation infrastructure, including highway mainline, sidewalks, utility strips, lighting, landscaping, drainage facilities, etc. The entity or entities with maintenance responsibility may vary or overlap.

New York Highway Law grants control of the maintenance and repair of improved state highways in towns and incorporated villages to the Commissioner. The law also permits the Commissioner to enter into a written agreement for the maintenance and repair of any public street, main route or thoroughfare or portion thereof.[67]

In capital contracts, the maintenance responsibilities for any work included in the project is clearly outlined in the Maintenance Jurisdiction Table. Refer to HDM Chapters 15 and 21 for additional information.

Materials Exchanges. Materials exchanges facilitate the exchange of materials or wastes from one party, which has no use for that material, to another party that views the materials as a valuable commodity. These facilities foster waste reduction efforts through the reuse of materials, thus eliminating the need to process the materials for recovery or disposal. These facilities are not regulated by the DEC. (**See Surplus**)

Null Alternative: See §2.3.2

Open Space. May be defined as an area of land or water that either remains in its natural state or is used for agriculture, free from intensive development for residential, commercial, industrial or institutional use. Open space can be publicly or privately owned. It includes agricultural and forest land, undeveloped coastal and estuarine lands, undeveloped scenic lands, public parks and preserves. It also includes water bodies such as lakes and bays. The definition of open space depends on the context. In a big city, a vacant lot or a small marsh can be open space. A small park or a narrow corridor for walking or bicycling is open space, though it may be surrounded by developed areas. Cultural and historic resources are part of the heritage of New York State and are often protected along with open space.

Open space provides:

- Preservation of areas of particular scenic beauty, cultural value and historic significance
- Room for production of food and forest products
- Room for outdoor recreation
- Green infrastructure to shape urban growth and provide a more livable and efficient urban environment
- Protection or restoration of ecological functions
- Protection of wildlife diversity and habitat for endangered plant and animal species
- Protection of fisheries, viewsheds, public access and ecotourism potential

[67] New York Highway Law §349-c 7.

- Mitigation of natural hazards, such as flooding, and protection of water supplies
- Values that can take decades or centuries to mature and can be quickly lost to new development.

Operation and Maintenance Transportation Operations is a broad term that encompasses all operational activities undertaken by the DOT. This includes program development and management for transportation systems maintenance, fleet administration, traffic safety and mobility, modal safety and security and employee safety and health.

Transportation Maintenance is a subset of Operations and entails the preservation, repair and safety of the State's highway and bridge infrastructure in a manner that optimizes travelers mobility and travel time reliability, enhances environmental conditions, enables efficient economic activity and maintains ready response capability.

Park-like Character. A term used repeatedly in the APSLMP. Although the term is not officially defined, the following excerpts from the APSLMP convey the intent of the definition:

- "…protection and preservation of the natural resources of the state lands in the Park must be paramount."
- "Human use and enjoyment of those lands should be permitted and encouraged, so long as the resources in their physical and biological context as well as their social or psychological aspects are not degraded."
- "The importance of the major travel corridors … to the integrity of the Park cannot be over-emphasized."
- "The lands adjacent to these highways are the most visible to the traveling public and frequently determine the image and entire atmosphere of the Park for many visitors."
- "The primary travel corridor-line will be to achieve and maintain a park-like atmosphere on state lands… …that complements the total Adirondack environment."

The APSLMP emphasizes state lands; the TCUMP recognizes that these principles extend beyond state lands.

Pavement. The layered structure that forms the surface of a path, road, highway or aircraft runway. (Two examples are Asphalt or Concrete)

Protected Birds. As defined in Environmental Conservation Law §11-0103, all wild birds except those named as "unprotected". Some of these birds, such as waterfowl and gallinaceous birds (heavy-bodied largely terrestrial birds typically raised or hunted for human consumption), are also listed as game species with seasons set, while others may not be taken at any time.

Protected Wildlife. All species besides birds protected under Environmental Conservation Law §11-0103. This now includes all Special Concern species.

Reference Markers. "Reference Markers" are signs that serve as location references (not mile markers). They are placed roughly every tenth of a mile along state highways. Their original purpose was to track accident history, but they now serve as a means to track or direct work along

a highway. When initially placed, the reference marker contains an indication of the route number, DOT Region, county number within Region, order, segment, and mileage from designated points. Once placed, a reference marker becomes a permanent reference for a particular point along a highway. Refer to the reference marker manual for a full description.

Resource. Natural, historic/ cultural features that create a sense of place and enhance the quality of a user's experience. Mountains, rivers, lakes, trees, archaeological sites, historic villages, cemeteries, monuments are all examples.

Right of Way (R.O.W). The area between the highway boundaries held in trust for the People of the State of New York in either fee or easement. Per 23 USC Part 710.105: Right-of-way (ROW) means real property and rights therein obtained for the construction, operation, maintenance, or mitigation of a transportation or realted facility funded under title 23, United States Code.

River area. The river and the land area in its immediate environs bounded as established by the commissioner pursuant to section 15-2711 of the act. Upon designation and until boundaries are established by the commissioner, the river area shall be that area within one-half mile of each bank of the river.

Roadside Hazards. Common roadside hazards are traffic and utility poles, trees and shrubs, bridge abutments, above ground utility boxes and ditches, steep slopes and curbs on high speed roads. Some are referred to as Deadly Fixed Objects (DFO's) which mean they do not move when struck by a vehicle so they can be deadly when hit.

Shoulder. The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses

Special Concern Species. Those native species not yet recognized as endangered or threatened, but for which documented evidence exists relating to their continued welfare in New York State. Special Concern Species are protected under Environmental Conservation Law §11-0103 and may also be protected under other laws.

Stakeholder. Any person or group who could be affected by a transportation action or who perceive that their interest could be affected. Stakeholders include external parties such as: residents, community organizations, municipal officials, transportation organizations, traveling public (using all modes), advocacy groups, environmental groups, state and federal environmental and economic development agencies, chambers of commerce, schools and groups with a specific interest.

Stormwater. Stormwater is water from rain or melting snow that doesn't soak into the ground but runs off into waterways. It flows from rooftops, over paved areas and bare soil, and through sloped lawns while picking up a variety of materials on its way. The quality of runoff is affected by a variety of factors and depends on the season, local meteorology, geography and upon activities which lie in the path of the flow.

Surplus Material. Amount of unused material left over when what was required has been used.

Technical Working Group (TWG) A group consisting of technical specialists and others formed as necessary, to follow-up on the resolution of priority issues and activities. The need for a TWG may be identified by an agency, the AST, an ICM and/or ELP. Refer to Section 3.4.3 for additional information.

Threatened Species.
(Federal): Those species determined by the U.S. Department of the Interior as likely to become endangered within the foreseeable future throughout all or a significant portion of their range, as defined in the Endangered Species Act of 1973 (and as amended). All such species are fully protected.
(State): Those species determined by the DEC as likely to become endangered within the foreseeable future in New York State, or are federally listed as threatened. All such species are fully protected under the New York State ECL §11-0535.

Traffic Control Device. Any sign, signal, marking or installation placed or erected under public authority, for the purpose of regulating, warning, informing or guiding traffic.

Trail Head. A point of entrance to state land which may contain some or all of the following: vehicle parking, trail signs and peripheral visitor registration structures.

Travel Corridor. (APSLMP definition): That strip of land constituting the roadbed and right-of-way for state and interstate highways in the Adirondack Park, the Remsen to Lake Placid railroad right-of-way, and those state lands immediately adjacent to and visible from these facilities.

Travel Lane. (or Traffic lane) is a lane for the movement of vehicles traveling from one destination to another, not including shoulder or auxiliary lanes.

Unprotected Species. Not protected under federal or state law. The species may be taken at any time without limit; however, a state license to take may be required.

User Road. Highways "by public use," which are governed by § 189 of the Highway Law of New York State, which defines them as all lands which have been used by the public as a highway for a period of 10 years or more.

Utility. Person, corporation, municipally or public authority engaged in the distribution of electricity, gases, petroleum products, water, steam, the collection of wastewater, the operation of traffic control systems, or the provision of telecommunication service.

Visual Impact Analysis (VIA). An exercise conducted during the preliminary design phase of the project development process. VIA is a process that determines the degree of change, influence, or impact, an action has on a view, scenic resource, or created visual feature. The result of a VIA may be negative or positive.

Visual Quality. An attribute or characteristic of a subject as perceived by sight. Usually based on professional, public, or personal values and the intrinsic physical properties of the landscape.

Visual Resource. Those natural and created features of the environment that can be potentially viewed.

Visual Resources Scoping Assessment. A visual resource inventory conducted during the scoping phase of the project development process that is designed to be site-specific and to locate and document existing significant visual resources in a project area.

Waste (Solid). Solid wastes are any discarded (abandoned or considered waste-like) materials. Solid wastes can be solid, liquid, semi-solid or containerized gaseous material. (**See Surplus Materials)**

Wetland. Although the definition of wetlands can vary slightly between the state and federal government, the outcomes of what is a wetland is typically determined to be a wetland similar.

State Definition in the Park, defined in §802 of the Adirondack Park Agency Act, "wetlands are any land which is annually subject to periodic or continual inundation by water and commonly referred to as a bog, swamp or marsh which are either (a) one acre or more in size or (b) located adjacent to a body of water, including a permanent stream, with which there is free interchange of water at the surface, in which case there is no size limitation1."

Federal Definition, "Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.""Section 404 of the Clean Water Act

8.2 ACRONYMS

AATV .....Association of Towns and Villages
ACE.....United States Army Corps of Engineer
ADA ..... Americans with Disabilities Act
ADAAG ..... Americans with Disabilities Act Accessibility Guidelines
ADP.....Advanced Detail Plans
Park .....Adirondack Park
AADT ..... Annual Average Daily Traffic
ADT .....Average Daily Traffic
A/GFTC ..... Adirondack-Glens Falls Transportation Council
AHC .....Adirondack Highway Council
ANCA .....Adirondack North County Association
APA.....Adirondack Park Agency
APSLMP .....Adirondack Park State Land Master Plan
AHC .....Adirondack Highway Council
ALLUP…….……... APA-approved Local Land Use Program
AST .....Adirondack Steering Team
BDM .....Bridge Design Manual
BMPANC.....Bicycle Master Plan for the Adirondack North Country Region of New York State
BMO .....Byways Management Organization
BMP .....Best Management Practice
C of C .....Chamber of Commerce
CAA ..... Central Adirondack Association
CAC ..... Citizen Advisory Committee
CMP .....Corridor Management Plan
CSS .....Context Sensitive Solution
DANC .....Development Authority North Country
DEC.....Department of Environmental Conservation
DED ..... New York State Department of Economic Development
DOS.....New York State Department of State
DOT ..... New York State Department of Transportation
ECL.....Environmental Conservation Law
EIC .....Engineer-in-Charge
EIS .....Environmental Impact Statement
ELP ..... Executive Level Partnering
EPM ..... Environmental Procedures Manual
EPP.....Expanded Project Proposal
ESB ..... Environmental Science Bureau
FHWA..... Federal Highway Administration
FP .....Forest Preserve State owned (public) lands within the Adirondack Park
FPAC.....Forest Preserve Advisory Committee
GIS .....Geographic Information System
GPS ..... Global Positioning System
HDM .....Highway Design Manual
HOCTS ..... Herkimer-Oneida Counties Planning Study

ICM ..... Interagency Coordination Meetings
IPM ..... Integrated Pest Management
IPP ..... Initial Project Proposal
IVM ..... Integrated Vegetation Management
LGPC ..... Lake George Park Commission
MEC ..... Maintenance Environmental Coordinator
MO ..... New York State Department of Transportation Main Office
MOU ..... Memorandum of Understanding
MPO ..... Metropolitan Planning Organization
MSDS ..... Material Safety Data Sheet
MUTCD ..... Manual of Uniform Traffic Control Devices
NEPA ..... National Environmental Policy Act
NGOs ..... Non-Governmental Organizations
NYCRR ..... New York Code of Rules and Regulations
NYSCG ..... New York Snowmobile Coordinating Group
NYSSBAB ..... New York State Scenic Byways Advisory Board
OPRHP ..... Office of Parks, Recreation and Historic Preservation
ORDA ..... Olympic Regional Development Authority
OWP ..... Operational Work Planning
PDM ..... Project Development Manual
PS& E ..... Plans, Specifications and Estimate
PSC ..... NYS Public Service Commission
ROW ..... Rights-of-Way
RM ..... Reference Marker
RMP ..... Recreational Management Plans
SEE ..... Social, Environmental and Economic
SEQR ..... State Environmental Quality Review
SEQRA ..... State Environmental Quality Review Act
SHPO ..... State Historic Preservation Office
SPDES ..... State Pollution Discharge Elimination System
STIP ..... State Transportation Improvement Program
TCUMP ..... Travel Corridor Unit Management Plan
TIP ..... Transportation Improvement Program
TMP ..... Transportation Management Plan
TRP ..... Temporary Revocable Permit
T & S ..... Traffic and Safety
TTC ..... Temporary Traffic Control
TWG ..... Technical Working Group
VRA ..... Visual Resource Assessment
WZTC ..... Work Zone Traffic Control

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SECTION 9 – REFERENCES

New York State Laws/Statutes

- Environmental Conservation Law, Article 9, Title 15
- Environmental Conservation Law, Article 11, Title 5

Habitat Connectivity

- *Design of Bridges and Culverts for Wildlife Passage at Freshwater Streams* - compiled through a collaborative effort between the Environmental, Bridge, Construction, and Hydraulics Sections of the Massachusetts Department of Transportation Highway Division. http://www.massdot.state.ma.us/Portals/8/docs/environmental/wetlands/WildlifePassagesBridgeDesign122710.pdf

Land Use

- *Citizen's Guide to Adirondack Park Agency Land Use Regulations* – familiarizes landowners with the APA's regulations pertaining to private land within the Adirondack Park. www.apa.ny.gov/Documents/Guidelines/CitizensGuide.pdf
- *Development in the Adirondack Park* – an advisory publication prepared by Agency staff to help guide project sponsors in designing their land use and development proposals. http://www.apa.ny.gov/Documents/Guidelines/DAP-Introduction.pdf
- *Adirondack Park State Land Master Plan* – a document that describes the master plan for all state lands in the Adirondack Park. https://www.apa.ny.gov/Documents/Laws_Regs/APSLMP.pdf

Lighting

- FHWA Lighting Handbook;
- AASHTO GL-6 *Roadway Lighting Design Guide* (www.transportation.org);
- ANSI/IES RP-8 Standard Practice for Roadway Lighting (www.ies.org);
- *Development in the Adirondack Park, APA*
- International Dark-Sky Association web pages
- *Light Pollution and Wildlife Brochure,* International Dark-Sky Association
- *Light Pollution Effects on Wildlife and Ecosystems*
- *Night Sky Heritage*

Rest areas, visitor centers

- Highway Design Manual (HDM) Chapter 27 – *Highway Rest Areas and Parking Areas*
- DOT Policy 1.3-4 *Rest Areas*, *Rest Area Planning Guidance*
- AASHTO *Guide for the Development of Rest Areas on Major Arterials and Freeway*
- 17NYCRR Part 156, *Use of Rest and Parking Areas and Scenic Overlooks*
- 23CFR 752.5 Safety Rest Areas

- 23 U.S.C. 111(b) Agreements relating to use of and access to rights-of-way-Interstate System – Rest Areas

Snowmobiling:
- 1995 NYS Snowmobile Trail Manual
- Guidelines for Snowmobile Trail Groomer Operator Training, A Resource Guide for Trail Grooming Managers and Equipment Operators
- New York State Snowmobile Trail Signing Handbook
- New York Statewide Trails Plan, December 2010.
- NYS Snowmobilers Guide, A Handbook for Recreational Riding in New York State

Statewide Transportation Program
Applicable federal and state mandates:
- NYS: Section 15 of state transportation law http://codes.findlaw.com/ny/transportation-law/tra-sect-15.html
- Federal: The current federal law, Fixing America's Surface Transportation (FAST) ACT, Section 1202 Statewide & non-metropolitan Planning https://www.gpo.gov/fdsys/pkg/BILLS-114hr22enr/pdf/BILLS-114hr22enr.pdf

- Statewide and metropolitan planning regulations (May 27, 2016). link:https://www.federalregister.gov/articles/2016/05/27/2016-11964/statewide-and-nonmetropolitan-transportation-planning-metropolitan-transportation-planning.

- Federal rule that governs Statewide Planning efforts: 23 CFR 450.216
  The State shall develop a long-range transportation plan, with a minimum of 20-year forecast period at the time of adoption that provides for the development and implementation of the multimodal transportation system for the State….

Threatened and Endangered Species

Federal Laws/Statutes
- Endangered Species Act, 87 Stat. 884, as amended; 16 U.S.C. 1531-1544 – Public Law 93-205, approved December 28, 1973.
- The federal *Magnuson-Stevens Fishery Conservation and Management Act* Section 305(b)(2) requires an Essential Fish Habitat (EFH) consultation with the National Marine Fisheries Service (NMFS).
- The federal *Fish and Wildlife Coordination Act* requiring consultation with the Fish and Wildlife Service (FWS) when waters will be impounded, diverted, or otherwise controlled or modified. Federal Regulations 50 C.F.R. Parts 17 and 402
- The federal *Migratory Bird Treaty Act* (of 1918) and as amended, implements the treaties that the U.S. has signed with a number of countries (Canada, Mexico and the United States, Russia, Japan) protecting birds that migrate across international borders.
- The federal *Bald and Golden Eagle Protection Act* protects the bald eagle and the golden eagle by prohibiting the taking, possession and commerce of such birds. (Bald and

Golden Eagles are also protected under NYS Environmental Conservation Law Article 11 Title 5).
- Revised Interagency Cooperative Policy Regarding the Role of State Agencies in Endangered Species Act Activities

New York State Regulations
- Title 6. Department of Environmental Conservation Chapter I. Fish And Wildlife
- Title 6. Department of Environmental Conservation Chapter II. Lands And Forests, Part 193. Trees And Plants

UNESCO's Man and the Biosphere Program

The Man and the Biosphere Program (MAB) was launched in 1970. A biosphere reserve is a unique kind of protected area that differs from a national park, wilderness area, national forest, or wildlife refuge in having three very different, but equal, aims: conservation of genetic resources, species, and ecosystems; scientific research and monitoring; and promoting sustainable development in communities of the surrounding region. All three of these aims are equally important in a biosphere reserve. National parks and other kinds of protected natural areas usually are primarily concerned with conservation, and only secondarily with research and sustainable development.

MAB's original aim was to establish protected areas representing the main ecosystems of the planet in which genetic resources could be protected and research and monitoring could be carried out. These protected areas were to be called "biosphere reserves" in reference to the MAB program's name. Like all scientific programs, MAB has been refined over the years but is still committed to its original aims. Today, MAB is a set of related scientific research projects with three focuses:
- Minimizing the loss of biological diversity;
- Making people aware of how cultural diversity and biological diversity affect each other; and
- Promoting environmental sustainability through the World Network of Biosphere Reserves.

Additional information on the MAB program can be obtained through the program's website (http://www.georgewright.org/mab).

Utilities and Transportation Law

The following is more specific to these obligations and applies in the Park as well as outside the Park:
- NYS Transportation Corporations Law – In general, privately owned utilities that serve the general public (e.g., Verizon, National Grid) have the legislated grant to occupy certain types of state highways.
    - Only if the occupancy does not interfere with the free and safe flow of traffic.

  - Applies to non-controlled access highways but not to controlled access highways (freeways).
  - Occupation is at no cost to the utility.
  - DOT can dictate where within its ROW the utility can exist.
- DOT Policy – Municipally owned utilities do not have a legislated grant to occupy highway ROW, but have traditionally been given the same privileges as Transportation Corporations. In the Park, Tupper Lake has a municipally owned utility.

The Utilities have certain obligations that do apply and are noted here for greater awareness and understanding of the overall process.

- NYS General Obligations Law Section 11-102 -- No utility shall interfere with or delay the progress of work under any contract with DOT. Official order must be issued to contractor after contract award.
- NYS Highway Law Section 52 – Utility must comply with requirements set forth in its DOT Highway Work Permit.
- 17NYCRR Part 131 – NYSDOT has the right to construct, repair and maintain its highways without interference from utility facilities.

When DOT has a project that will influence a utility and require it to relocate it generally is a cost to the utility to relocate. Movement of utilities typically have minor potential impacts, but in some circumstances can have implications to park-like character or the need for consideration as part of the project coordination and/or permitting. Relocation involves legal requirements related to funding, as shown in the following general overview of the responsibility for associated costs that DOT (State) covers.

What DOT Is Authorized To Fund

- DOT authorized to pay the cost of relocating any municipally owned utility facilities if the relocation is necessitated by highway improvements (in-kind replacement). Also, authorized to acquire additional property as necessary to accommodate relocated -- Highway Law Section 10-24
- DOT authorized to pay the cost of relocating privately owned public utilities located on private property (excludes other state, federal or locally owned property). No authorization to acquire additional property for utilities in these instances -- Highway Law Section 10-24b.

Undergrounding Of Utilities

17NYCRR Part 131.15

(a) The Department may preclude or require the relocation or undergrounding of new or existing utility facilities based upon environmental, scenic appearance or historical concerns;

(i) in order to ensure compliance with any federal or state statute, regulation, Executive order or similar mandate, or

(ii) when the Department, in its sole discretion, determines that preclusion, undergrounding, or relocation is required as a condition to the Department obtaining or utilizing any federal or state funds, or

(iii) when the Department, it its sole discretion, determines that preclusion, undergrounding or relocation is required to comply with, or participate in, any program or action under federal or state law.

(b) Various federal and state laws, regulations, Executive Orders or other mandates contain provisions recognizing and extending protections to scenic and historical places. Included among such provisions which may relate to highway rights-of-way are the landscape and scenic enhancement provisions in Section 319 of Title 23 of the U.S. Code; "transportation enhancement activities" as defined in Section 101 of Title 23 of the U.S. Code; Parts 645 and 752 of Title 23 of the Code of Federal Regulations; Sections 20 through 22 and Article X 11-C of the Highway Law; Article 27 of the State Executive Law, Parts 570 through 586 of Title 9 of the Official Compilation of Codes, Rules and Regulations of the State of New York and Executive Order 150 relating to the Adirondack Park; Section 106 of the National Historic Preservation Act of 1966; Section 14.09 of the State Parks, Recreation and Historic Preservation Law; Sections 65, 66 91 and 94 of the Public Service Law; and related regulations in Parts 98, 99 and 608 of Title 16 of the Official Compilation of Codes, Rules and Regulations of the State of New York; Title 27 of Article 15 of the State Environmental Conservation Law, (Wild, Scenic and Recreation Rivers System); Article 49 of the State Environmental Conservation Law, (Protection of Natural and Man-Made Beauty); Article 24 of the State Environmental Conservation Law (Freshwater Wetlands); Article 42 of the State Executive Law (Waterfront Revitalization and Coastal Resources): and Federal Executive Order No. 11990 (Protection of Wetlands). The above is not a complete recitation of all applicable provisions.

Background History of Utilities, Travel Corridors, and Forest Preserve

Early utilities in Adirondack Park were built in the right-of-way of pre-existing highways or railroads that were improved with the consent of the State Conservation Commission, succeeded by the Department of Conservation in 1911. The right-of-way served both as a cleared area facilitating the construction and maintenance of utility lines, and as a corridor that was removed from the Forest Preserve, exempting the utility company from prohibitions on timber removal and land taking. Thomas Durant's telegraph line from North Creek to Blue Mountain Lake was built along the old stage route before the State Forest Preserve was established in 1885. The extension of the line to Raquette Lake, partly passing through state land, appears to have followed pre-existing roads built by W.W. Durant. The same held true for the private line built from Raquette Lake to Camp Sagamore in 1914. All public telephone and electric lines built through Old Forge, Eagle Bay, Inlet, Blue Mountain Lake, and Indian Lake, from the 1900's to 1920's followed pre-existing roads comprising the original alignment of Route 28. The original lines from Eagle Bay to Raquette Lake followed the right-of-way of the Raquette Lake Railroad.

The impacts of utilities on the Forest Preserve became an issue with increasing development in the Adirondacks in the 1930's. In deciding whether approve a permit for a utility, the Conservation Department considered including whether the utility was essential to the Forest Preserve and served a public use, whether it affected the wild forest character of the Forest Preserve, and whether it represented a permanent taking of Forest Preserve land by a corporation. The Conservation Department was not always certain of its authority in granting permits and requested the opinion of the State Attorney General on how to proceed.

In 1936, The Department of Conservation consulted the Attorney General regarding the installation of a conduit, by the Natural Gas Corporation, which would cross reforested state land in Adirondack Park. Attorney General John J. Bennett, Jr. indicated that under Section 16 of Article VII of the Constitution, the Conservation Department had neither a barrier nor an authority to grant an easement for the gas line, but under Section 60-a of the Conservation Law, had the authority to manage and control reforested properties. Based on Section 60-a, the Attorney General indicated that the Department of Conservation, at its own discretion, could grant a permit if no substantial harm would occur to the reforested area.

In 1949, the Department of Conservation requested the Attorney General to advise whether a permit could be granted for a power line and telephone line to a private camp along the road to Mount Whitney. The road was not a "highway" *per se* and apparently did not have a defined right-of-way. Attorney General Nathaniel L. Goldstein indicated that the Conservation Department could grant the permit if it determined that the utility lines would not impair the "wild character of the preserve," and thus constitute a prohibited use of the land. Goldstein cited two earlier opinions to illustrate the responsibility of the Department of Conservation regarding utilities. In 1945, the Department had requested the Attorney General to advise whether it could grant a permit for an overhead electric line to a private cottage. The line would not require a supporting pole and might also provide power to a public camp in the same location. Alternatively, an underground line would be built. Attorney General Goldstein indicated that an extension of an overhead line from a state camp to a private camp would not make much difference in physical appearance, and an underground line would be permissible if the land was restored to its original state without disturbance to the forest. He gave the Department of Conservation the responsibility to determine whether either the overhead or underground line would impair the "character of wilderness" of the Forest Preserve. In an another instance, in 1941, Attorney General John J. Bennett, Jr. had advised the Department that it could permit a railroad to erect a power line along an existing railroad right-of-way, presuming that trees would not need to be removed.

In 1950, the Conservation Department requested the Attorney General to advise whether a permit could be granted to Paul Smiths Electric Light and Power Company to construct a power line along Route 86 between the Villages of Saranac Lake and Lake Placid. The company had erected an original power line along the New York Central Railroad right-of-way and now desired an auxiliary line to the north. The line would require the removal of 90 trees, 3" to 21" in diameter, and the trimming of numerous adjacent trees on two miles of state land within the Clifford R. Pettis Memorial Forest. To provide context, Attorney General Goldstein cited an earlier opinion of Attorney General Bennett, in 1933, regarding the proposed removal of 2,067 trees for the improvement of Route 86 between Saranac Lake and Lake Placid, pursuant to Chapter 275, Laws of 1924, an amendment to the 1908 Highway Law. Bennett had advised the Conservation Department that a permit to remove the trees could not be granted due to the constitutional prohibition on timber removal from the Forest Preserve. This prohibition had been upheld in *Association for the Protection of the Adirondacks v. MacDonald*, 253 N.Y. 234, where timber was to be removed for the construction of what the court felt was a non-essential use. In a related instance, also in 1933, Bennett had advised that refreshment stands and a restaurant along the Whiteface Memorial Highway were not permissible, as being non-essential to the road and encroaching on the Forest Preserve. Attorney General Goldstein stated that while the proposed power line was not essential to the use of Router 86, he understood the desire to erect it along the

highway where it could be efficiently maintained. Yet, he indicated that the Department of Conservation would not be justified in granting the permit, as it would be in violation of the constitutional prohibition on timber removal from the Forest Preserve.

The Paul Smiths Electric Light and Power Company subsequently obtained a permit from the State Department of Public Works to install the power line, and the Department of Conservation asked the Attorney General whether the Department of Public Works had the authority to grant the permit. Attorney General Goldstein indicated that Route 86 was built on a pre-existing highway in 1913, and that the right-of-way, having been removed from the Forest Preserve, was under the exclusive control of the Department of Public Works. In 1933, the Conservation Department had granted permission for the highway to occupy the adjoining Forest Preserve land to accommodate a proposed improvement of the highway. Goldstein opined that because the Conservation Department had not transferred jurisdiction of the adjoining land to the Department of Highways, both Departments would need to consent to the construction of the power line on the expanded right-of-way.

The Department of Conservation granted permits for at least five new transmission lines intersecting Route 28 in the 1950's to 1970's. These consisted of the NYSEG line from Long Lake to Blue Mountain Lake, and Niagara Mohawk lines from North Creek to Indian Lake, from Warrensburg to North Creek, and from North Creek and North River to the Barton Mines quarries. There is no record of objections to these lines by the Attorney General of the Conservation Department. The Adirondack Park Agency, formed in 1971, evaluated only the Barton Mines quarry development at Ruby Mountain, and determined that it would have no adverse environmental impact.

All of the later transmission lines included substantial clear cutting on private land, outside the jurisdiction of the Department of Conservation. The line from North Creek to Indian Lake line was required to follow Route 28 where it crossed the Forest Preserve on reforested land formerly owned by Finch, Pruyn, and Company. A few years after this line was built, the highway was realigned, taking substantial new right-of-way from the Forest Preserve under the land bank amendment of 1957. There was no such provision for new utility alignments, which constituted a prohibited taking of Forest Preserve. The power line built from the North Creek substation to the Barton Mines quarry, in 1960, was allowed to clear cut along the edge of the state-owned Gore Mountain Ski Center. The reason for this is not clear, except that the mine and the state had a history of cooperation in the development of the ski resort. In 1975, the Office of the Attorney General voiced an opinion regarding a planned transmission line through a reforested area in the Forest Preserve, for which the DEC proposed a temporary revocable license. The Attorney General denied the DEC authority to issue the license on the grounds that that the line, to be built on high steel support towers, fit the definition of a permanent rather than a temporary use, and would constitute a prohibited taking of land by a corporation.

Recent projects have drawn attention to the impact of utilities in Adirondack Park. In 2006, the Adirondack Park Agency approved the construction of the Tri-Lakes Power Line from Stark Falls Reservoir to Piercefield, to augment power to Tupper Lake, Saranac Lake, and Lake Placid. The proposed line followed the right-of-way of Routes 3 and 56 and new alignments through private land, requiring extensive clear cutting. A portion of the route in the Town of Colton detoured five

miles through a pristine boreal wilderness to avoid Forest Preserve land, leading to calls for a less damaging route. In November 2009, an amendment to Article XIV was passed by voters, allowing the exchange of six acres of the Forest Preserve for at least 10 acres of intact forest land along the Raquette River, allowing the power line to be rerouted through a less sensitive area near Route 56. Despite the amendment, some members of the APA Board of Commissioners decried the excessive removal of hazard trees on private land bordering the highway, and along the corridor through the Forest Preserve, which was allowed to begin more than a year prior to the passage of the amendment.

In 2009, the State Department of Transportation implemented a project to widen and resurface ten miles of Route 28 in the Town of Forestport, including the entire route from Woodgate to McKeever in Adirondack Park. The project called for the relocation of power lines further from the highway and the cutting of trees within and adjacent to the right-of-way for clearance. The potential removal of scenic tree lines along White Lake prompted a citizen petition against the project and a rejection of the original project proposal by the Adirondack Park Agency. The Department of Transportation subsequently redesigned the project under guidelines for the relocation of utility lines in the 2008 Green Book for highway development in Adirondack Park. Lands bordering Route 28 in White Lake are not included in the Forest Preserve, and so this was a precedent setting case where the Adirondack Park Agency placed restrictions on utility impacts to private lands along a highway corridor.

Under the existing Adirondack Park Land Use Plan, numerous sections of Route 28 have been included in the Forest Preserve. The relocation of utility lines in these sections requires the Department of Transportation, the Adirondack Park Agency, and the Department of Environmental Conservation, to evaluate the effect of utilities on sensitive resources, such as trees, and determine if mitigation is necessary. This includes the extensive bypassed alignments of Route 28 between North River and Indian Lake, and between Thendara and McKeever, which have been returned to the Forest Preserve.

Wetlands

Sections 401 and 404 of the Clean Water Act
Executive Order 11990
New York State Freshwater Wetland Act (Article 24)

SECTION 10 - ATTACHMENTS

Attachment A: Adirondack High Peaks
Attachment B: List of Towns and Villages of the Adirondack Park (by County)
Attachment C: Land Use Classifications within the Adirondack Park (from APA website)
Attachment D: Sample Training Description
Attachment E: Selected Asset Management Inventories and Data Dictionaries
Attachment F: Process for Coordinating Maintenance Activities within the Adirondack Park
Attachment G: State Highways as Main Streets
Attachment H: Millings Guidance Letter
Attachment I: Smart Growth
Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)
Attachment K: Public Transportation in the Adirondack Park
Attachment L: Adirondack Park Economic Profile
Attachment M: Designated Inland Waterways in Adirondack Park
Attachment N: Threatened and Endangered Species in the Adirondack Region
Attachment O: Natural and Upland/Terrestrial Plant Communities in Adirondack Park
Attachment P: Natural Wetland/Aquatic Plant Communities in Adirondack Park

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Attachment A: Adirondack High Peaks

Rank	Mountain	Elevation (feet)
1	Marcy	5,344
2	Algonquin	5,114
3	Haystack	4,960
4	Skylight	4,926
5	Whiteface	4,867
6	Dix	4,857
7	Gray	4,840
8	Iroquois	4,840
9	Basin	4,827
10	Gothics	4,736
11	Colden	4,714
12	Giant	4,627
13	Nippletop	4,620
14*	Santanoni	4,607
15*	Redfield	4,606
16	Wright	4,580
17	Saddleback	4,515
18*	Panther	4,442
19*	Tabletop	4,427
20	Rocky	4,420
21*	Macomb	4,405
22	Armstrong	4,400
23*	Hough	4,400
24*	Seward	4,361
25*	Marshall	4,360
26*	Allen	4,340
27	Big Slide	4,240
28*	Esther	4,240
29	Upper Wolfjaw	4,185
30	Lower Wolfjaw	4,175
31*	Street	4,166
32	Phelps	4,161
33*	Donaldson	4,140
34*	Seymour	4,120
35	Sawteeth	4,100
36	Cascade	4,098
37*	South Dix	4,060
38	Porter	4,059
39	Colvin	4,057
40*	Emmons	4,040

Attachment A: Adirondack High Peaks

Rank	Mountain	Elevation (feet)
41	Dial	4,020
42*	Grace (East Dix)	4,012
43	Blake	3,960
44*	Cliff	3,960
45*	Nye	3,895
46*	Couchsachraga	3,820
*No trail to the peak. There are no longer registers on the summits of peaks without trails, and some may have signs. (McNaughton [4,000 feet] is not required.)		

Attachment B: Towns and Villages of the Adirondack Park (By County)

Clinton		
Altona	Dannemora	Plattsburgh
AuSable	Ellenburg	Saranac
Black Brook	Peru	Village of Dannemora
Essex		
Chesterfield	Minerva	Ticonderoga
Crown Point	Moriah	Village of Lake Placid
Elizabethtown	Newcomb	Village of Port Henry
Essex	North Elba	Westport
Jay	North Hudson	Willsboro
Keene	Schroon	Wilmington
Lewis	St. Armand	Village of Saranac Lake (also in Franklin County)
Franklin		
Bellmont	Franklin	Tupper Lake
Brighton	Harrietstown	Village of Tupper Lake
Duane	Santa Clara	Waverly
Fulton		
Bleecker	Johnstown	Stratford
Broadalbin	Mayfield	Village of Mayfield
Caroga	Northampton	Village of Northville
Ephratah	Oppenheim	
Hamilton		
Arietta	Inlet	Morehouse
Benson	Lake Pleasant	Village of Speculator
Hope	Long Lake	Wells
Indian Lake		
Herkimer		
Ohio	Salisbury	
Russia	Webb	
Lewis		
Croghan	Greig	Watson
Diana	Lyonsdale	
Oneida		
Forestport	Remsen	
Saratoga		
Corinth	Greenfield	Providence
Day	Hadley	Village of Corinth
Edinburg		
St. Lawrence		
Clare	Fine	Parishville

Attachment B: Towns and Villages of the Adirondack Park (By County)

Clifton	Hopkinton	Piercefield
Colton	Lawrence	Pitcairn
Warren		
Bolton	Johnsburg	Stony Creek
Chester	Lake George	Thurman
Hague	Lake Luzerne	Village of Lake George
Horicon	Queensbury	Warrensburg
Washington		
Dresden	Fort Ann	Putnam

Attachment C: Land Use Classifications within the Adirondack Park (from APA website)

Land Use Classification	Clinton	Essex	Franklin	Fulton	Hamilton	Herkimer	Lewis	Oneida	Saratoga	St. Lawrence	Warren	Washington	Park Acres	% of Park
Hamlet	3,050	19,081	7,079	3,623	4,827	1,528	0	239	1,250	2,171	10,881	0	53,729	0.92%
Moderate Intensity	7,172	20,222	9,325	4,768	12,410	4,421	1,635	1,303	5,584	2,530	25,133	4,972	99,475	1.71%
Low Intensity	31,229	76,923	21,069	17,930	27,976	22,388	11,621	42	10,199	2,457	38,537	8,038	268,409	4.61%
Rural Use	121,583	180,624	132,375	47,470	42,024	50,460	40,511	7,214	73,464	96,093	170,750	42,097	1,004,665	17.26%
Resource Management	72,329	283,585	270,014	28,890	233,065	106,295	49,717	470	32,764	322,301	76,162	20,873	1,496,465	25.71%
Industrial Use	58	6,290	628	0	136	0	0	0	0	3,927	1,359	0	12,398	0.21%
Wilderness	0	366,640	57,228	0	473,279	134,796	4,722	0	0	61,634	62,957	0	1,161,256	19.95%
Canoe Area	0	0	17,637	0	0	0	0	0	0	0	0	0	17,637	0.30%
Primitive	952	8,572	7,995	0	6,130	122	0	0	0	15,111	101	0	38,983	0.67%
Wild Forest	69,609	174,655	167,806	75,167	291,569	208,597	51,977	6,588	14,471	88,091	127,325	22,354	1,298,209	22.30%
Intensive Use	337	6,680	1,764	303	5,035	1,626	0	0	5	275	6,399	280	22,704	0.39%
Historic	0	530	1	0	0	0	0	0	0	0	0	0	531	0.01%
State Administrative	1,045	359	357	8	152	0	0	0	0	36	46	0	2,003	0.03%
Pending Classification	33	3,749	2,189	1,967	913	273	104	34	1,081	2	30	0	10,375	0.18%
Water	19,454	76,770	41,225	23,117	58,615	28,375	4,577	727	9,988	28,462	39,937	3,337	334,584	5.75%
County Total Acreage	326,850	1,224,679	736,692	203,244	1,156,130	558,881	164,865	16,617	148,805	623,090	559,616	101,951	5,821,420	100.00%
County as % of Park	5.61%	21.04%	12.65%	3.49%	19.86%	9.60%	2.83%	0.29%	2.56%	10.70%	9.61%	1.75%	100.00%	
% County as Private	72.03%	47.91%	59.79%	50.52%	27.72%	33.12%	62.77%	55.77%	82.83%	68.93%	57.69%	74.53%		
% County as State Land	22.01%	45.52%	34.31%	37.14%	67.13%	61.76%	34.39%	39.65%	9.73%	26.50%	35.17%	22.20%		

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Attachment D: Sample Training Description

Adirondack Park Training Series

Title: ***Transportation Conflicts with Beaver: Assessment and Treatment Training for Highway Maintenance Workers***

Location: Route 30 over Brister Brook, Speculator, Hamilton County (Region 2)

Date: May 11, 2016

Instructors: DOT, DEC , and APA Staff

Course Description:

This course is designed to provide Highway Residencies and their Maintenance Workers information on how to address basic beaver problems along the state highway system. Not all situations are the same and this course will help to give staff the guidance/tools they need to assess different situations and solutions based on those site conditions. Not all locations can be fixed, but techniques introduced in this training can be used to address a majority of problem sites. A beaver deceiver enclosure system will be installed as part of this training. This training will discuss balancing environmental considerations into solutions, and the recognition that beaver serve important ecological benefits.

It is anticipated that this training will be one of a series of ongoing trainings that will focus on chronic beaver problem locations within the Adirondack Park. This effort is consistent with on going efforts in the Adirondack Park including the DOT Guidelines for the Adirondack Park (The Green Book) and Travel Corridor Unit Management Planning.

Training Agenda Outline: Introductions, Applicable Regulations and Guidance (DEC and APA). Chronic Locations and Long term Benefits to Establishing a Management Plan, Site Assessment Considerations, Defining Solutions, Key Environmental Considerations, Timing, Implementing a Management Plan, Installation of a Treatment

SAMPLE

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Attachment E: Selected Asset Management Inventories and Data Dictionaries

Asset	Data dictionary available? (Y/N/ UD - under development)	Inventory available?	
		(Y/N/UD - under development)	Resides in
Critical slopes and rock areas.	N	N	TBD
Existing traffic calming measures	N	N	TBD
Branding	N	N	TBD
Gateways	N	N	TBD
Barriers to wildlife movement	UD	UD	Culvert Inventory
Unique Maintenance Locations	N	N	TBD
Travel lanes widths	UD	UD	GIS/ Individual TCUMPs
Shoulder widths and lengths	UD	UD	GIS/ Individual TCUMPs
Drainage infrastructure	UD	UD	GIS/ Operations
Frost and boulder heave locations	N	N	GIS
Rest areas, safety parking areas and scenic overlooks	N	Y	DOT Planning
Informal pull-offs.	Y	N	GIS
Fencing and wall infrastructure	N	N	GIS/ Individual TCUMPs
Signage/ visual resources concerns (e.g.clutter or visual intrusion).	UD	UD	GIS
Beneficial reuse areas (e.g. slope flattening areas, parking areas, etc.). Refer to section 4.5.1 – *Surplus material and disposal*	UD	UD	GIS/ Individual TCUMPs
Invasive Species	Y	Y	iMapInvasives/APIPP
Canopy cover	Y	UD	GIS/ Individual TCUMPs
Visual resource summer foliage	Y	Y	GIS/ Individual TCUMPs
Wetland inventories	Y	UD	GIS/ Individual TCUMPs

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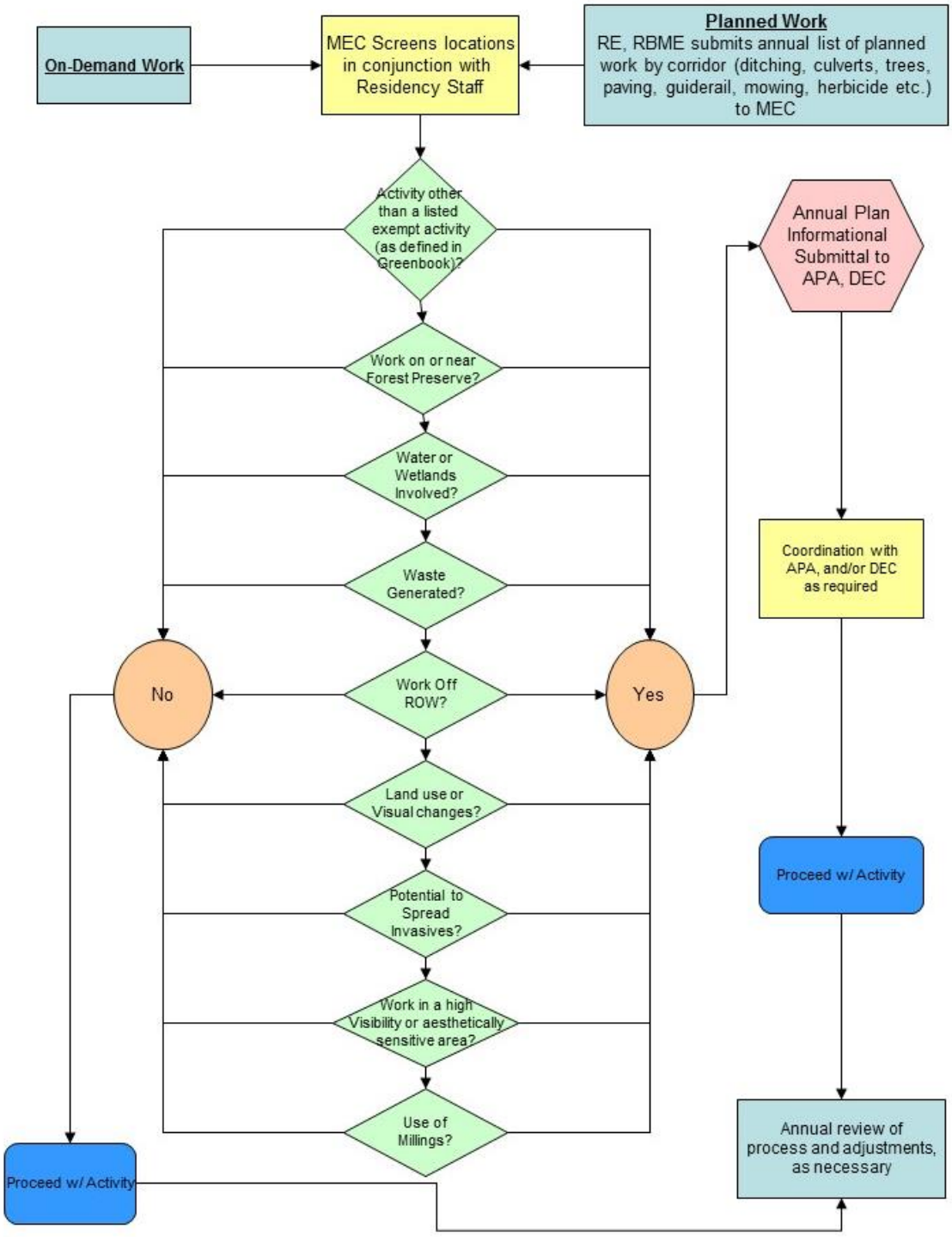
Attachment F: Process for Coordinating Maintenance Activities within the Adirondack Park

Operational Work Planning and Interagency Communication



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Attachment G: State Highway as Main Street

Town/Village/Municipality	State Route	County
AuSable Forks	9N	Clinton
Bakers Mills	8	Warren
Bloomingdale	3	Essex
Blue Mountain Lake	28	Hamilton
Bolton	9N	Warren
Bolton Landing	9N	Warren
Brant Lake	8	Warren
Caroga Lake	10	Fulton
Chestertown	9	Warren
Clintonville	9N	Clinton
Corinth	9N	Saratoga
Cranberry Lake	3	St Lawrence
Crown Point	9N	Essex
Diamond Point	9N	Warren
Eagle Bay	28	Herkimer
Elizabethtown	9	Essex
Fine	58	St Lawrence
Hadley	9N	Saratoga
Hague	9N	Warren
Hopkinton	118	St Lawrence
Indian Lake	28, 30	Hamilton
Inlet	28	Hamilton
Jay	9N	Essex
Johnsburg	8, 28	Warren
Keene	9N	Essex
Keene Valley	73	Essex
Keeseville	22, 9N, 9	Essex
Lake Clear	30	Franklin
Lake George	9	Warren
Lake Luzerne	9N	Warren
Lake Placid	86	Essex
Lake Pleasant	8	Hamilton
Lewis	9	Essex
Long Lake	28N, 30	Hamilton
Minerva	28N, 30	Essex
New Russia	9	Essex
Newcomb	28N	Essex
Nicholville	118	St Lawrence

Town/Village/Municipality	State Route	County
North Creek	28N	Warren
North Hudson	9	Essex
Old Forge	28	Herkimer
Otter Lake	28	Oneida
Paul Smith's	30	Franklin
Pickets Corners	30	Clinton
Piercefield	3	St Lawrence
Port Henry	9N	Essex
Pottersville	9	Warren
Raquette Lake	28	Hamilton
Ray Brook	86	Essex
Redford	3	Clinton
Riparius	8	Warren
Rockwood	29	Fulton
Saint Regis Falls	458	Franklin
Santa Clara	458	Franklin
Saranac	3	Clinton
Saranac Lake	3, 86	Franklin
Schroon Lake	9	Essex
Severance	74	Essex
Sevey's Corners	3	St Lawrence
Silver Bay	9N	Warren
Speculator	8, 30	Hamilton
Star Lake	3	St Lawrence
Stratford	29A	Fulton
Thendara	28	Herkimer
Ticonderoga	9N	Essex
Tupper Lake	3	Franklin
Upper Jay	9N	Essex
Valcour	9	Clinton
Vermontville	3	Franklin
Wadhams	22	Essex
Warrensburg	9	Warren
Wells	30	Hamilton
Westport	9N	Essex
Wevertown	8, 28	Warren
Whallonsburg	22	Essex
Wheelerville	10	Fulton
Willsboro	22	Essex
Wilmington	86	Essex

Attachment H: Millings Guidance Letter

NEW YORK STATE
Adirondack
parkagency

August 1, 2008

Brian Rowback
NYSDOT Region 1, Regional Director
328 State Street
Schenectady, NY 12305

Michael Shamma
NYSDOT Region 2, Regional Director
Utica State Office Bldg
207 Genesee St.
Utica, NY 13501

Carey Babyak
NYSDOT Region 7, Regional Director
New York State Department of Transportation
317 Washington Street
Watertown, New York 13601

Dear Messrs. Rowback, Shamma and Babyak:

On July 30, 2008, I met with a number of your Resident Engineers to observe a trial placement of asphalt concrete pavement millings as shoulder backup material. The work was done under the direction of Hamilton County Resident Engineer Mike Romanych. I greatly appreciate your staff taking the time to show me the operation and to discuss issues of mutual concern regarding this practice.

The work consisted of using a borrowed pavement widener machine to place asphalt concrete millings as shoulder backup to a width of 3 feet. This machine was incapable of placing the material to a narrower width. Excess material was then swept from the pavement and then rolled and compacted with the tires of a road grader. The final step was to re-sweep the shoulder and the placed material to clean the adjacent pavement and to smooth out wheel markers in the compacted shoulder backup material.

P.O. Box 99 • NYS Route 86 • Ray Brook, NY 12977 • 518 891-4050 • 518 891-3938 fax • www.apa.state.ny.us

Brian Rowback
Michael Shamma
Carey Babyak
August 1, 2008
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I informed Mr. Romanych that this was acceptable to me and that he could proceed to place the material as demonstrated along several separate, recently resurfaced portions of Route 28, as well as along other nearby road sections, not being resurfaced, where shoulder backup material had eroded away and was now needed. This would provide a consistent appearance for this stretch of state highway.

As a group, we had a candid discussion about the safety need for shoulder backup, why asphalt concrete millings were desirable for this use, the need for better communication regarding potential forest preserve issues, and pragmatic issues that the residencies face in trying to maintain their highways with limited budgets, manpower and equipment.

I learned the following:

- Safety of the traveling public is the highest concern of the Resident Engineers.
- Asphalt concrete millings are desirable for shoulder backup use because it compacts well and stays in place better than gravel or crushed stone. Perhaps most importantly, the material is readily available from highway projects within the region and does not need to be purchased. With very limited budgets, money is short to buy other acceptable shoulder back-up materials such as crushed as crusher-run, crushed gravel or crushed stone.
- Shoulder backup width may vary due to the depth of the paved shoulder (sometimes high because of multiple overlays), the slope of the existing ground adjacent to the shoulder, ongoing erosion, and adjacent features such as ditches.
- The general consensus of the DOT staff present was that the standard detail of 600mm (2 feet) was not realistic to meet field conditions and that widths varied based on site conditions.
- Asphalt concrete millings vary considerably in size, shape and color depending on the source of the original paving material, the amount of asphalt that was in the mix, the depth and type of material milled, and the age of the material.

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- Region 2 has used a widener machine in the past that could place the backup material to a 2 foot width. Most residencies did not have access to a machine that could meet a 2 foot width.
- A steel roller is not readily available for use, necessitating compacting with the rubber wheels of a grader or loader.
- Not all residencies have their own equipment and must "borrow" equipment from others, often at a time when the demand is high to perform similar activities. This severely hinders planning for and completing the work.
- The timing of the release and amount of maintenance funds during the limited construction season hinders work planning, equipment sharing, and necessary coordination with the regulatory agencies.
- Formal and informal parking areas often need repairs due to rutting or erosion. Sometimes DEC will ask that they be improved without coordination with APA. Some are used for turn-arounds for winter snow plowing. It is unclear as to which parking areas are on or adjacent to Forest Preserve and have Unit Management Plans that address these parking areas.

Conditional Agency Approval

Asphalt concrete millings may be used along state highways as shoulder backup in the Adirondack Park provided that it meets the following criteria:

1) Shoulder backup shall not exceed 3 feet in width. The goal should be to keep the backup material as narrow as possible, generally between two and three feet in width. Placement of shoulder backup in excess of 3 feet shall require prior coordination with Agency staff.

2) Where adjacent areas are particularly low or have eroded, they shall be graded, trimmed and brought up to grade with select granular fill, crusher-run or similar appropriate materials so as to allow the shoulder backup material to be placed at the proper thickness and so as to not exceed 3 feet in width.

Brian Rowback
Michael Shamma
Carey Babyak
August 1, 2008
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3) Asphalt millings shall not be used to improve parking areas unless and until both APA and DEC staff has signed off. This is to assure that right-of-way, Forest Preserve and Unit Management Plan issues have been adequately considered and approvals obtained, if needed.

4) It is preferable that shoulder backup be compacted with a steel roller, rather than rubber tires.

Coordination should generally occur through the Regional Maintenance Environmental Coordinator and Tom Saehrig of my office. If Forest Preserve issues are involved, Rick Weber, APA Assistant Director, Planning Division should be contacted.

Recommendations:

Among other goals, we have been working cooperatively together to revise the Green Book to help improve the consistency of design, construction and maintenance practices in the Adirondack Park. The intent is to have the appearance of state highways in the Park be similar in road section, signing, treatment of parking areas, clear zone and roadside appurtenances. I understand that state and federal funding for transportation projects is very limited at this time. Recognizing the above, I offer the following for your consideration:

1) It seems that not all of the Resident Engineers have the appropriate equipment (pavement widners, rollers, etc.) to perform their work in a similar manner and that sharing of the limited equipment is not always working very well. I encourage the Department to inventory the equipment needs of the Resident Engineers so the correct type and quantity of maintenance equipment is available for use during the limited construction season.

2) Maintenance work planning is hindered by limited funds and the time during the year when those funds are made available to the Resident Engineers. Nevertheless, I believe there could and should be better advanced work planning and coordination between the three agencies. I recommend that the Regions inventory and identify on a priority basis road segments and roadside parking areas that may need improvements and coordinate with APA project review and state lands staff, even if those improvements may be several years off. The summer construction season is also the

Brian Rowback
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Carey Babyak
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time our staff are busiest in the field, so as much advance coordination as possible would result in more timely reviews and approvals.

Conclusion:

I believe we have adequately resolved for now the issue of the use of asphalt concrete millings for shoulder backup material provided it is under taken as conditioned above. I leave it to the Department to decide whether this is the best and highest use of this material.

I again want to express my appreciation for your staff's input. I was impressed with their sincerity and focus on the safety of the traveling public while recognizing the unique character and importance of the Adirondack Park. Please call me if you have any questions. I look forward to our next executive level partnering meeting where we can discuss this further.

Sincerely,

Mark Sengenberger
APA Deputy Director
Regulatory Programs Division

cc: Mark Silo, NYSDOT, Chief Engineer
Gary McVoy, NYSDOT, Acting Director, Operations Division
Mary Ivey, NYSDOT, Director, Office of Environment
Edward Frantz, NYSDOT, Adirondack Park Manager
Jan Meilhede, NYSDOT R-1, Regional Director of Operations
Paul Obernesser, NYSDOT R-2, Reg. Director of Operations
John Cook, NYSDOT R-7, Regional Director of Operations
Curt Stiles, APA Chairman
John Banta, APA Counsel
Tom Saehrig, APA Environmental Program Specialist
Rick Weber, APA Assistant Director, Planning Division

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Attachment I: Smart Growth Attestation

PIN N/A

Prepared By:Office of Environment

Smart Growth Screening Tool (STEP 1)

NYSDOT & Local Sponsors – Fill out the Smart Growth Screening Tool until the directions indicate to **STOP** for the project type under consideration. For all other projects, complete answering the questions. For any questions, refer to Smart Growth Guidance document.

Title of Proposed Project: Unit Management Plan for the Adirondack Park Travel Corridors

Location of Project: Adirondack Park

Brief Description: Master Plan and Overview which pertains universally and in common to all 38 Adirondack Park travel corridors.

A. Infrastructure:

Addresses SG Law criterion a. –
(To advance projects for the use, maintenance or improvement of existing infrastructure)

1. Does this project use, maintain, or improve existing infrastructure?

   Yes ☐ **No** ☐ **N/A** ☒

   Explain: (use this space to expand on your answers above – the form has no limitations on the length of your narrative)

   This document is a Corridor Management Plan. No specfic projects are part of the plan. the plan includes best practices and management objectives.

Maintenance Projects Only

a. Continue with screening tool for the four (4) types of maintenance projects listed below, as defined in **NYSDOT PDM Exhibit 7-1 and described in 7-4:** https://www.dot.ny.gov/divisions/engineering/design/dqab/pdm

   - Shoulder rehabilitation and/or repair;
   - Upgrade sign(s) and/or traffic signals;

- Park & ride lot rehabilitation;
- 1R projects that include single course surfacing (inlay or overlay), per Chapter 7 of the NYSDOT Highway Design Manual.

b. For all other maintenance projects, **STOP here.** Attach this document to the programmatic Smart Growth Impact Statement and signed Attestation for Maintenance projects.

For all other projects (other than maintenance), continue with screening tool.

B. Sustainability:

NYSDOT defines Sustainability as follows: A sustainable society manages resources in a way that fulfills the community/social, economic and environmental needs of the present without compromising the needs and opportunities of future generations. A transportation system that supports a sustainable society is one that:

- Allows individual and societal transportation needs to be met in a manner consistent with human and ecosystem health and with equity within and between generations.
- Is safe, affordable, and accessible, operates efficiently, offers choice of transport mode, and supports a vibrant economy.
- Protects and preserves the environment by limiting transportation emissions and wastes, minimizes the consumption of resources and enhances the existing environment as practicable.

For more information on the Department's Sustainability strategy, refer to Appendix 1 of the Smart Growth Guidance and the NYSDOT web site, www.dot.ny.gov/programs/greenlites/sustainability

(Addresses SG Law criterion j **:** to promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain and implement.)

1. Will this project promote sustainability by strengthening existing communities?

   Yes ☐ **No** ☐ **N/A** ☒

2. Will the project reduce greenhouse gas emissions?

   Yes ☐ **No** ☐ **N/A** ☒

   Explain: (use this space to expand on your answers above)

Corridor management objectives and recommendations are consistent with the Department's sustainability strategy.

C. Smart Growth Location:

Plans and investments should preserve our communities by promoting its distinct identity through a local vision created by its citizens.

(Addresses SG Law criteria b and c: to advance projects located in municipal centers; to advance projects in developed areas or areas designated for concentrated infill development in a municipally approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan.)

1. Is this project located in a developed area?

   Yes ☐ **No** ☐ **N/A** ☒

2. Is the project located in a municipal center?

   Yes ☐ **No** ☐ **N/A** ☒

3. Will this project foster downtown revitalization?

   Yes ☐ **No** ☒ **N/A** ☐

4. Is this project located in an area designated for concentrated infill development in a municipally approved comprehensive land use plan, waterfront revitalization plan, or Brownfield Opportunity Area plan?

   Yes ☐ **No** ☐ **N/A** ☒

   Explain: (use this space to expand on your answers above)

   This is a Travel Corridor Unit Management Plan (TCUMP) for 38 travel corridors on state routes within the Adirondack Park. The unit managment plan is required by NY State's Adirondack Park State Land Master Plan (APSLMP).

D. Mixed Use Compact Development:

Future planning and development should assure the availability of a range of choices in housing and affordability, employment, education transportation and other essential services to encourage a jobs/housing balance and vibrant community-based workforce.

(Addresses SG Law criteria e and i: to foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income groups; to ensure predictability in building and land use codes.)

1. Will this project foster mixed land uses?

   Yes ☐ **No** ☐ **N/A** ☒

2. Will the project foster brownfield redevelopment?

   Yes ☐ **No** ☐ **N/A** ☒

3. Will this project foster enhancement of beauty in public spaces?

   Yes ☒ **No** ☐ **N/A** ☐

4. Will the project foster a diversity of housing in proximity to places of employment and/or recreation?

   Yes ☐ **No** ☐ **N/A** ☒

5. Will the project foster a diversity of housing in proximity to places of commercial development and/or compact development?

   Yes ☐ **No** ☐ **N/A** ☒

6. Will this project foster integration of all income groups and/or age groups?

   Yes ☐ **No** ☐ **N/A** ☒

7. Will the project ensure predictability in land use codes?

   Yes ☐ **No** ☐ **N/A** ☒

8. Will the project ensure predictability in building codes?

   Yes ☐ **No** ☐ **N/A** ☒

Explain: (use this space to expand on your answers above)

The TCUMP follows the requirements found in the APSLMP which includes the protection of Adirondack park-like character and the Park's resources.

E. Transportation and Access:

NYSDOT recognizes that Smart Growth encourages communities to offer a wide range of transportation options, from walking and biking to transit and automobiles, which increase people's access to jobs, goods, services, and recreation.

(Addresses SG Law criterion f: to provide mobility through transportation choices including improved public transportation and reduced automobile dependency.)

1. Will this project provide public transit?

   Yes ☐ **No** ☐ **N/A** ☒

2. Will this project enable reduced automobile dependency?

   Yes ☐ **No** ☐ **N/A** ☒

3. Will this project improve bicycle and pedestrian facilities (such as shoulder widening to provide for on-road bike lanes, lane striping, crosswalks, new or expanded sidewalks or new/improved pedestrian signals)?

   Yes ☐ **No** ☐ **N/A** ☒

   (Note: Question 3 is an expansion on question 2. The recently passed Complete Streets legislation requires that consideration be given to complete street design features in the planning, design, construction, reconstruction and rehabilitation, but not including resurfacing, maintenance, or pavement recycling of such projects.)

   Explain: (use this space to expand on your answers above)

   the plan will encourage public recreation, bicycle and pedestrian facility improvement, however no specfic projects are included. The TCUMP is a corridor management strategy.

F. Coordinated, Community-Based Planning:

Past experience has shown that early and continuing input in the transportation planning process leads to better decisions and more effective use of limited resources. For information on community based planning efforts, the MPO may be a good resource if the project is located within the MPO planning area.

(Addresses SG Law criteria g and h: to coordinate between state and local government and inter-municipal and regional planning; to participate in community based planning and collaboration.)

1. Has there been participation in community-based planning and collaboration on the project?

   Yes ☒ **No** ☐ **N/A** ☐

2. Is the project consistent with local plans?

   Yes ☒ **No** ☐ **N/A** ☐

3. Is the project consistent with county, regional, and state plans?

   Yes ☒ **No** ☐ **N/A** ☐

4. Has there been coordination between inter-municipal/regional planning and state planning on the project?

   Yes ☒ **No** ☐ **N/A** ☐

   Explain: (use this space to expand on your answers above)

   The TCUMP is consistent with the requirements of the APSLMP and a SEQR document; as such public involvement was an integral part of the document's development. DEC and DOT are co-lead authors with close coordination occuring with APA.

G. Stewardship of Natural and Cultural Resources:

Clean water, clean air and natural open land are essential elements of public health and quality of life for New York State residents, visitors, and future generations. Restoring and protecting natural assets, and open space, promoting energy efficiency, and green building, should be incorporated into all land use and infrastructure planning decisions.

(Addresses SG Law criterion d :To protect, preserve and enhance the State's resources, including agricultural land, forests surface and groundwater, air quality, recreation and open space, scenic areas and significant historic and archeological resources.)

1. Will the project protect, preserve, and/or enhance agricultural land and/or forests?

   Yes ☐ **No** ☐ **N/A** ☒

2. Will the project protect, preserve, and/or enhance surface water and/or groundwater?

   Yes ☐ **No** ☐ **N/A** ☒

3. Will the project protect, preserve, and/or enhance air quality?

   Yes ☐ **No** ☐ **N/A** ☒

4. Will the project protect, preserve, and/or enhance recreation and/or open space?

Yes ☐ No ☐ N/A ☒

5. Will the project protect, preserve, and/or enhance scenic areas?

Yes ☐ No ☐ N/A ☒

6. Will the project protect, preserve, and/or enhance historic and/or archeological resources?

Yes ☐ No ☐ N/A ☒

Explain: (use this space to expand on your answers above)

The TCUMP promotes these values, however it does not contain any specific projects.

Smart Growth Impact Statement (STEP 2)

NYSDOT: Complete a Smart Growth Impact Statement (SGIS) below using the information from the Screening Tool.

Local Sponsors: The local sponsors are **not** responsible for completing a Smart Growth Impact Statement. Proceed to **Step 3**.

Smart Growth Impact Statement

PIN: N/A

Project Name: Unit Management Plan for the Adirondack Park Travel Corridors

Pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act. This project has been determined to meet the relevant criteria, to the extent practicable, described in ECL Sec. 6-0107. Specifically, the project:

- The TCUMP follows the requirements found in the APSLMP which includes the protection of Adirondack park-like character and the Park's resources.
- Promotes the protection, preservation and enhancement of the State's resources including recreation and open space, scenic areas, forest surface and significant historic and archaeological resources of the Adirondack Park, however it does not contain any specific projects.

This publically supported infrastructure project complies with the state policy of maximizing the social, economic and environmental benefits from public infrastructure development.

The project will not contribute to the unnecessary costs of sprawl development, including environmental degradation, disinvestment in urban and suburban communities, or loss of open space induced by sprawl.

Review & Attestation Instructions (STEP 3)

NYSDOT: For state-let projects, the Screening Tool and SGIS is forwarded to Regional Director/ RPPM/Main Office Program Director or designee for review, and upon approval, the attestation is signed **(Section B.2).** For locally administered projects, the sponsor's submission and certification statement is reviewed by NYSDOT staff, the appropriate box **(Section B.1)** is checked, and the attestation is signed (Section B.2).

B. ATTESTATION (NYSDOT)

1. ***I HEREBY:***

   Concur with the above certification, thereby attesting that this project is in compliance with the State Smart Growth Public Infrastructure Policy Act

   Concur with the above certification, with the following conditions (information requests, confirming studies, project modifications, etc.):

   (Attach additional sheets as needed)

   do not concur with the above certification, thereby deeming this project ineligible to be a recipient of state funding or a sub-recipient of federal funding in accordance with the State Smart Growth Public Infrastructure Policy Act.

2. ***NOW THEREFORE,*** pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act, to the extent practicable, as described in the attached Smart Growth Impact Statement.

NYSDOT Commissioner, Regional Director, MO Program Director,
Regional Planning & Programming Manager (or official designee):

Signature Date

Title Printed Name

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Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
Adirondack Association of Towns and Villages	Adirondack Association of Towns and Villages (AATV) is an association of towns and villages located wholly or partly within the Adirondack Blue Line. The organization formed to provide a unified presence for towns and villages in the Park. The association has nine primary purposes, including the following that are most relevant to the TCUMP process: • Local governments in the Adirondacks must be permitted to exercise their legitimate function in land-use planning and regulation within their jurisdiction. • Adirondack residents and governments must have adequate representation on all committees, commissions, task forces, studies, etc. and must be involved in all decision-making on Adirondack issues with all state agencies at the highest level of state government. • The economy of the region must be improved and stabilized, and • Reasonable access must be provided to residents and visitors to state lands in the Adirondacks. The group collaborated with ANCA and the Towns of Chester and Arietta to publish the Adirondack Park Regional Assessment Plan (APRAP). The study profiles all 103 municipalities within the Adirondack Park. The document was written to provide a data-rich, factual baseline for discussion and planning of park issues at both the local and regional levels. It gives a comprehensive survey of the socio-economic status of the individual communities and the park as a region. The APRAP data is also presented on the AATV website as a series of eight page community profiles for each Adirondack municipality. The profiles include demographics (population, households, income, employment, etc.), land use, government operations, infrastructure and a number of additional, intriguing community factors.
Adirondack Foundation	The Adirondack Foundation is a community foundation working to raise and manage funds to benefit Adirondack communities. Fundraising is accomplished through personal donor services, charitable asset stewardship ($47 million in more than 200 personalized charitable funds created by individuals and organizations), legacy administration, and supporting nonprofit organizations through grants, training and networking.
Adirondack Harvest	A community organization concerned with the loss and abandonment of farmland in the Adirondacks working to keep local food available and preserve scenic farmland vistas. It includes Clinton, Essex, Franklin, Hamilton, Warren St. Lawrence, Lewis and Jefferson Counties. Their goal and mission is to increase opportunities for profitable, sustainable production and sale of high quality food and agricultural products and to ensure the future preservation and growth of open farmland.

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
Adirondack Lakes Alliance	The Adirondack Lakes Alliance (ALA) represents lake and river associations within the Adirondack Park. Its primary mission is to protect and preserve the waters of the Adirondacks. ALA provides a forum for information and resource sharing and makes recommendations to appropriate state, county and local agencies, educational and other relevant non-profit organizations regarding Adirondack lake and river environmental and ecological issues.[68]
Adirondack Land Trust	The Adirondack Land Trust (ALT) was established in 1984. Dedicated to protecting open space, working landscapes (farmland and managed forests) and other lands contributing to the quality of life for Adirondack residents. The ALT and Adirondack Chapter of the Nature Conservancy are separate organizations that are co-located. Example projects include: o Securing state-funded agricultural easements in Essex and Clinton Counties. o Conserving 1,800 feet of shoreline on upper Saranac Lake. The property is bounded on two sides by "forever wild" Forest Preserve (part of Saranac Lakes Wild Forest).
Adirondack Landowners Association	The Adirondack Landowners Association (ALA) is a group of private landowners who collectively own over 200,000 acres of land in the Adirondack Park. The organization has over 5,000 individual members that include clubs and private preserves. ALA encourages continued land stewardship, sound resource land management and advocates laws, regulation and government policies that promote and facilitate good stewardship by private landowners. They are a leader in the prevention of the spread of invasive species through education and advocacy. They have partnered with the DEC on the study, *Ecology of American Martens in the Adirondacks (DEC)*.
Adirondack Nonprofit Network	The Adirondack Nonprofit Network (ANN)_is described as an informal network of leaders from organizations serving the Adirondacks organized by the Adirondack Community Trust (ACT). The organization was formed to identify proactive approaches to redundancies and collaborations. ANN's membership includes over 40 organizations. Its goal is to foster more integrated, Park-wide planning and cooperation.

[68] Adirondack Lakes Alliance. 2016. (http://www.adirondacklakesalliance.org/)

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
Adirondack North Country Association	The Adirondack North Country Association (ANCA) is a not-for-profit NGO working to build local economies that sustain communities in Northern New York. Their mission is to catalyze sustainable economic development across the Adirondack North Country and enhance the quality of life of the people who live, work and visit. The organization leverages investments into key economic sectors that drive sustainable local economic development. ANCA's region extends beyond the boundaries of the Adirondack Park, but focuses on counties in northern New York State. ANCA's programs and partnerships focus on three areas, clean energy, connected communities and local economies. Organizational partners include Common Ground Alliance (CGA), North Country Regional Economic Development Council (REDC), New York State Energy Research Development Agency (NYSERDA Technology), NYS Department of Labor (Market Development Board), NYS Scenic Byways Advisory Council, and the Empire State Development. These collaborations have resulted in regional planning efforts such as Solarize the North Country, Clean Energy Economy Conference, North Country Sustainability Plan, Accessibility in the North Country, Adirondack Regional Art Trail and the North Guide website.
Adirondack Park Recreation Strategy Group	The Adirondack Park Recreation Strategy Group (APRSG) is a group of state and local officials, consultants, educators and not-for profit organizations appointed by the Adirondack Partnership. APRSG explores ways to improve the economy of the Adirondack Park through leveraging the recreation opportunities offered by the Park's natural resources. The Group is credited with developing the document *Adirondack Park Recreation Strategy: Capitalizing on the Economic Potential of our Natural Environment,* that suggests strategies to increase recreation-based economic growth inside the Park.
Adirondack Regional Tourism Council	The Adirondack Regional Tourism Council (ARTC) is the official tourism promotion agency for the "I LOVE NY" state-designated Adirondack tourism region. By sharing resources, the seven counties that comprise the ARTC (Warren, Essex, Clinton, Franklin, Hamilton, Lewis, and St. Lawrence) promote economic development through destination marketing for the entire region.

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
Adirondack Research Consortium	The Adirondack Research Consortium (ARC) is a group of academic researchers and leaders of Adirondack-focused nonprofit organizations formed to provide research-based knowledge used to inform and guide policies, planning, and management of the Adirondack Park's public and private lands. The goal of the group is to encourage, facilitate and make more available research-based knowledge and scholarship that advances the quality and vitality of the Adirondack Park and related environs. The group conducts research conferences and publishes the *Adirondack Journal of Environmental Studies*.
Adirondack Research, LLC	A contract research firm focused on social science, climate change and invasive species. The group is currently working with • PARK Action to investigate the cost burden of road salt, • TNC on a post-treatment monitoring program for APIPP, • Paul Smith's College and SUNY ESF on the Adirondack All-Taxa Biodiversity Inventory (ATBI) BioBlitzes, • USDA in New York testing traps for Emerald Ash Borer monitoring, • Northern NY Audubon to create a phenology trail, • DEC to inform Invasive Species regulations, and • The Pennsylvania State University to test Asian Longhorned Beetle pheromones.
Adirondack Wild: Friends of the Forest Preserve	The mission of the Adirondack Wild: Friends of the Forest Preserve is to advance New York's 'Forever Wild" legacy and Forest Preserve policies in the Adirondack and Catskill Parks, and promote public and private land stewardship that is consistent with wild land values through education, advocacy and research.
Ausable River Association	The mission of the Ausable River Association (AsRA) is to identify, conserve, and restore the Ausable River watershed's natural and recreational resources for their ecological value and the benefit of human communities. AsRA integrates natural stream restoration planning and techniques into public storm response, infrastructure development, road maintenance and private projects that will improve the ecology, morphology and hydrology of the river.[69]
Boquet River Association	The Boquet River Association (BRASS) is dedicated to enhancing the quality of water and life in the Boquet River watershed. They work with individuals, organizations, local governments and state and federal agencies to solve problems affecting the river. BRASS is currently conducting a culvert assessment on the condition of all culverts which assist in the flow of the Boquet River and tributaries with the hope to secure funding for culvert repair and replacement. BRASS is also involved in major erosion control projects and watershed wetland monitoring.

[69] Ausable River Association. 2016. (http://www.ausableriver.org/programs).

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
Central Adirondack Partnership for the 21st Century	Central Adirondack Partnership for the 21st Century (CAP-21) acts as a facilitator to open communication and increase cooperation between diverse entities in the region. Their mission is to nurture and support vibrant and sustainable year-round Adirondack communities through its work in promoting economic revitalization, social responsibility and environmental balance. CAP-21 also supports the development and implementation of comprehensive master plans for constituent towns. Collaborative activities have helped: • acquire new playground equipment • secure funding for main street revitalization in Indian Lake and the Old Forge-Thendara Shuttle • the Adirondack Park Invasive Plant Program (APIPP) and (with SUNY ESF) the Great South Woods project.
Chateaugay Lake Foundation	The Chateaugay Lake Foundation was established to support efforts to protect the environmental quality of the Lake and its surroundings.[70] The Foundation was created to control the spread of Eurasian water milfoil. The organization works with the Chateaugay Lakes Association and the APIPP.

[70] Chateaugay Lake Foundation. 2016.

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
Common Ground Alliance	The Common Ground Alliance (CGA) of the Adirondacks consists of local (Adirondack) elected officials, economic development non-profits, environmental non-profits, private entrepreneurs, and education representatives. The group participated in the development of the documents, *The Adirondack Park: The Next Twenty-Five Years Healthy Communities and Ecosystems Thriving Together in a Protected and Unique Landscape* and *Adirondack Economic Development Strategy and Plan to Advance Key Projects* (with the Adirondack Partnership). The latter is an approach to developing a strategic economic development plan for Adirondack Park communities. CGA working groups include: • creating a regional trail-town initiative • using Park's assets to attract economic investment and access to capital and financing for business • developing a recipe for attractive and livable hamlets • schools • working families • cultivating communities through local food • funding community drinking water and waste water infrastructure • climate change • terrestrial invasive species <u>Adirondack Futures</u> - A pro bono project for the Adirondack Common Ground Alliance that develops a vision, strategy and implementation plan for the Adirondack Park. The group developed the document, *The Adirondack Park: The Next Twenty-Five Years: Healthy Communities and Ecosystems Thriving Together in a Protected and Unique Landscape.* The document promotes more efficient, rational government that works together across all levels and functions and partners with community groups and NGOs.
Eagle Lake Property Owners, Inc.	Eagle Lake Property Owners (ELPO) is an organization that serves to protect the mutual interests of its property owners and to maintain the environmental and recreational quality of Eagle Lake. It is a member of the APIPP and is active in spreading the word about aquatic invasive species, including Eurasian Water milfoil, Zebra mussels and Purple Loosestrife.
East Shore Schroon Lake Association	The East Shore Schroon Lake Association (ESSLA) was founded to preserve and improve the waters and shorelines of the Schroon Lake/River area. Monitoring, identifying and harvesting invasive species is at the heart of the association's mission.[71] Stewardship programs include the Milfoil Scout Program, Asian Clam and Zebra Mussel Watch Program, Boat Inspection Program and Water Testing – Adirondack Lake Assessment Program.

[71] East Shore Schroon Lake Association. 2016. (http://essla.org/)

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
Environmental Defense Fund	A nonprofit organization that advocates for the addition of wildlands to the Forest Preserve and for conservation easements which further ecologically-beneficial stewardship of private lands.
Lake Champlain Basin Program	The Lake Champlain Basin Program (LCBP) is a congressionally-designated initiative to restore and protect Lake Champlain and its surrounding watershed. The LCBP partners with New York, Vermont and Quebec to coordinate and fund efforts to address challenges in the areas of phosphorous pollution, toxic substances, biodiversity, aquatic invasive species, climate change and the Champlain Valley National Heritage Partnership.
Lake Champlain – Lake George Regional Planning Board	One of ten regional planning and development organizations operating the NY. The LCLGRPB covers the five counties of Clinton, Essex, Hamilton, Warren and Washington.
Lake Colby Association	The Lake Colby Association (LCA) represents residential, commercial and governmental interests on Lake Colby in the Town of Harrietstown, Franklin County, New York. Their mission is to preserve Lake Colby for the quiet enjoyment of shore owners and public users. The organization focuses on water quality, invasive species control and public policy issues affecting the lake. The LCA is a member of APIPP.
Lake George Association	The Lake George Association advises and educates people about how they can help keep Lake George water clean for the future. The Association performs critical in-the-ground projects that stop the degradation of Lake George's water quality.[72] The Association provides education, creates and maintains geographic databases, has an invasive species program and is involved with projects that improve the quality of stormwater runoff entering the lake.
Lake George Land Conservancy	The Lake George Land Conservancy is a not-for-profit land trust dedicated to working with partners to protect the water quality of Lake George and to permanently preserve the natural, scenic, historical and recreational resources of the Lake George region.
New York State Farm Bureau	The mission of the new York Farm Bureau is "To Serve and Strengthen Agriculture". The Farm Bureau is a non-governmental, volunteer organization financed and controlled by member families for the purpose of solving economic and public policy issues challenging the agricultural industry.

[72] Lake George Association (http://www.lakegeorgeassociation.org/who-we-are/mission.asp).

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
New York State Snowmobile Association	The New York State Snowmobile Association (NYSSA) works toward improving trails, facilities and services for participants, and defends snowmobilers against discriminatory legislation. NYSSA works to protect landowners, review and watchdog the NYS Trail Fund and is constantly seeking additional Trail funding programs. NYSSA continually works to improve communications in every aspect of snowmobiling. NYSSA coordinates and provides leadership for New York State Snowmobile Clubs and Organizations in developing and implementing policies, strategies and action plans which foster the growth of safe snowmobiling.
North Country Chamber of Commerce	The North Country Chamber of Commerce is a regional chamber serving Clinton, Essex, Franklin, Hamilton and northern Warren Counties. According to the Chamber's website, the organization is the largest business and economic development alliance in northern New York. Activities include long-term strategic plans for marketing the Plattsburg International Airport, small business support, tourism promotion and development, industrial support services and advocacy for the region in Washington, Albany, Ottawa and elsewhere.
ParkAction.org	ParkAction.org is a not-for-profit that embraces the uniqueness of the Adirondack Park and the interplay of environmental and social issues by addressing those that promote sound, sustainable life in the Adirondacks while preserving its wild character.[73] Current initiatives include road-salt reduction, water quality protection, universal broadband access, Monarch butterfly conservation, invasive species control and the promotion of Adirondack art.
Paul Smith's College Adirondack Watershed Institute	The Adirondack Watershed Institute (AWI) is a program of Paul Smith's College that broadly focuses on conserving and protecting natural resources in the Adirondack Region. Services include invasive species management, water quality monitoring, recreational use studies, ecological studies and educational programs and publications.[74]

[73] ParkAction.org (2016). www.Parkaction.org
[74] The Adirondack Watershed Institute of Paul Smith's College. 2016. (http://www.Parkwatershed.org/)

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
Protect the Adirondacks	Protect the Adirondacks (PROTECT) is a bottom-up grassroots organization formed to respond to conservation policy and dedicated to the protection and stewardship of the public and private lands of the Adirondack Park. This organization consolidated the Residents' Committee to Protect the Adirondacks (RCPA) and The Association for the Protection of the Adirondacks (AFPA) in 2009. PROTECT is volunteer-driven and includes citizen activism, research and policy analysis, educational outreach, private philanthropy and a sense of individual responsibility for the environment. Stewardship programs are integrated with work that promotes conservation-based planning and design for environmentally sound development.
Regional Office of Sustainable Tourism	The Regional Office of Sustainable Tourism (ROOST) is a not-for-profit corporation and the accredited Designation Marketing Organization (DMO) for Lake Placid and Essex County, Franklin County and Hamilton County. They provide regions with designation development planning strategies and small business marketing education and assistance. Sustainable tourism attempts to establish tourism bases in ways that benefit area residents and their quality of life in terms of jobs and business opportunities, while preserving the culture.
Schroon Lake Association	The Schroon Lake Association is a not for profit volunteer organization dedicated to preserving, promoting and protecting the welfare of Schroon Lake, the Schroon River and the watershed area.[75]

[75] Schroon Lake Association. (http://www.Parkaction.org/files/public/Monarch_Brochure_printed_by_Fed_Ex_3.20.pdf).

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
The Adirondack Council	The mission of the Adirondack Council is to ensure the ecological integrity and wild character of the Adirondack Park for current and future generations. The Council educates the public, advocates for regulations, policies and funding to benefit the Park's environment and communities, monitor proposals, legislation and policies impacting the Park. To achieve its vision for the Adirondack Park, the Council: • sponsors and publishes research; • educates the public and policy makers; • advocates for regulations, policies and funding to benefit the Park's environment and communities; • monitors compliance, proposals, legislation and policies impacting the Park; and, • takes legal action when necessary to uphold constitutional protections and agency policies establish to protect the Adirondacks.
The Adirondack Diversity Council	The Adirondack Diversity Council (ADAC) was formed as an outcome of the symposium "*Toward a More Diverse Adirondacks*" held in Newcomb in 2014, ADAC's mission is to develop and promote strategies to help the Adirondack Park become more welcoming and inclusive. Toward that end, the ADAC has developed initiatives in training and education, transportation, youth engagement, arts and culture, targeted outreach and best-practice consulting.
The Adirondack Housing Community Trust	The Adirondack Housing Community Trust (AHCT) is a not-for-profit corporation with board members that represent various communities in the Park. AHCT was created to keep a selection of Adirondack Park homes affordable. They reduce the cost of home purchases for families making up to 120% of area median income. Resale limitations on the property require that future sales of these homes be controlled by AHCT so that they will be passed on to other income-qualified families at affordable prices. The AHCT uses the Community Land Trust (CLT) model for perpetually affordable housing.

Attachment J: Working List of Organizations and Stakeholder Groups (updated as needed)

Organization and Stakeholder	Description
The Adirondack Mountain Club	The Adirondack Mountain Club (PARK) is a member-directed organization dedicated to the conservation, preservation and responsible recreational use of the New York State Forest preserve and other parks, wild lands and waters. PARK uses a balanced approach to conservation, environmental advocacy, recreation, education and stewardship. PARK sponsors the High Peaks Summit and Backcountry Stewardship Programs to promote land stewardship through the development and maintenance of quality, all-encompassing trail system. Trail work involves hiking trails, canoe carries, mountain bike trails, ski trails, lean-tos, campsites and trailheads. PARK currently partners with DEC and The Adirondack Chapter of The Nature Conservancy (TNC). For the TCUMP process, PARK is a resource for carrying capacity and other trailhead issues.
The Adirondack Partnership	The Adirondack Partnership is an organization that oversees grants for Hamilton County. It is a consortium of municipalities and economic development agencies across the Adirondack Park. The Partnership produced: *Advantage Adirondacks: Advancing Economic Opportunities Across the Adirondack Park* and *Adirondack Economic Development Strategy and Plan to Advance Key Projects.* The latter presents an approach to developing a strategic economic development plan for Adirondack Park communities.
The Nature Conservancy	The Nature Conservancy (TNC) is a science-based conservation organization that works around the world to protect ecologically important lands and waters for nature and people. TNC collaborates with communities, companies, government agencies, individuals, other non-profits and multilateral institutions to achieve non-confrontational, pragmatic, market-based solutions to conservation challenges.
Wildlife Conservation Society: Adirondack Program	The Wildlife Conservation Society (WCS), originally the New York Zoological Society, dates back to the late 1800s. The WCS began working in the Park in 1984. They have identified key conservation issues within the Park, including degradation to wildlife habitat as a result of land (poorly planned residential development) and recreational use. Research and education activities include loon conservation, boreal birds, climate change, community-based conservation, forest health, habitat connectivity and fragmentation.

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Attachment K: Public Transportation in the Adirondack Park

Regional Providers		
Service	Area Covered	Comments
Adirondack Regional Rideshare	Adirondack Park and surrounding communities	Web-board for commuters to find carpooling opportunities
CDTA	Saratoga County	Park and Ride lots available for commuting into Albany, Schenectady and Troy
	Warren County	Park and Ride lot at Warren County Municipal Center
Birnie Bus Service	Herkimer County Lewis County	Offers line run services, shuttles, and public bussing throughout the communities.
Adirondack Trailways	All Adirondack Park Counties	Bus route stops in the Park include Lake George, Warrensburg, Chestertown, Pottersville, Schroon Lake, Keene Valley, Lake Placid, and Saranac Lake. Provides transit services between the park and other parts of the State.
Clinton County		
Clinton County Public Transit (CCPT)	Clinton County	Services Clinton County, including the City of Plattsburgh, AuSable and Ellenburg within the Park
Clinton County Shopper	Clinton County Community College	Runs Monday through Friday between the Government Center and CCC Dorms, Champlain Centre, Walmart and K-Mart/Price Chopper. There is an AuSable route that provides regular stops between the Government Center and Ausable Forks Post Office.
Essex County		
Service	Area Covered	Comments
Cascade Express	Essex County	Services Elizabethtown, Keene, North Elba, Lake Placid and Saranac Lake. Flag Down Services and Non-Scheduled Stop Service available. Route deviations of up to ¾ mile are available upon request.
Lake Placid Express	Essex County	Busses and Trolleys available. Flag Down Service at crosswalks and route deviations of up to ¾ mile. Regular schedule seven days a week.
Champlain Northern Route	Essex County	Regularly scheduled stops in Elizabethtown, Essex, Keeseville, Chesterfield, and Willsboro. Flag Down Services and Non-Scheduled Stop Service available. Route deviations of up to ¾ mile are available upon request.

Attachment K: Public Transportation in the Adirondack Park

Champlain Southern Route	Essex County	Regularly scheduled stops in Elizabethtown, Westport, Moriah, Crown Point and Ticonderoga. Flag Down Services and Non-Scheduled Stop Service available. Route deviations of up to ¾ mile are available upon request.
Mountain Valley Shuttle	Essex County	Regularly scheduled stops in Au Sable Forks, Jay, Upper Jay, Wilmington, Lake Placid, North Elba and Saranac Lake. Flag Down Services and Non-Scheduled Stop Service available. Route deviations of up to ¾ mile are available upon request.
Franklin County		
Service	Area Covered	Comments
Saranac Lake Demand Shuttle	Saranac Lake	Operates Monday through Friday, 7:30 AM to 3:00 PM. Requires 24 hour advanced notice.
Franklin/Essex Adirondack Route	Franklin County and Essex County	Regularly scheduled departures and stops in Franklin and Essex County including Lake Placid.
Tupper Lake Demand Shuttle	Tupper Lake	Operates 7 days a week, 7:30 AM to 6:10 PM. Requires 24 hour advanced notice. Will deviate up to one mile off the route.
Plattsburgh Shuttle	Franklin County	Operates 7 days a week from 6:25 AM to 8:15 PM with regular stops between Plattsburgh and Malone.
Hamilton County		
Service	Area Covered	Comments
Hamilton County Express	Hamilton County	On-demand public transit system available for the general public. Operates Monday through Saturday.
St Lawrence County		
Service	Area Covered	Comments
St. Lawrence NYSARC	St. Lawrence County	Bus service with more than 50 locations throughout St. Lawrence County, including Colton, Star Lake, Clifton, Cranberry Lake and Piercefield
Warren County		
Service	Area Covered	Comments
Greater Glens Falls Transit	Glens Falls, Queensbury, Lake George	Bus service 7 days depending on the route. Includes Trolley Schedule in to Lake George Village

Attachment L: Adirondack Park Economic Profile

Adirondack Park Economic Profile March 2012

Population Trends

	2000	2010	Net Change	% Change
New York State	18,976,811	19,378,102	401,291	2.1%
Adirondack Park*	131,807	130,137	(1,670)	-1.3%
Counties**				
Clinton County	79,894	82,128	2,234	2.8%
Essex County	38,849	39,370	521	1.3%
Franklin County	51,134	51,599	465	0.9%
Fulton County	55,077	55,531	454	0.8%
Hamilton County	5,377	4,836	(541)	-10.1%
Herkimer County	64,437	64,519	82	0.1%
Lewis County	26,944	27,087	143	0.5%
Oneida County	235,461	234,878	(583)	-0.2%
St. Lawrence County	111,919	111,944	25	0.0%
Saratoga County	200,635	219,607	18,972	9.5%
Warren County	63,303	65,707	2,404	3.8%
Washington County	61,042	63,216	2,174	3.6%

*APA US Census Block Count

**County numbers are for the entire county, not just Adirondack Park Portion

Employment by Industry*

	2010		Change from 2000	
	#	%	#	%
Agriculture, forestry, fishing, hunting, mining	1,135	2.44%	52	4.80%
Construction	4,686	10.06%	581	14.15%
Manufacturing	3,245	6.97%	-1,380	-29.84%
Wholesale trade	742	1.59%	-48	-6.08%
Retail trade	5,398	11.59%	348	6.89%
Transportation, warehousing, and utilities	1,694	3.64%	-11	-0.65%
Information	790	1.70%	5	0.64%
Finance, insurance, real estate, rental, leasing	1,924	4.13%	311	19.28%
Professional, scientific, management, administrative, waste management services	2,678	5.75%	715	36.42%
Educational services, health care, social assistance	12,616	27.08%	1,398	12.46%
Arts, entertainment, recreation, accommodation, food services	5,777	12.40%	158	2.81%
Other services, except public administration	2,252	4.83%	-335	-12.95%
Public administration	3,649	7.83%	-572	-13.55%

Source: U.S. Census Bureau

*Data for municipalities wholly located within the Adirondack Park

Basic Industries*

	Location Quotient**
Agriculture, forestry, fishing, hunting, mining	4.10
Construction	1.72
Retail trade	1.08
Arts, entertainment, recreation, accommodation, food services	1.45
Public administration	1.58

Source: U.S. Census Bureau

*Data for municipalities located wholly within the Adirondack Park

**A location quotient of 1.0 woud indicate that an industry segment in the Adirondacks employs the same percentage of workers as the rest of New York State. A location quotient above 1.05 indicates that an segment is "basic" or is an exporting industry. An LQ of 4 indicates that the region has four times as many employees in that industry than an average New York municipality

1

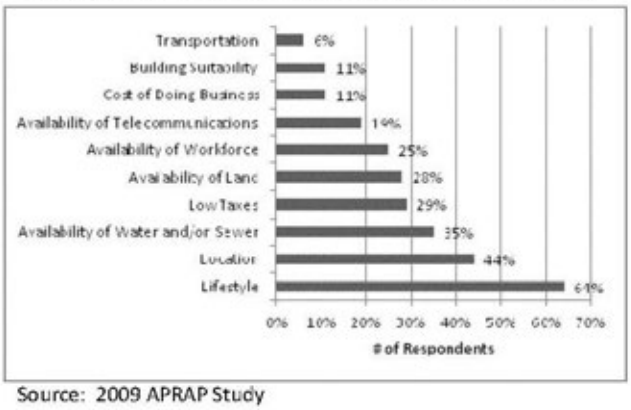
Adirondack Park Economic Profile March 2012

# of Businesses by Sector and Size*

Sector	Number of Employees per Business								
	1 to 4	5 to 9	10 to 19	20 to 49	50 to 99	100 to 249	250 to 499	500 to 999	Total
Agriculture, forestry, fishing and hunting	46	12	2	1	0	0	0	0	61
Mining, quarrying, and oil and gas extraction	7	0	1	1	1	1	0	0	11
Utilities	13	2	3	0	0	0	0	0	18
Construction	358	62	26	11	2	0	0	0	459
Manufacturing	43	14	12	5	2	6	1	1	84
Wholesale trade	33	11	11	7	1	0	0	0	63
Retail trade	328	193	106	36	3	3	0	0	669
Transportation and warehousing	42	7	6	3	1	0	0	0	59
Information	41	16	6	2	1	0	0	0	66
Finance and insurance	71	39	7	2	0	0	0	0	119
Real estate and rental and leasing	97	15	2	4	0	0	0	0	118
Professional and technical services	157	21	17	3	0	1	0	0	199
Management of companies and enterprises	5	2	1	1	1	0	0	0	10
Administrative and waste services	86	10	7	2	0	0	0	0	105
Educational services	19	4	3	6	4	2	0	0	38
Health care and social assistance	142	83	60	29	6	4	3	0	327
Arts, entertainment, and recreation	124	16	16	5	0	0	0	0	161
Accommodation and food services	438	121	85	38	12	2	1	0	697
Other services, except public administration	216	54	14	7	2	0	1	0	294
Total	**2266**	**682**	**385**	**163**	**36**	**19**	**6**	**1**	**3558**
Percent	**63.7%**	**19.2%**	**10.8%**	**4.6%**	**1.0%**	**0.5%**	**0.2%**	**0.0%**	

*Data for zip codes wholly located within the Adirondack Park
Source: US Census Bureau

Positive Influences On Business Retention and Attraction Since 1990



Source: 2009 APRAP Study

Negative Influences On Business Retention and Attraction Since 1990

Source: 2009 APRAP Study

New York State Employment Multipliers*

Industry Group	Multiplier
Information	3.41
Management of Companies	3.16
Financial Activities	3.06
Manufacturing	3.04
Prof., Scdi. & Tech. Services	2.25
Construction	2.24
Transporation and Warehousing	2.03
Health Services	1.78
Wholesale and Retail Trade	1.71
Admin & Support Services	1.64
Forestry	2.80
Leisure & Hospitality	1.50

Source: NYS Department of Labor, National Alliance of Forest Producers

*Economic multipliers are a standard tool of measuring the potential impacts of a change in a region's economy by estimating the effects on output, income, and employment resulting from a change in spending. For example, an added job in the forestry industry promotes to an additional 1.8 jobs (the 1 direct job is added to indirect and induced 1.8 jobs for a multiplier of 2.8).

Adirondack parkagency

2

Attachment M: Adirondack Park Community/Hamlet SURVEY

Date:

DRAFT Adirondack Park Community/Hamlet SURVEY

New York State Department of Transportation

Community or Hamlet

Lighting

Is Highway Lighting Present?	Y☐	N☐	
Is it Adequate?	Y☐	N☐	N/A☐
Is Pedestrian Lighting Present?	Y ☐	N ☐	
Is it Adequate?	Y ☐	N ☐	N/A☐
Is it Decorative	Y ☐	N ☐	N/A☐

Notes:

Parking

Is Parking Present?	Y☐	N☐	
Is it Adequate?	Y☐	N☐	N/A☐
Parking Location	On-Street ☐		Off Street ☐
Is Park and Ride Present?	Y ☐	N ☐	
Is it Needed?	Y ☐	N ☐	N/A☐

Notes:

Landscape Elements and Plantings (i.e. signs, benches, planters)

Is Landscaping Present? Y☐ N☐

Is Landscaping Adequate? Y☐ N☐ N/A☐

Notes:

Special Use Areas (i.e. park, kiosk, monument)

Is it Present? Y☐ N☐

Notes:

Utilities

Water? Y☐ N☐

Age

Is it Adequate? Y☐ N☐ N/A☐

Sanitary Sewer Y☐ N☐

Age

Is it Adequate? Y☐ N☐ N/A☐

Gas Y☐ N☐

Age

Is it Adequate? Y☐ N☐ N/A☐

Electric

Is it Adequate? Y☐ N☐ N/A☐

Is it Underground? Y☐ N☐ N/A☐

Telephone

Is it Adequate? Y☐ N☐ N/A☐

Is it Underground? Y☐ N☐ N/A☐

Fiber Optics

Is it Adequate? Y☐ N☐ N/A☐

Is it Underground? Y☐ N☐ N/A☐

Cable TV/Internet

Is it Adequate? Y☐ N☐ N/A☐

Is it Underground? Y☐ N☐ N/A☐

Other:

Notes:

Snow Storage

Is Snow Storage Present? Y☐ N☐

Is it Paved or Grassed? Y☐ N☐

Is it Adequate? (3' Min.) Y☐ N☐ N/A☐

Notes:

Drainage

Open (i.e. swales, ditches, gutters)? Y☐ N☐

Is it adequate? Y☐ N☐ N/A☐

Closed (i.e. culvert, catch basin, drain inlet)? Y☐ N☐

Is it Adequate? (3' Min.) Y☐ N☐ N/A☐

Notes:

Traffic Signals/Control Devices

Are they adequate? Y☐ N☐

Notes:

Geometry/Traffic Channelization

Are they adequate? Y☐ N☐

Notes:

Perceived/Real Congestion/Delay Issues

Delay? Low☐ Med☐ High☐

Notes:

Perceived/Real Accident Problems

Is there a perceived or real accident problem? Y☐ N☐

Notes:

Roadside Commercial Development

Is it present? Y☐ N☐

Level of Development? Low☐ Med☐ High☐

Notes:

Walkability (Pedestrian Access and Mobility)

Sidewalks (connectivity, width, condition)	Y☐	N☐		
Are they Adequate?	Y☐	N☐		N/A☐
Ped Crossing Signalized	Y☐		N☐	
Are they Adequate?	Y☐	N☐		N/A☐
Count-down timers	Y☐		N☐	
Are they Adequate?	Y☐	N☐		N/A☐
Curbs and curb extensions	Y☐		N☐	
Are they Adequate?	Y☐	N☐		N/A☐
Crosswalks	Y☐		N☐	
Are they Adequate?	Y☐	N☐		N/A☐
Crosswalks Type: (i.e. color, texture, mid-bloc				

Notes:

Designated Scenic Byways

Is it present? Y☐ N☐

Bicycle Facilities

Bike Lanes	Y☐	N☐	
Are they Adequate?	Y☐	N☐	N/A☐
Bike Parking Facilities (i.e. lockers, racks)	Y☐	N☐	
Are they Adequate?	Y☐	N☐	N/A☐
Designated Bike Routes	Y☐	N☐	

Notes:

Other Multi-Modal

Bus?	Y☐	N☐	Local	Intercity
Air	Y☐	N☐		
Rail	Y☐	N☐	Freight	Passenger

Notes:

Master Plan

Is it present?	Y☐	N☐
Last Updated:		
Are there any currently planned projects?	Y☐	N☐
Is the Village seeking other funding?	Y☐	N☐

Notes:

Infrastructure Projects

Infrastructure projects done recently? Y☐ N☐

Notes:

Historic and Cultural Context

(i.e. historic buildings, sites, landmarks, monuments, cultural themes, murals, sculptures, art)

Is it present? Y☐ N☐

Notes:

Economic Sustainability

(i.e. Economic Opportunities, Economic Condition, Tax Base Info, Tourism, Zoning, List Industrial Sites)

Notes:

Miscellaneous

(i.e. Special Events, Open Spaces, Gateways, Institutional– schools hospitals, Bridges – historical signature)

Notes:

Comments

How can DOT assist in achieving your transportation vision in your Village?

Notes:

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Attachment N: Designated Inland Waterways in the Adirondack Park

Resource	County	Municipality	LWRP
Ausable River	Hamilton, Essex	Town of Wilmington Jay Ausable North Elba Keene Chesterfield	Yes (2005) No No No No No
Big Tupper Lake	Franklin, St Lawrence	Tupper Lake Piercefield	No No
Black River	Lewis, Oneida, Herkimer	Ohio	No
Boquet River	Essex	Chesterfield Lewis Willsboro Westport Elizabethtown	No No No No No
Chateaugay Lake	Franklin, Clinton	Bellmont Ellenburg Dannemora	No No No
Cranberry Lake	St. Lawrence	Clifton Coulton Fine	No No No
Deer River	Franklin		
Fish Creek	Lewis	Greig	No
Fulton Chain Lakes	Hamilton, Herkimer	Inlet Webb	No No
Grasse River	St. Lawrence	Russell Clare Clifton Colton	No No No No
Great Chazy River	Clinton	Altona Dannemora Ellenburg	No No No
Great Sacandaga Lake	Saratoga, Fulton	Day Edinburg Broadalbin Northampton Mayfield Northville	No No No No No No
Hudson River (north of Federal Dam at Troy)	Saratoga, Washington, Warren, Essex	Newcomb Minerva Indian Lake Johnsburg Chester Thurman Warrensburg Lake Luzerne Hadley Corinth	No No No No No No No No No No
Indian Lake	Hamilton	Indian Lake Lake Pleasant Speculator	No No No

Attachment N: Designated Inland Waterways in the Adirondack Park

Resource	County	Municipality	LWRP
Lake Champlain	Essex, Clinton, Warren	Essex	Yes (2003)
		Whitehall (outside Park)	Yes (2006)
		Port Henry	No
		Fort Ann	No
		Dresden	No
		Putnam	No
		Ticonderoga	No
		Crown Point	No
		Moriah	No
		Westport	No
		Willsboro	No
		Chesterfield	No
		Ausable	No
		Peru	No
		Plattsburgh	No
		Beekmantown	No
Lake George	Warren	Lake George	No
		Queensbury	No
		Fort Ann	No
		Bolton	No (Draft)
		Dresden	No
		Hague	No
		Putnam	No
		Ticonderoga	No
Lake Placid	Essex	North Elba	No
		St Armand	No
		Lake Placid	No
Little Ausable River	Clinton	Peru	No
		Ausable	No
		Black Brook	No
Little River	St. Lawrence	Fine	No
		Clifton	No
Long Lake	Hamilton	Long Lake	No
Mirror Lake	Essex	North Elba	No
		Lake Placid	No
Moose River (North and Middle Branches)	Lewis, Oneida, Herkimer	Webb	No
		Forestport	No
		Lyonsdale	No
Oswegatchie River	St. Lawrence, Herkimer, Lewis	Fine	No
		Diana	No
		Croghan	No
		Webb	No
Raquette Lake	Hamilton	Long Lake	No
		Arietta	No
Raquette River	St. Lawrence, Franklin, Hamilton	Arietta	No
		Long Lake	No
		Harrietstown	No
		Tupper Lake	No
		Piercefield	No
		Colton	No
		Parishville	No

Attachment N: Designated Inland Waterways in the Adirondack Park

Resource	County	Municipality	LWRP
Sacandaga Lake	Hamilton	Lake Pleasant	No
		Speculator	No
Sacandaga River	Hamilton, Fulton, Saratoga, Warren	Lake Pleasant	No
		Speculator	No
		Wells	No
		Arietta	No
		Benson	No
		Hope	No
		Northampton	No
		Broadalbin	No
		Edinburg	No
		Day	No
		Hadley	No
		Thurman	No
		Johnsburg	No
Salmon River	Franklin	Malone (outside Park)	Yes
		Bellmont	No
		Franklin	No
Saranac River	Clinton, Franklin, Essex	Saranac	No
		Black Brook	No
		Franklin	No
		Brighton	No
		St Armand	No
		Harrietstown	No
		Santa Clara	No
Schroon Lake	Essex, Warren	Schroon	No
		Horicon	No
		Chester	No
Schroon River	Essex, Warren	North Hudson	No
		Schroon	No
		Chester	No
		Horicon	No
		Bolton	No
		Warrensburg	No
Upper Saranac Lake	Essex, Franklin	Village of Saranac Lake	Yes

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Attachment O: New York State Department of State Coastal Assessment Form

NEW YORK STATE DEPARTMENT OF STATE
COASTAL MANAGEMENT PROGRAM

Coastal Assessment Form

A. INSTRUCTIONS (Please print or type all answers)

1. State agencies shall complete this CAF for proposed actions which are subject to Part 600 of Title 19 of the NYCRR. This assessment is intended to supplement other information used by a state agency in making a determination of significance pursuant to the State Environmental Quality Review Act (see 6 NYCRR, Part 617). If it is determined that a proposed action will not have a significant effect on the environment, this assessment is intended to assist a state agency in complying with the certification requirements of 19 NYCRR Section 600.4.

2. If any question in Section C on this form is answered "yes", then the proposed action may affect the achievement of the coastal policies contained in Article 42 of the Executive Law. Thus, the action should be analyzed in more detail and, if necessary, modified prior to either (a) making a certification of consistency pursuant to 19 NYCRR Part 600 or, (b) making the findings required under SEQR, 6 NYCRR, Section 617.11, if the action is one for which an environmental impact statement is being prepared. If an action cannot be certified as consistent with the coastal policies, it shall not be undertaken.

3. Before answering the questions in Section C, the preparer of this form should review the coastal policies contained in 19 NYCRR Section 600.5. A proposed action should be evaluated as to its significant beneficial and adverse effects upon the coastal area.

B. DESCRIPTION OF PROPOSED ACTION

1. Type of state agency action (check appropriate response):

   (a) Directly undertaken (e.g. capital construction, planning activity, agency regulation, land transaction) X
   (b) Financial assistance (e.g. grant, loan, subsidy) ____
   (c) Permit, license, certification ____

2. Describe nature and extent of action: The Adirondack Generic/Master Travel Corridor Unit Mangement Plan is a generic planning document that describes goals, policies and management criteria that will be universally applied and characteristic to all Adirondack Park state highway travel corridors. The plan includes specific management objectives and actions.

3. Location of action:

See Section E	See Section E	The Adirondack Park
County	City, Town or Village	Street or Site Description

4. If an application for the proposed action has been filed with the state agency, the following information shall be provided:

   (a) Name of applicant: _____

   (b) Mailing address: _____

   (c) Telephone Number: Area Code (____) _____

   (d) State agency application number: _____

5. Will the action be directly undertaken, require funding, or approval by a federal agency?

   Yes ____ No X If yes, which federal agency? _____

C. COASTAL ASSESSMENT (Check either "YES" or "NO" for each of the following questions)

1. Will the proposed activity be located in, or contiguous to, or have a significant effect upon any of the resource areas identified on the coastal area map:

		YES	NO
(a)	Significant fish or wildlife habitats?		X
(b)	Scenic resources of statewide significance?		X
(c)	Important agricultural lands?		X

2. Will the proposed activity have a significant effect upon:

(a)	Commercial or recreational use of fish and wildlife resources?		X
(b)	Scenic quality of the coastal environment?		X
(c)	Development of future, or existing water dependent uses?		X
(d)	Operation of the State's major ports?		X
(e)	Land and water uses within the State's small harbors?		X
(f)	Existing or potential public recreation opportunities?		X
(g)	Structures, sites or districts of historic, archeological or cultural significance to the State or nation?		X

3. Will the proposed activity involve or result in any of the following:

(a)	Physical alteration of two (2) acres or more of land along the shoreline, land under water or coastal waters?		X
(b)	Physical alteration of five (5) acres or more of land located elsewhere in the coastal area?		X
(c)	Expansion of existing public services of infrastructure in undeveloped or low density areas of the coastal area?		X
(d)	Energy facility not subject to Article VII or VIII of the Public Service Law?		X
(e)	Mining, excavation, filling or dredging in coastal waters?		X
(f)	Reduction of existing or potential public access to or along the shore?		X
(g)	Sale or change in use of state-owned lands located on the shoreline or under water?		X
(h)	Development within a designated flood or erosion hazard area?		X
(i)	Development on a beach, dune, barrier island or other natural feature that provides protection against flooding or erosion?		X

4. Will the proposed action be located in or have a significant effect upon an area included in an approved Local Waterfront Revitalization Program? X _

D. SUBMISSION REQUIREMENTS

If any question in Section C is answered "Yes", AND either of the following two conditions is met:

Section B.1(a) or B.1(b) is checked; or
Section B.1(c) is checked AND B.5 is answered "Yes",

THEN one copy of the Completed Coastal Assessment Form shall be submitted to:

New York State Department of State
Division of Coastal Resources
41 State Street, 8th Floor
Albany, New York 12231

If assistance of further information is needed to complete this form, please call the Department of State at (518) 474-6000.

E. REMARKS OR ADDITIONAL INFORMATION

B.3. Location of Action:

Counties Affected include portions of Clinton, Franklin, Fulton, Herkimer, Lewis, Oneida Saratoga, St. Lawrence, Warren and Washington and all of Hamilton and Essex.

Cities, Towns or Villages within the Adirondack Park with LWRPs include the Town of Wilmington, Village of Saranac Lake and Essex.

Letters to each of the affected LWRP communities are pending.

Preparer's Name: Ed Frantz
(Please print)

Title: Adirondack Park Forest Preserve Manager Agency: New York State Department of Transportation

Telephone Number: (315) 793-2421 Date: December 22, 2016

Coordination Letter to Town of Wilmington for consistency review - *Reserved*

Coordination Letter to Town of Essex for consistency review – *Reserved*

Coordination Letter to Village of Saranac Lake for consistency review - *Reserved*

Attachment P: Threatened and Endangered Species in the Adirondack Region

Sensitive	Scientific Name	Common Name	Group Name	NY Listed	State Rank
N	Asio flammeus	Short-eared Owl	Birds	Endangered	Imperiled
Y	Falcipennis canadensis	Spruce Grouse	Birds	Endangered	Imperiled
Y	Falco peregrinus	Peregrine Falcon	Birds	Endangered	Vulnerable
N	Prosopium cylindraceum	Round Whitefish	Fish	Endangered	Critically Imperiled
Y	Myotis sodalis	Indiana Bat	Mammals	Endangered	Critically Imperiled
N	Lithophane lepida lepida	Pine Pinion Moth	Moths	Endangered	Critically Imperiled
N	Ammophila breviligulata ssp. champlainensis	Champlain Beachgrass	Vascular Plants	Endangered	Critically Imperiled
N	Anthoxanthum monticola ssp. monticola	Alpine Sweetgrass	Vascular Plants	Endangered	Critically Imperiled
N	Arnica lanceolata ssp. lanceolata	Lanceleaf Arnica	Vascular Plants	Endangered	Critically Imperiled
N	Betula glandulosa	Tundra Dwarf Birch	Vascular Plants	Endangered	Critically Imperiled
N	Betula minor	Dwarf White Birch	Vascular Plants	Endangered	Critically Imperiled
Y	Botrychium rugulosum	Rugulose Grape Fern	Vascular Plants	Endangered	Critically Imperiled
N	Calamagrostis stricta ssp. stricta	Northern Reedgrass	Vascular Plants	Endangered	Critically Imperiled
N	Callitriche hermaphroditica	Autumnal Water-starwort	Vascular Plants	Endangered	Critically Imperiled
N	Carex arcta	Northern Clustered Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Carex atratiformis	Scabrous Black Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Carex capillaris	Hair-like Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Carex haydenii	Cloud Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Carex livida	Livid Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Carex nigra	Black Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Carex scirpoidea ssp. scirpoidea	Canadian Single-spike Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Carex tenuiflora	Sparse-flowered Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Carex typhina	Cat-tail Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Carex wiegandii	Wiegand's Sedge	Vascular Plants	Endangered	Critically Imperiled
N	Ceanothus herbaceus	Prairie Redroot	Vascular Plants	Endangered	Critically Imperiled
N	Cynoglossum virginianum var. boreale	Northern Wild Comfrey	Vascular Plants	Endangered	Critically Imperiled
N	Descurainia pinnata ssp. brachycarpa	Northern Tansy-mustard	Vascular Plants	Endangered	Critically Imperiled
N	Diphasiastrum complanatum	Northern Running-pine	Vascular Plants	Endangered	Critically Imperiled
N	Diphasiastrum sitchense	Sitka Clubmoss	Vascular Plants	Endangered	Critically Imperiled

Attachment P: Threatened and Endangered Species in the Adirondack Region

Sensitive	Scientific Name	Common Name	Group Name	NY Listed	State Rank
N	Draba glabella	Smooth Rock-cress	Vascular Plants	Endangered	Critically Imperiled
Y	Dryopteris fragrans	Fragrant Cliff Fern	Vascular Plants	Endangered	Critically Imperiled
N	Eleocharis ovata	Ovate Spikerush	Vascular Plants	Endangered	Critically Imperiled
N	Empetrum atropurpureum	Purple Crowberry	Vascular Plants	Endangered	Critically Imperiled
N	Epilobium hornemannii ssp. hornemannii	Alpine Willow-herb	Vascular Plants	Endangered	Critically Imperiled
N	Erigeron hyssopifolius	Daisy Fleabane	Vascular Plants	Endangered	Critically Imperiled
N	Festuca saximontana var. saximontana	Sheep Fescue	Vascular Plants	Endangered	Critically Imperiled
N	Galium kamtschaticum	Northern Wild-licorice	Vascular Plants	Endangered	Critically Imperiled
N	Geocaulon lividum	False Toadflax	Vascular Plants	Endangered	Critically Imperiled
N	Halenia deflexa	Spurred Gentian	Vascular Plants	Endangered	Critically Imperiled
N	Kalmia procumbens	Alpine Azalea	Vascular Plants	Endangered	Critically Imperiled
N	Lactuca hirsuta	Downy Lettuce	Vascular Plants	Endangered	Critically Imperiled
N	Lipocarpha micrantha	Dwarf Bulrush	Vascular Plants	Endangered	Critically Imperiled
Y	Listera auriculata	Auricled Twayblade	Vascular Plants	Endangered	Critically Imperiled
Y	Listera convallarioides	Broad-lipped Twayblade	Vascular Plants	Endangered	Critically Imperiled
N	Luzula spicata	Spiked Woodrush	Vascular Plants	Endangered	Critically Imperiled
N	Lysimachia hybrida	Lowland Yellow Loosestrife	Vascular Plants	Endangered	Critically Imperiled
N	Omalotheca sylvatica	Woodland Cudweed	Vascular Plants	Endangered	Critically Imperiled
Y	Platanthera hookeri	Hooker's Orchid	Vascular Plants	Endangered	Critically Imperiled
N	Poa glauca ssp. glauca	White Bluegrass	Vascular Plants	Endangered	Critically Imperiled
N	Poa laxa ssp. fernaldiana	Fernald's Bluegrass	Vascular Plants	Endangered	Critically Imperiled
N	Potamogeton strictifolius	Straight-leaf Pondweed	Vascular Plants	Endangered	Critically Imperiled
N	Prenanthes boottii	Boott's Rattlesnake-root	Vascular Plants	Endangered	Critically Imperiled
N	Prunus pumila var. pumila	Low Sand-cherry	Vascular Plants	Endangered	Critically Imperiled
N	Pseudolycopodiella caroliniana	Carolina Clubmoss	Vascular Plants	Endangered	Critically Imperiled
N	Pyrola minor	Snowline Wintergreen	Vascular Plants	Endangered	Critically Imperiled
N	Rhododendron lapponicum	Lapland Rosebay	Vascular Plants	Endangered	Critically Imperiled
N	Rosa acicularis ssp. sayi	Prickly Rose	Vascular Plants	Endangered	Critically Imperiled

Attachment P: Threatened and Endangered Species in the Adirondack Region

Sensitive	Scientific Name	Common Name	Group Name	NY Listed	State Rank
N	Salix herbacea	Dwarf Willow	Vascular Plants	Endangered	Critically Imperiled
Y	Saxifraga oppositifolia ssp. oppositifolia	Purple Mountain-saxifrage	Vascular Plants	Endangered	Critically Imperiled
Y	Saxifraga paniculata ssp. neogaea	White Mountain-saxifrage	Vascular Plants	Endangered	Critically Imperiled
N	Schoenoplectus heterochaetus	Slender Bulrush	Vascular Plants	Endangered	Critically Imperiled
N	Scleria triglomerata	Whip Nutrush	Vascular Plants	Endangered	Critically Imperiled
N	Solidago simplex var. racemosa	Mountain Goldenrod	Vascular Plants	Endangered	Critically Imperiled
N	Subularia aquatica var. americana	Water Awlwort	Vascular Plants	Endangered	Critically Imperiled
N	Thalictrum venulosum var. confine	Veiny Meadow-rue	Vascular Plants	Endangered	Critically Imperiled
N	Triantha glutinosa	Sticky False Asphodel	Vascular Plants	Endangered	Critically Imperiled
N	Trichophorum clintonii	Clinton's Clubrush	Vascular Plants	Endangered	Critically Imperiled
N	Trisetum melicoides	Melic-oats	Vascular Plants	Endangered	Critically Imperiled
N	Vaccinium cespitosum	Dwarf Blueberry	Vascular Plants	Endangered	Critically Imperiled
N	Viola nephrophylla	Northern Bog Violet	Vascular Plants	Endangered	Critically Imperiled
N	Viola novae-angliae	New England Violet	Vascular Plants	Endangered	Critically Imperiled
Y	Woodsia alpina	Alpine Cliff Fern	Vascular Plants	Endangered	Critically Imperiled
Y	Woodsia glabella	Smooth Cliff Fern	Vascular Plants	Endangered	Critically Imperiled
N	Sander canadensis	Sauger	Fish	Game Species	Critically Imperiled
N	Ardea herodias	Great Blue Heron	Birds	Protected Bird	Abundant
N	Bubulcus ibis	Cattle Egret	Birds	Protected Bird	Imperiled
N	Euphagus carolinus	Rusty Blackbird	Birds	Protected Bird	Imperiled
N	Hydroprogne caspia	Caspian Tern	Birds	Protected Bird	Critically Imperiled
N	Oreothlypis peregrina	Tennessee Warbler	Birds	Protected Bird	Imperiled
N	Picoides dorsalis	American Three-toed Woodpecker	Birds	Protected Bird	Imperiled
N	Setophaga castanea	Bay-breasted Warbler	Birds	Protected Bird	Imperiled
N	Setophaga tigrina	Cape May Warbler	Birds	Protected Bird	Imperiled
N	Empetrum nigrum	Black Crowberry	Vascular Plants	Rare	Vulnerable
N	Huperzia appressa	Appalachian Firmoss	Vascular Plants	Rare	Vulnerable
N	Panicum flexile	Wiry Panic Grass	Vascular Plants	Rare	Vulnerable

Attachment P: Threatened and Endangered Species in the Adirondack Region

Sensitive	Scientific Name	Common Name	Group Name	NY Listed	State Rank
N	Salix pyrifolia	Balsam Willow	Vascular Plants	Rare	Vulnerable
N	Scheuchzeria palustris	Pod Grass	Vascular Plants	Rare	Vulnerable
N	Catharus bicknelli	Bicknell's Thrush	Birds	Special Concern	Imperiled
N	Gavia immer	Common Loon	Birds	Special Concern	Common
N	Ophiogomphus anomalus	Extra-striped Snaketail	Dragonflies and Damselflies	Special Concern	Imperiled
N	Ophiogomphus howei	Pygmy Snaketail	Dragonflies and Damselflies	Special Concern	Critically Imperiled
N	Progomphus obscurus	Common Sanddragon	Dragonflies and Damselflies	Special Concern	Critically Imperiled
Y	Myotis leibii	Eastern Small-footed Myotis	Mammals	Special Concern	Imperiled
N	Bartramia longicauda	Upland Sandpiper	Birds	Threatened	Vulnerable
N	Circus cyaneus	Northern Harrier	Birds	Threatened	Vulnerable
N	Cistothorus platensis	Sedge Wren	Birds	Threatened	Vulnerable
Y	Haliaeetus leucocephalus	Bald Eagle	Birds	Threatened	Imperiled
N	Ixobrychus exilis	Least Bittern	Birds	Threatened	Vulnerable
N	Podilymbus podiceps	Pied-billed Grebe	Birds	Threatened	Vulnerable
N	Ammocrypta pellucida	Eastern Sand Darter	Fish	Threatened	Imperiled
N	Hiodon tergisus	Mooneye	Fish	Threatened	Imperiled
Y	Myotis septentrionalis	Northern Long-eared Bat	Mammals	Threatened	Vulnerable
Y	Crotalus horridus	Timber Rattlesnake	Reptiles	Threatened	Vulnerable
N	Agrostis mertensii	Northern Bentgrass	Vascular Plants	Threatened	Imperiled
N	Alisma gramineum	Water-plantain	Vascular Plants	Threatened	Imperiled
Y	Arethusa bulbosa	Dragon's Mouth Orchid	Vascular Plants	Threatened	Imperiled
N	Betula pumila	Swamp Birch	Vascular Plants	Threatened	Imperiled
N	Boechera grahamii	Purple Rock-cress	Vascular Plants	Threatened	Imperiled
N	Boechera missouriensis	Green Rock-cress	Vascular Plants	Threatened	Imperiled
N	Boechera stricta	Drummond's Rock-cress	Vascular Plants	Threatened	Imperiled
N	Calamagrostis stricta ssp. inexpansa	New England Northern Reedgrass	Vascular Plants	Threatened	Imperiled
N	Carex backii	Back's Sedge	Vascular Plants	Threatened	Imperiled
N	Carex bigelowii	Bigelow's Sedge	Vascular Plants	Threatened	Imperiled

Attachment P: Threatened and Endangered Species in the Adirondack Region

Sensitive	Scientific Name	Common Name	Group Name	NY Listed	State Rank
N	Carex buxbaumii	Brown Bog Sedge	Vascular Plants	Threatened	Imperiled
N	Carex chordorrhiza	Creeping Sedge	Vascular Plants	Threatened	Imperiled
N	Carex crawei	Crawe's Sedge	Vascular Plants	Threatened	Imperiled
N	Carex cumulata	Clustered Sedge	Vascular Plants	Threatened	Imperiled
N	Carex formosa	Handsome Sedge	Vascular Plants	Threatened	Imperiled
N	Carex houghtoniana	Houghton's Sedge	Vascular Plants	Threatened	Imperiled
N	Carex lupuliformis	False Hop Sedge	Vascular Plants	Threatened	Imperiled
N	Carex merritt-fernaldii	Fernald's Sedge	Vascular Plants	Threatened	Imperiled
N	Carex retroflexa	Reflexed Sedge	Vascular Plants	Threatened	Imperiled
N	Corydalis aurea	Golden Corydalis	Vascular Plants	Threatened	Imperiled
Y	Cypripedium arietinum	Ram's-head Ladyslipper	Vascular Plants	Threatened	Imperiled
N	Diapensia lapponica	Diapensia	Vascular Plants	Threatened	Imperiled
N	Draba arabisans	Rock-cress	Vascular Plants	Threatened	Imperiled
N	Equisetum pratense	Meadow Horsetail	Vascular Plants	Threatened	Imperiled
N	Hedeoma hispida	Mock-pennyroyal	Vascular Plants	Threatened	Imperiled
N	Juncus trifidus	Arctic Rush	Vascular Plants	Threatened	Imperiled
N	Myriophyllum alterniflorum	Water Milfoil	Vascular Plants	Threatened	Imperiled
N	Myriophyllum farwellii	Farwell's Water-milfoil	Vascular Plants	Threatened	Imperiled
N	Pellaea glabella ssp. glabella	Smooth Cliff Brake	Vascular Plants	Threatened	Imperiled
N	Piptatherum canadense	Canada Ricegrass	Vascular Plants	Threatened	Imperiled
N	Podostemum ceratophyllum	Riverweed	Vascular Plants	Threatened	Imperiled
N	Polygonum douglasii	Douglas' Knotweed	Vascular Plants	Threatened	Imperiled
N	Potamogeton alpinus	Northern Pondweed	Vascular Plants	Threatened	Imperiled
N	Potamogeton hillii	Hill's Pondweed	Vascular Plants	Threatened	Imperiled
N	Prunus pumila var. depressa	Dwarf Sand-cherry	Vascular Plants	Threatened	Imperiled
N	Pyrola asarifolia ssp. asarifolia	Pink Wintergreen	Vascular Plants	Threatened	Imperiled
N	Rhododendron canadense	Rhodora	Vascular Plants	Threatened	Imperiled
N	Rorippa aquatica	Lake-cress	Vascular Plants	Threatened	Imperiled

Attachment P: Threatened and Endangered Species in the Adirondack Region

Sensitive	Scientific Name	Common Name	Group Name	NY Listed	State Rank
N	Salix uva-ursi	Bearberry Willow	Vascular Plants	Threatened	Imperiled
N	Solidago leiocarpa	Alpine Goldenrod	Vascular Plants	Threatened	Imperiled
N	Solidago simplex var. monticola	Rand's Mountain Goldenrod	Vascular Plants	Threatened	Imperiled
N	Sparganium natans	Small Bur-reed	Vascular Plants	Threatened	Imperiled
N	Sporobolus heterolepis	Northern Dropseed	Vascular Plants	Threatened	Imperiled
N	Symphyotrichum boreale	Northern Bog Aster	Vascular Plants	Threatened	Imperiled
N	Trichophorum cespitosum ssp. cespitosum	Deer's Hair Sedge	Vascular Plants	Threatened	Imperiled
N	Vaccinium boreale	High-mountain Blueberry	Vascular Plants	Threatened	Imperiled
N	Viburnum edule	Squashberry	Vascular Plants	Threatened	Imperiled
Y	Cicindela ancocisconensis	Appalachian Tiger Beetle	Beetles	Unlisted	Imperiled
Y	Cicindela hirticollis	Hairy-necked Tiger Beetle	Beetles	Unlisted	Critically Imperiled
N	Oeneis jutta	Jutta Arctic	Butterflies	Unlisted	Critically Imperiled
N	Aeshna subarctica	Subarctic Darner	Dragonflies and Damselflies	Unlisted	Critically Imperiled
N	Coenagrion interrogatum	Subarctic Bluet	Dragonflies and Damselflies	Unlisted	Critically Imperiled
N	Cordulegaster erronea	Tiger Spiketail	Dragonflies and Damselflies	Unlisted	Critically Imperiled
N	Gomphurus fraternus	Midland Clubtail	Dragonflies and Damselflies	Unlisted	Vulnerable
N	Gomphus quadricolor	Rapids Clubtail	Dragonflies and Damselflies	Unlisted	Vulnerable
N	Lestes unguiculatus	Lyre-tipped Spreadwing	Dragonflies and Damselflies	Unlisted	Imperiled
N	Ophiogomphus aspersus	Brook Snaketail	Dragonflies and Damselflies	Unlisted	Vulnerable
N	Ophiogomphus colubrinus	Boreal Snaketail	Dragonflies and Damselflies	Unlisted	Critically Imperiled
N	Somatochlora cingulata	Lake Emerald	Dragonflies and Damselflies	Unlisted	Critically Imperiled
N	Somatochlora forcipata	Forcipate Emerald	Dragonflies and Damselflies	Unlisted	Critically Imperiled
N	Somatochlora franklini	Delicate Emerald	Dragonflies and Damselflies	Unlisted	Critically Imperiled

Attachment P: Threatened and Endangered Species in the Adirondack Region

Sensitive	Scientific Name	Common Name	Group Name	NY Listed	State Rank
N	Somatochlora incurvata	Incurvate Emerald	Dragonflies and Damselflies	Unlisted	Critically Imperiled
N	Somatochlora kennedyi	Kennedy's Emerald	Dragonflies and Damselflies	Unlisted	Critically Imperiled
N	Somatochlora minor	Ocellated Emerald	Dragonflies and Damselflies	Unlisted	Imperiled
N	Sympetrum danae	Black Meadowhawk	Dragonflies and Damselflies	Unlisted	Imperiled
N	Williamsonia fletcheri	Ebony Boghaunter	Dragonflies and Damselflies	Unlisted	Critically Imperiled
N	Catostomus utawana	Summer Sucker	Fish	Unlisted	Imperiled
N	Notropis heterodon	Blackchin Shiner	Fish	Unlisted	Critically Imperiled
N	Margaritifera margaritifera	Eastern Pearlshell	Freshwater Mussels	Unlisted	Imperiled
N	Potamilus alatus	Pink Heelsplitter	Freshwater Mussels	Unlisted	Imperiled
N	Fabronia ciliaris	Fringed Fabronia	Mosses	Unlisted	Critically Imperiled
N	Grimmia unicolor	Dingy dry rock moss	Mosses	Unlisted	Imperiled
N	Hyophila involuta	Rolled-leaf wet ground moss	Mosses	Unlisted	Imperiled
N	Meesia triquetra	Three-leaved thread moss	Mosses	Unlisted	Imperiled
N	Platydictya jungermannioides	False Willow Moss	Mosses	Unlisted	Imperiled
N	Pseudotaxiphyllum distichaceum	Two-ranked moss	Mosses	Unlisted	Imperiled
N	Splachnum ampullaceum	Ampulla dung moss	Mosses	Unlisted	Imperiled
N	Tortula pagorum	Leafy screw moss	Mosses	Unlisted	Critically Imperiled
N	Eacles imperialis	Imperial Moth	Moths	Unlisted	Status Uncertain
N	Lithophane thaxteri	Thaxter's Pinion Moth	Moths	Unlisted	Status Uncertain
N	Xylena thoracica	Acadian Swordgrass Moth	Moths	Unlisted	Critically Imperiled
Y	Bat Colony	Bat Colony	Animal Assemblages		Status Not Assessed
N	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	Animal Assemblages		Vulnerable
N	Gull Colony	Gull Colony	Animal Assemblages		Status Not Assessed

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Attachment Q: Natural and Upland/Terrestrial Plant Communities In The Adirondack Park

Acidic talus slope woodland	Hemlock-northern hardwood forest	Riverside ice meadow
Alpine krummholz	Ice cave talus community	Riverside sand/gravel bar
Appalachian oak-hickory forest	Limestone woodland	Rocky summit grassland
Appalachian oak-pine forest	Maple-basswood rich mesic forest	Sand beach
Aquatic cave community	Mountain fir forest	Sandstone pavement barrens
Balsam flats	Mountain spruce-fir forest	Shale cliff and talus community
Beech-maple mesic forest	Northern white cedar rocky summit	Shoreline outcrop
Boreal heath barrens	Open alpine community	Spruce flats
Calcareous cliff community	Pine-northern hardwood forest	Spruce-fir rocky summit
Calcareous pavement woodland	Pitch pine-heath barrens	Spruce-northern hardwood forest
Calcareous shoreline outcrop	Pitch pine-oak-heath rocky summit	Successional blueberry heath
Calcareous talus slope woodland	Pitch pine-scrub oak barrens	Successional northern hardwoods
Chestnut oak forest	Red cedar rocky summit	Successional red cedar woodland
Cliff community	Red pine rocky summit	Successional red cedar woodland
Cobble shore		Talus cave community

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Attachment R: Natural Wetland/Aquatic Plant Communities in Adirondack Park

Alpine sliding fen	Inland poor fen	Rich shrub fen
Backwater slough	Intermittent stream	Rich graminoid fen
Black spruce-tamarack bog	Marsh headwater stream	Rich hemlock-hardwood peat swamp
Bog lake	Medium fen	Rich shrub fen
Cobble shore wet meadow	Meromictic lake	Rich sloping fen
Confined river	Mesotrophic dimictic lake	Rocky headwater stream
Deep emergent marsh	Northern white cedar swamp	Sedge meadow
Dwarf shrub bog	Oligotrophic dimictic lake	Shallow emergent marsh
Eutrophic dimictic lake	Oligotrophic pond	Shrub swamp
Eutrophic pond	Oxbow lake	Silver maple-ash swamp
Floodplain forest	Patterned peatland	Spruce-fir swamp
Hemlock-hardwood swamp	Pine barrens vernal pond	Summer-stratified monomictic lake
Highbush blueberry bog thicket	Red maple-tamarack peat swamp	Unconfined river
Inland calcareous lake shore	Rich graminoid fen	Vernal pool
Inland non-calcareous lake shore	Rich hemlock-hardwood peat swamp	Winter-stratified monomictic lake

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