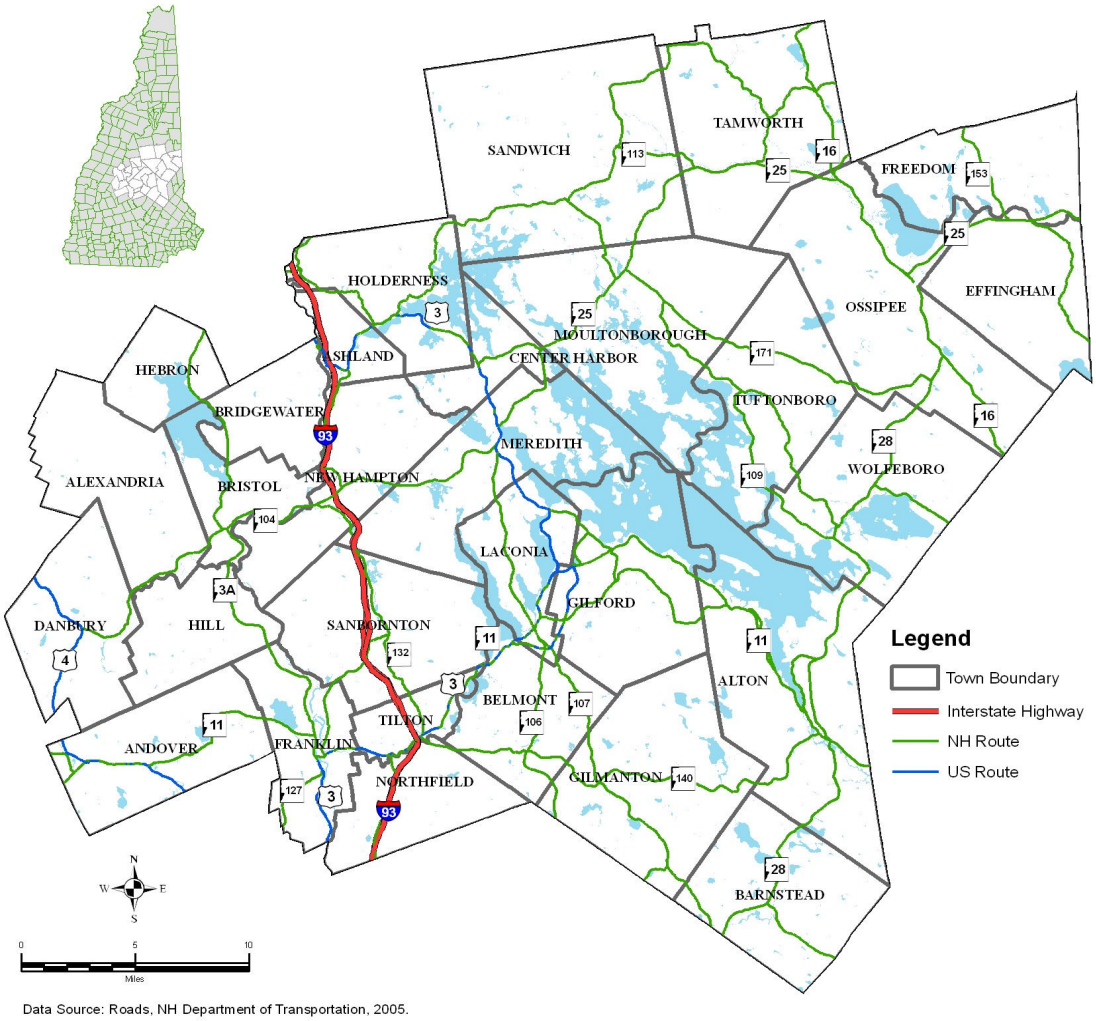
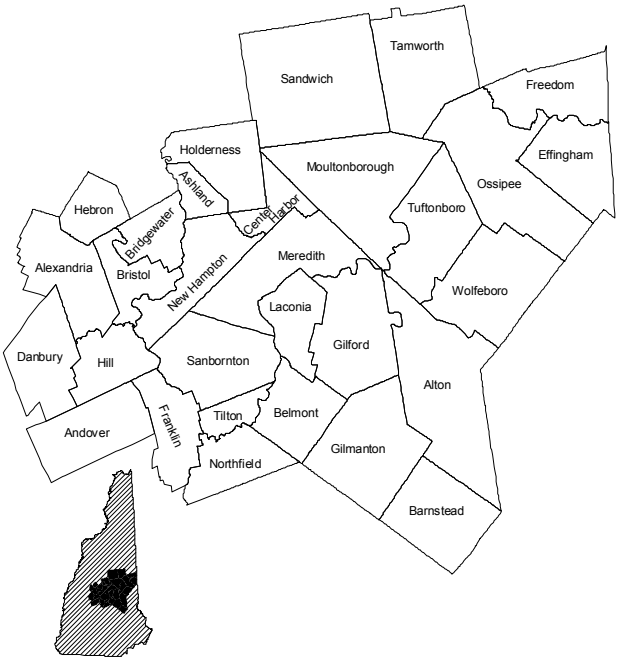
Lakes Region Transportation Plan 2008



Data Source: Roads, NH Department of Transportation, 2005.

January 28, 2008

THE LAKES REGION PLANNING COMMISSION



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Acknowledgements

The Lakes Region Planning Commission would like to thank the following persons for participating on the Lakes Region Transportation Technical Advisory Committee:

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1. INTRODUCTION

Transportation Planning Structure

Federal Legislation and Funding - On August 10, 2005, the President signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). With guaranteed funding for highways, highway safety, and public transportation totaling $244.1 billion, SAFETEA-LU represents the largest surface transportation investment in our nation's history. The two landmark bills that brought surface transportation into the 21st century—the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21)—shaped the highway program to meet the nation's changing transportation needs. SAFETEA-LU builds on this firm foundation, supplying the funds and refining the programmatic framework for investments needed to maintain and grow our vital transportation infrastructure.

The Highway Trust Fund (HTF) is the source of funding for most of the programs in the SAFETEA-LU. The HTF is comprised of the Highway Account, which funds highway and intermodal programs, and the Mass Transit Account which consists of highway user taxes dedicated to fund transit needs. Federal motor fuel taxes are the major source of income into the HTF.[1]

State Department of Transportation - In 2004, the New Hampshire Department of Transportation (NHDOT) embarked upon the development of a 25-year Long Range Transportation Plan for the State of New Hampshire, the "Transportation Business Plan". When finalized, this Plan will recommend the strategic direction for transportation investments and policies for the next 25 years. The Plan considers the needs of all modes of passenger and freight transportation including bicycle, pedestrian, highway, bus transit, passenger and freight railroad, aviation and port activities throughout the state. The transportation strategies developed as part of this plan will serve to advance the transportation, economic development, environmental, and land use vision for the State of New Hampshire.[2]

Most recently, the NHDOT has publicly identified significant funding shortfalls in the Ten-Year Plan, a list of construction projects statewide. Estimates based on 2007 construction costs indicate the Ten Year Plan would require 35 years to implement. Two essential components of finding a solution for the funding crisis are to 1) remove or defer projects from the plan focusing on the essential ones first, placing priority on maintenance rather than construction; and 2) consider increasing revenues from transportation funding sources which consist primarily of gas taxes and turnpike revenues.

Governor's Advisory Council on Intermodal Transportation (GACIT) – The GACIT is comprised of the five Executive Councilors and the Commissioner of NH Department of Transportation. The GACIT plays a key role in the state Ten Year Plan development process by hosting statewide public hearings on the plan and making revisions prior to submitting the plan to the governor. The GACIT hearings are held every other fall (odd years); the following legislative session the governor reviewed plan is submitted to the legislature for additional public comment and approval.

[1] Source: http://www.fhwa.dot.gov/safetealu/summary.htm
[2] Source: http://www.nhtranplan.com/abouttheplan.htm

Regional Planning Commissions – Each of the nine regional planning commissions statewide are responsible for coordination and implementation of a Unified Planning Work Program (UPWP). This contractual agreement with the NH Department of Transportation defines the tasks to be accomplished over a two-year period. For the LRPC the work program is comprised of:

Performance of traffic counts and road inventories, and the maintenance of an extensive database of transportation related information.

Facilitation, preparation, and maintenance of regional transportation plans and studies on safety, mobility, commerce, and recreation.

Maintaining an active transportation technical advisory committee to advise the commission.

Securing funding from state and federal sources in support of transportation planning.

Support for the development and evaluation of local and regional applications for funding through the Transportation Enhancement program.

Providing local and regional views and information to transportation policy makers.

Consensus building regarding system needs, maintenance, and preservation.

The strategies contained in the regional transportation plan form the foundation for the work proposed to NHDOT for inclusion in subsequent UPWPs. The goals and objectives also serve as policy statements in the regional comprehensive plan as outlined in RSA 36:47 III. Coordination with the state transportation plan and local transportation planning efforts is important for consistency.

The Lakes Region Transportation Plan 2008 consists of goals, objectives, and strategies outlined in the Transportation Business Plan that were compared with existing regional transportation goals. The result was the development of several new goals, objectives, and strategies for the region which are contained in this plan. This plan acknowledges that long-range transportation planning can be made realistic if the long-range plan includes achievable, short-range programs and plans.

Lakes Region Communities – Communities in the Lakes Region face many transportation planning issues. These issues include: significant seasonal population/transportation demand, difficulty appropriating sufficient tax dollars to meet their transportation needs, and conflicts resulting from having a state route as a Main Street, which presents competing and often conflicting priorities relating to community character, economic vitality, and traffic volumes. Local planning tools include transportation chapters in the community master plan as outlined in RSA 674:2 III. (a), local transportation improvement programs, and capital improvement plans.

The LRPC provides ongoing transportation technical support on a first served basis and is regularly engaged with community transportation planning efforts. Additionally, the communities are encouraged to appoint a representative and alternate to the Transportation Technical Advisory Committee (TAC). TAC members serve as liaison to the board of selectmen or city council.

2. PLANNING PROCESS

Introduction

The Lakes Region Planning Commission (LRPC) is one of nine regional planning commissions in the state of New Hampshire that works cooperatively with its constituent communities and the New Hampshire Department of Transportation (NH DOT) to plan a statewide transportation system. The LRPC is one of five rural planning agencies; the other four regional agencies are metropolitan planning organizations (MPOs), each with at least one community having a population over 50,000. These nine agencies develop long-range transportation plans and update them periodically, providing input to the NHDOT. The regional plan serves as a guide for the development of regional transportation improvement programs (TIP). The TIP is developed biennially and submitted to the NHDOT for their consideration and implementation.

The result of the regional transportation plan development process is a document that expresses a vision of the transportation system in the Lakes Region. The completion of the plan provides the background for the selection of transportation improvement projects. The vision is articulated in the mission statement, and implemented through a set of goals and objectives, and regional strategies outlined in both the near-term and 20-year time horizon.

Transportation Technical Advisory Committee

The Transportation Technical Advisory Committee (TAC) is comprised of representatives and alternates from each Lakes Region community who are appointed by their board of selectmen or city council. Each community is encouraged to maintain an active member, and if possible, an alternate. Additional committee representation is provided through NHDOT Bureaus of Planning and Community Assistance, and Rails and Transit; NH Department of Environmental Services; the Laconia Airport Authority; an LRPC Representative, and the NH DOT District 3 Engineer. Each community is entitled to one vote through their appointed representatives on matters of action by the TAC; the agency representatives are non-voting members. Regularly held TAC meetings are open to the public.

The responsibilities of the TAC are as follows:

- Render technical assistance to the LRPC regarding transportation plans, programs, and projects in the form of written memoranda and presentations at LRPC meetings.
- Review and comment on technical reports and studies related to transportation plans or programs prepared by the LRPC staff or consultants.
- Act as liaison between LRPC and municipal and state officials and the general public regarding transportation planning.
- Make recommendations regarding the utilization of the media to provide information which will keep citizens informed of the transportation planning process.

In addition, the TAC is instrumental in the evaluation and prioritization of proposals for Transportation Improvement Program (TIP) and Transportation Enhancements (TE) funding. Both programs are federally funded through the Surface Transportation Program (STP) and are administered by the NHDOT.

New Hampshire receives approximately $30 million annually in STP funding. Federal funds through this program are received with some requirements for their use. Examples include the requirements that ten percent of the funding is used for Transportation Enhancements and ten percent for safety improvements. There is flexibility associated with the remaining 80 percent of the STP funds, eligible activities include:

- Construction, reconstruction, resurfacing, restoration, and rehabilitation;
- Operational improvements;
- Capital costs for transit projects and publicly owned intra-city or inter-city bus terminals or facilities;
- Highway and transit safety improvements;
- Surface transportation planning, highway and transit technology transfer activities, and research and development;
- Capital and operating cost for traffic management and control;
- Fringe and corridor parking facilities;
- Carpool and vanpool projects;
- Most transportation control measures in the Clean Air Act;
- Development and establishment of management systems;
- Participation in wetland mitigation and wetland banking;
- State bicycle and pedestrian coordination; and
- Transportation Enhancements:
    - Pedestrian and bicycle facilities;
    - Acquisition of scenic and historic sites;
    - Scenic and historic highway programs;
    - Landscaping;
    - Rehabilitation of historic facilities;
    - Preservation of abandoned transportation corridors;
    - Archeological planning and research;
    - Control and removal of outdoor advertising; and
    - Mitigation of water quality impacts from roadway runoff.

The greatest source of federal transportation funding in the Lakes Region is through the TIP process. Transportation Enhancement projects follow a different evaluation process, but both programs begin with locally initiated project proposals that are reviewed by the TAC. The TAC's recommendations are reviewed and approved by the LRPC commissioners before submittal to NHDOT for further consideration. The process for communities to secure general STP and TE funding are outlined in greater detail below.

The two-year cycle for Transportation Improvements Program.

MONTH	YEAR	ACTIVITY
October	Even	Regional Planning Commissions (RPC) request proposals from constituent communities for candidate projects.
November-December	Even	The Transportation Advisory Committee for each RPC ranks projects submitted for consideration based on selection criteria established by each RPC.
January - May	Odd	TAC develops and approves draft regional priorities and recommendations for consideration by NHDOT.
May - July	Odd	NHDOT prepares the draft Statewide Ten Year Plan for submission to the Governor's Advisory Commission on Intermodal Transportation (GACIT) based on information provided by RPCs.
July - December	Odd	GACIT amends the Ten Year Plan after a series of statewide public hearings and forwards it to the Governor.
December - June	Even	The Governor reviews the Statewide Ten Year Plan and submits it to the Legislature for consideration and approval. Public Hearings are held and input considered.

The two-year cycle for Transportation Enhancements.

MONTH	YEAR	ACTIVITY
June	Odd	Regional Planning Commissions (RPC)/ NHDOT notification to potential sponsors of application availability.
August	Odd	Applications due to RPCs.
October	Odd	RPC submits applications and ratings to NHDOT.
January	Even	NHDOT submits applications and ratings to the Transportation Enhancement Advisory Committee (TEAC)
February	Even	TEAC hold public hearings.
April	Even	TEAC selects projects and submits recommendations to the Commissioner of NHDOT for submission to the GACIT
May	Even	The GACIT approves projects, which then become part of the State's Transportation Improvement Plan (TIP).
June	Even	RPCs include selected projects in their TIP's.

3. EXISTING CONDITIONS

Introduction

This section describes current regional conditions related to transportation planning and conveys the information though a variety of maps. This section is presented in three elements:

1) System Performance and Preservation explores regional population trends, seasonal population influx, annual and seasonal traffic volumes, and congested areas.

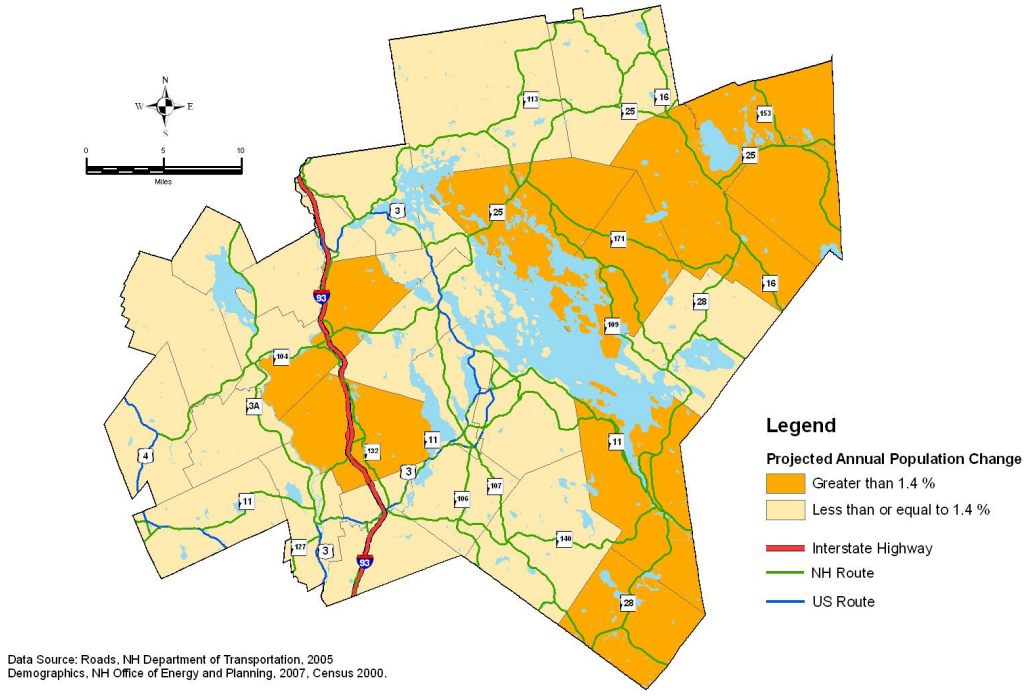
2) Mobility and Access for People and Goods describes corridors of importance, opportunities for alternative modes of transportation, and public transportation.

3) Environment and Quality of Life reviews the importance of travel and tourism regionally and discusses the important linkage between land use and transportation.

System Performance and Preservation

Between 1980 and 2000 the Lakes Region experienced significant population growth. The annual rate of growth for the region during these two decades was 1.81 percent, slightly higher than the statewide rate of 1.71 percent. For the period 2000 to 2020, the annual rate of growth for the state as a whole is projected to decrease to 0.95 percent, while the Lakes Region is projected to continue to grow at an average annual growth rate of 1.45 percent. As depicted in Map 1, nine of the 30

Map 1: Areas Projected to Grow Faster than the Regional Annual Average Rate of Growth 2000-2020

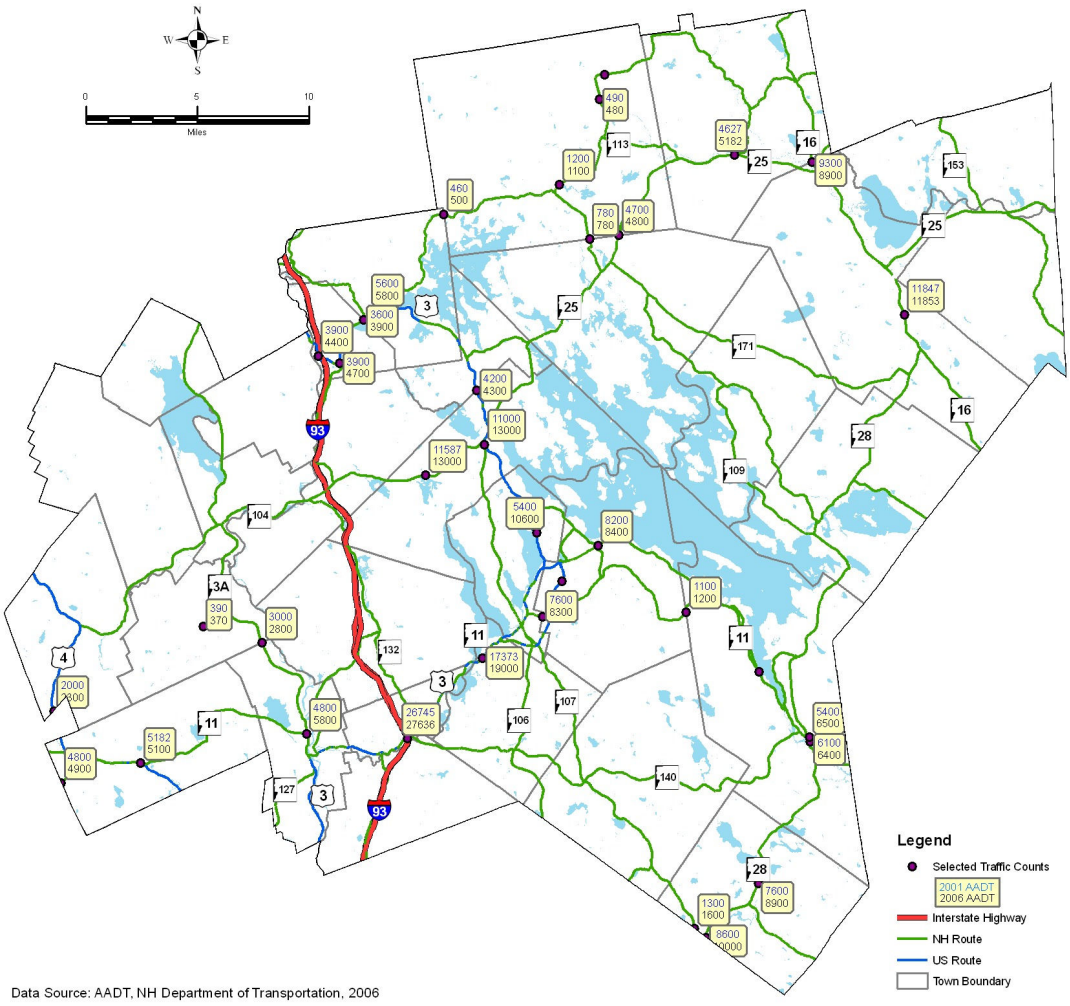


communities in the Lakes Region are projected to experience a growth rate greater than the projected regional average. Most of these communities are located on the eastern side of the region or in close proximity to existing commercial and residential centers. Based on this data, the region can expect increased traffic volumes directly related to population growth in the fastest growing communities in the region, specifically along Interstate 93, NH Routes 104, 132, 3A, 28, 140, 11, 16, 109, 109A, 171, 25, and 153.

In 2000 the Lakes Region population was 106,428; this is projected to grow to 141,270 by 2025. This reflects the year-round population of the region. Seasonal visitors dramatically increase the actual number of people in the area and the number of vehicles on the road.

Tracking patterns in traffic volumes can provide insight for access management, transportation demand management, and land use management issues. LRPC collects data on traffic volumes at more than 450 locations throughout the Lakes Region. These data are sent to NH DOT where they are seasonally adjusted to reflect the Average Annual Daily Traffic (AADT) which represents the

Map 2: Selected AADTs: 2001 Compared to 2006



Data Source: AADT, NH Department of Transportation, 2006

average number of vehicles passing a location each day throughout the year. Map 2 illustrates recent traffic volume changes region-wide. While a few locations experienced no change or a slight decrease in traffic in the five years between data collections, the majority of locations experienced increased volumes. A comparison of total traffic volume between 2001 and 2006 indicates a 7 percent regional increase.

Through a contractual agreement with the NH Department of Transportation (NH DOT), the Lakes Region Planning Commission conducts traffic counts at up to 200 locations each year. Table 1 compares summer data at selected locations to the modeled NHDOT yearly averages (AADTs). Summer traffic count values represent the actual traffic volume count for a specific location when the data were collected in the summer of 2006. The comparison indicates a considerable summer influx on many of the key state routes in the region.

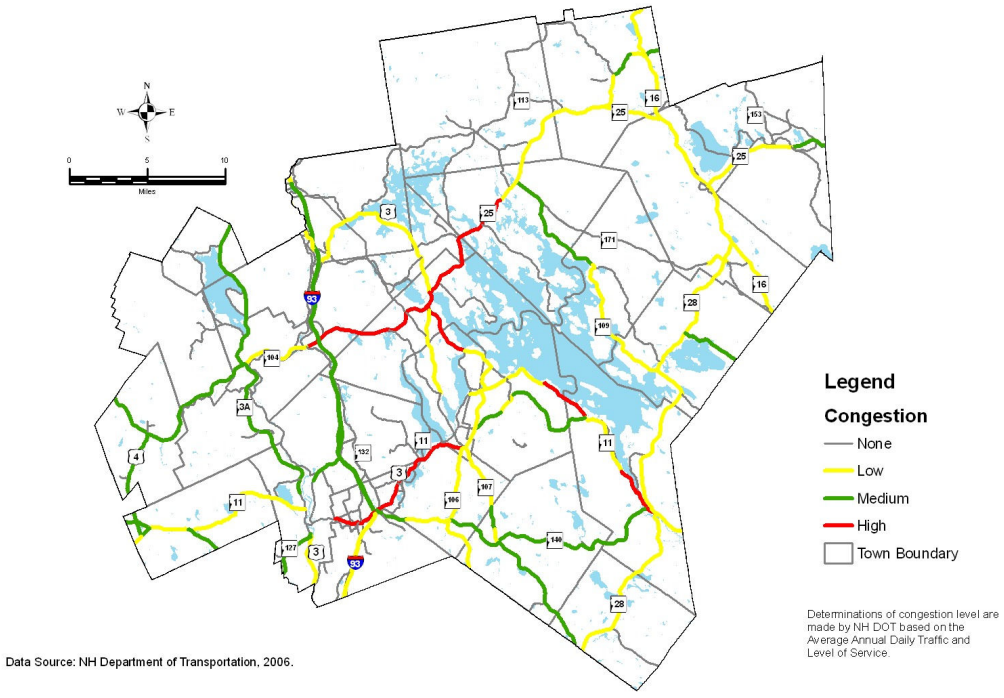
Table 1: Comparison of Selected 2006 Summer Traffic Counts Vs. AADTs

Municipality	Location	Summer Traffic Count	Annual Average Daily Traffic	Seasonal Increase
Alton	NH 28 North of Route 11	8,940	6,500	37.5%
Andover	NH 11 at Wilmot Town Line	5,075	4,900	3.6%
Barnstead	NH 28 North of Center Barnstead	11,085	8,900	24.6%
Barnstead	NH 107 at Pittsfield Town Line	1,807	1,600	12.9%
Belmont	NH 140 at Northfield Town Line	10,213	8,400	21.6%
Belmont	NH 106 at Laconia Town Line	16,416	15,000	9.4%
Center Harbor	US 3/NH 25 at Meredith Town Line	4,424	4,300	2.9%
Danbury	US 4 at Wilmot Town Line	2,459	2,300	6.9%
Franklin	NH 3 at Boscawen Town Line	4,624	4,200	10.1%
Gilford	NH 11A at Alton Town Line	1,649	1,200	37.4%
Gilford	NH 11 West of NH 11B	11,383	8,400	35.5%
Gilmanton	NH 140 Over Suncook River	3,789	2,600	45.7%
Hill	NH 3A at Franklin Town Line	2,864	2,800	2.3%
Holderness	US 3/NH 25 West of Shepard Hill Road	7,100	5,800	22.4%
Laconia	NH 106 Over US 3/NH 11	13,508	13,000	3.9%
Laconia	NH 106 North of Pleasant Street	16,518	16,000	3.2%
Moultonborough	NH 109 at Sandwich Town Line	783	780	0.4%
New Hampton	NH 104 Wes of Cleveland Way	12,941	12,000	7.8%
Tilton	US 3 South of Park and Ride	18,626	16,000	16.4%
Wolfeboro	NH 28 South of High School	14,304	11,000	30.0%

Traffic congestion in New Hampshire is measured by Level of Service (LOS). Based on a number of factors that affect congestion including AADT and road configurations, LOS analysis is designed as an indication of how well traffic moves along a highway system. Low congestion describes general operating conditions where traffic is generally free flowing, medium congestion indicates stable flow approaching unstable conditions, and high congestion is associated with unstable traffic flows. As depicted in Map 3, in the Lakes Region US Route 3/NH Route 11 from Franklin to Laconia, US Route 3 from the Weirs in Laconia to downtown Meredith, NH Route 104 from New Hampton to Meredith, NH Route 25 from Meredith into Moultonborough and sections of NH Route 11 in Alton all operate with high levels of traffic congestion. Seasonal congestion also occurs in Wolfeboro along NH Routes 28 and 109.

Today, four of the seven major access routes to the Lakes Region off of I-93 currently experience high to medium levels of congestion. Anticipated growth in population, second homes, commercial development, and demand for services, combined with the current NHDOT focus to preserve existing capacity, together heighten the need for enhanced land use and transportation planning.

Map 3: Lakes Region Traffic Congestion 2006

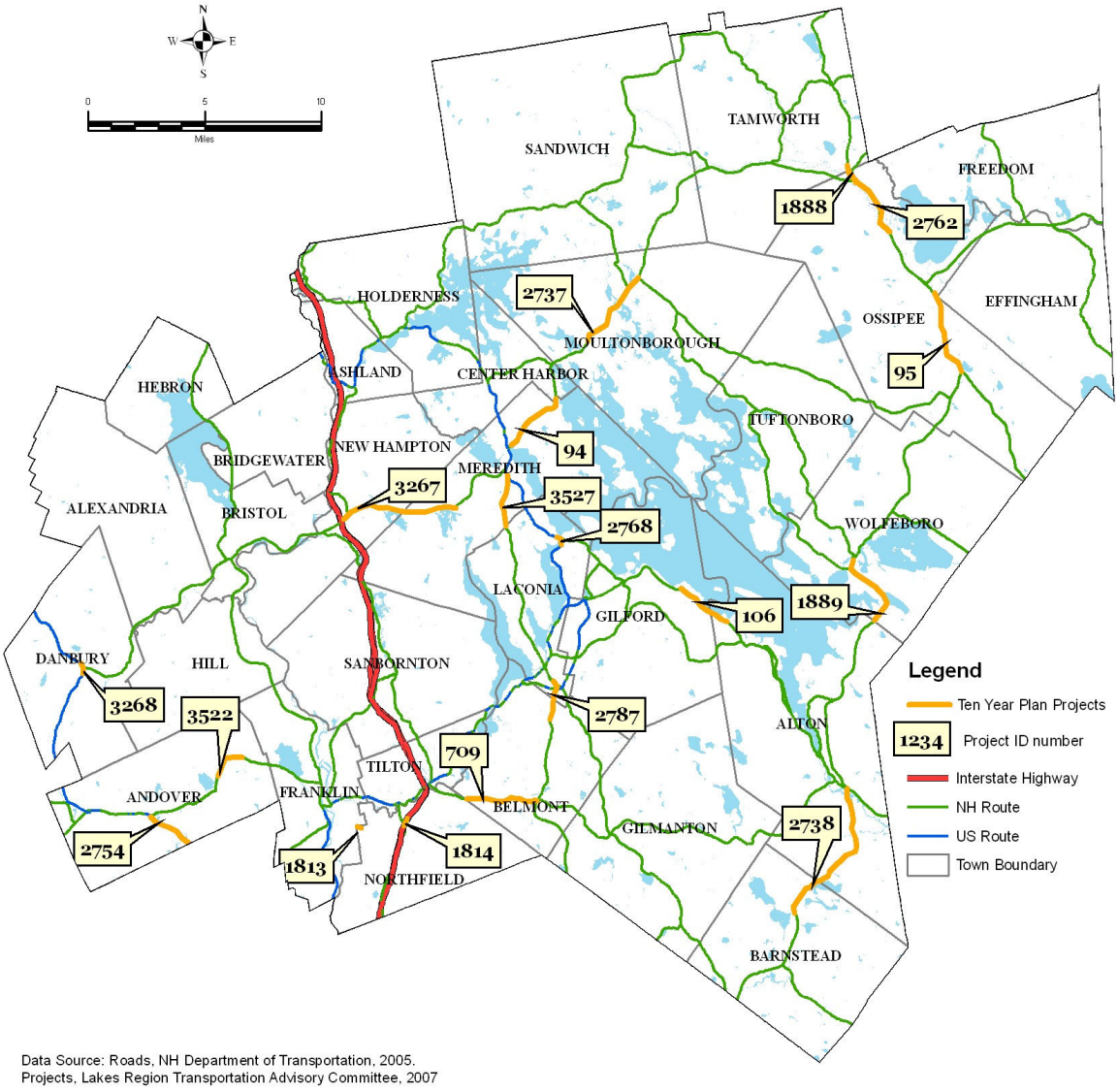


On a typical summer day it is extremely difficult to drive across the Lakes Region without encountering areas of congestion. Concerns expressed by citizens, legislators, and the transportation community have centered on the need to improve east/west transportation corridors. Although our major north/south corridors are in somewhat better condition, there remain some sections which deserve improvements which have not been addressed in the Ten Year Plan.

Regional transportation priorities are vetted through the regional Transportation Improvement Program (TIP) process. In recent years funding limitations have excluded new projects from being considered for Ten Year Plan funding. Due to increasing financial constraints, the NH DOT asked the Regional Planning Commissions to re-evaluate existing Ten Year Plan projects through the 2007 TIP process. In 2007 a total of 18 previously submitted Lakes Region projects on state primary and secondary routes were re-affirmed by the Lakes Region Planning Commission in September 2007 as the region's leading transportation priorities, as shown on Map 4. Updated 2007 project descriptions are found in the *Lakes Region Transportation Improvement Plan: Recommendations for the State of New Hampshire Ten Year Transportation Plan*. At this writing, the Governor's Advisory Committee on

Intermodal Transportation is preparing its recommendations to the legislature for the 2009-2018 Ten Year Plan.

Map 4: Ten Year Plan Project Priorities



Data Source: Roads, NH Department of Transportation, 2005.
Projects, Lakes Region Transportation Advisory Committee, 2007

Mobility and Access for People and Goods

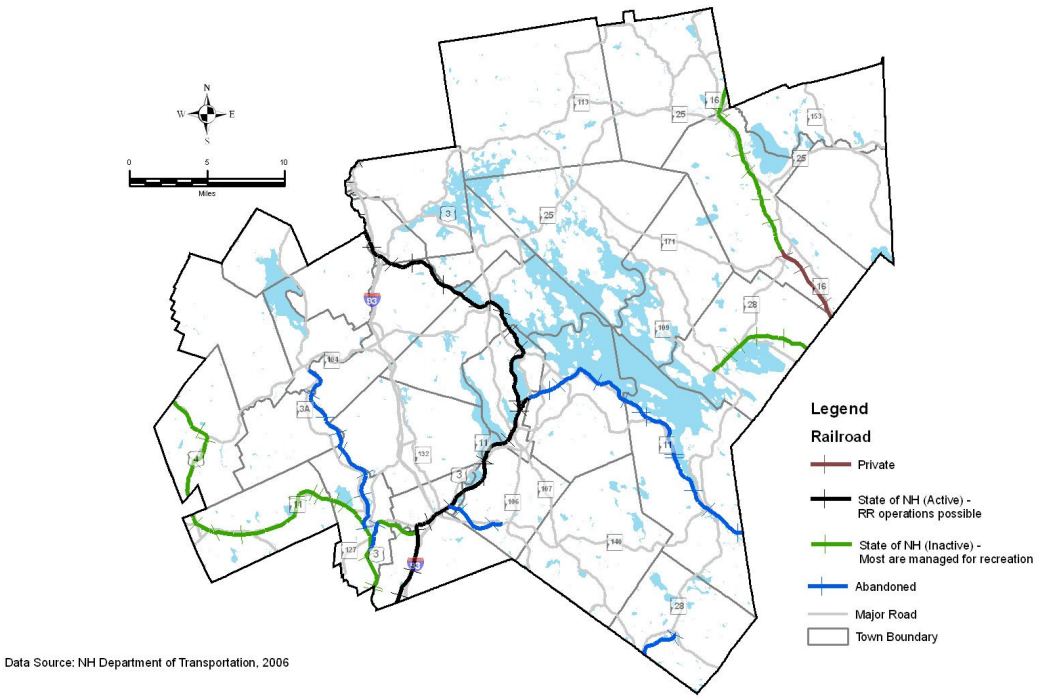
Before the development of the federal Interstate system and the expansion in air transportation, the railroad system was an affordable means of transporting goods and passengers between hubs throughout the Northeast. There are three existing rail corridors with branches through the Lakes Region; two of these corridors support active rail operations. The Ossipee line serves Ossipee Aggregates, a gravel mining operation in southern Carroll County for daily freight deliveries. Along the Concord to Lincoln line a seasonal tourist train runs through Franklin, Tilton, Belmont, Laconia, Meredith, New Hampton, Ashland, and Bridgewater along the Pemigewasset River to Lincoln. The

Northern line corridor runs through Franklin, Andover, and Danbury. There has been a sustained effort in the region to convert the abandoned and inactive corridors into recreational corridors (See "Lakes Region Connector" page 13).

The 2003 *Lakes Region Demographic Profile* indicates that the most common commuter destination in the region is Laconia with more than 10 percent of Lakes Region commuters traveling into the city. Twenty-nine percent of Lakes Region commuters travel outside the region, with Concord being the most common destination. One method of relieving some of the traffic on Lakes Region roadways might be the redevelopment of a passenger and freight rail system. The newly formed New Hampshire Rail Transit Authority has the primary authority to establish and oversee the actual operation of passenger rail service in the state. Specific responsibilities include working with local governments to establish station sites, setting fares, and creating operating schedules that will respond to local needs. Map 5 displays the status of existing regional rail corridors.

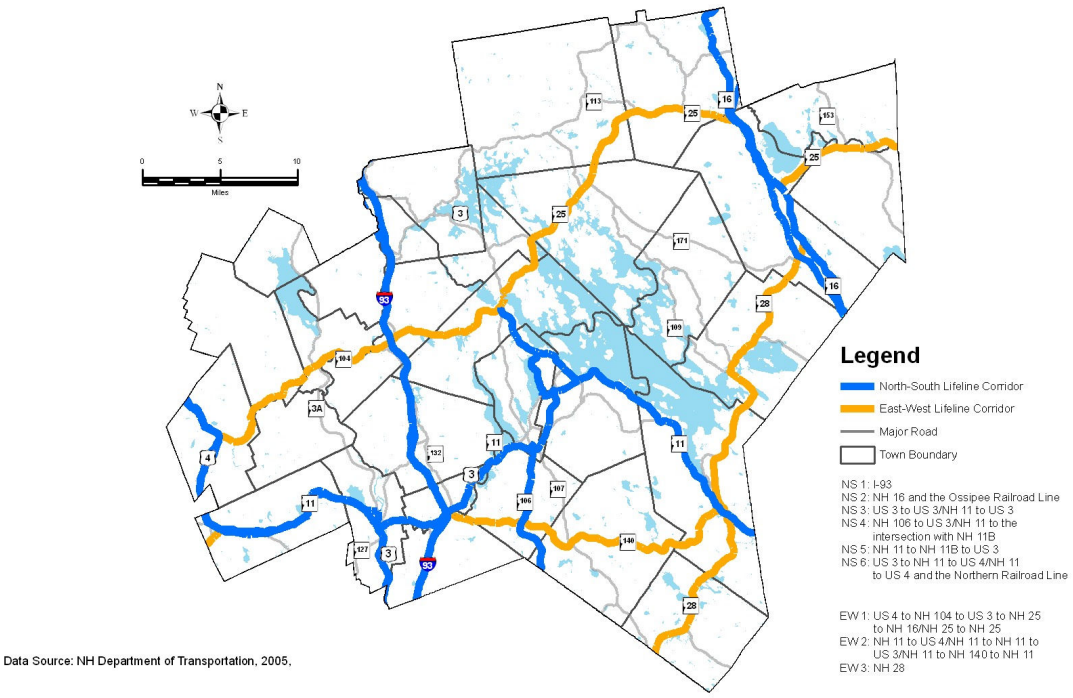
Phase I of the Boston to Montreal High Speed Rail Study concluded that sufficient potential ridership and fare revenue exists to warrant the implementation Phase II of the Study for evaluation of the operating and capital costs, and associated benefits, of implementing a high speed rail service between Boston and Montreal. In the Lakes Region the Northern Rail Line passes through Andover, Danbury, and Franklin. A Phase II study would focus upon potential rail users, who might partner in such and undertaking, participating railroads, benefits, regional economic development, and cost savings. The principal objectives for re-opening this rail connection include reductions in highway congestion, creating an energy efficient transportation alternative, reduction in freight rates, and others.

Map 5: Status of Regional Railroad Corridors



The Lakes Region has identified nine "Lifeline Corridors" (Map 6) which represent major east-west or north-south roadways that handle the majority of the traffic flow through and within the region. These routes are direct connectors to other Lifeline Corridors (NH Route 16 between NH Route 25 and NH Route 28), between Lakes Region population centers (US Route 3/NH Route 11) from Franklin to Laconia, and destinations outside the Lakes Region (NH Routes 11 and 16 to the Seacoast). As these are the most important corridors for carrying the passengers and freight throughout the Lakes Region, it is essential that they be capable of handling traffic in a safe and efficient manner.

Map 6: Lakes Region Lifeline Corridors

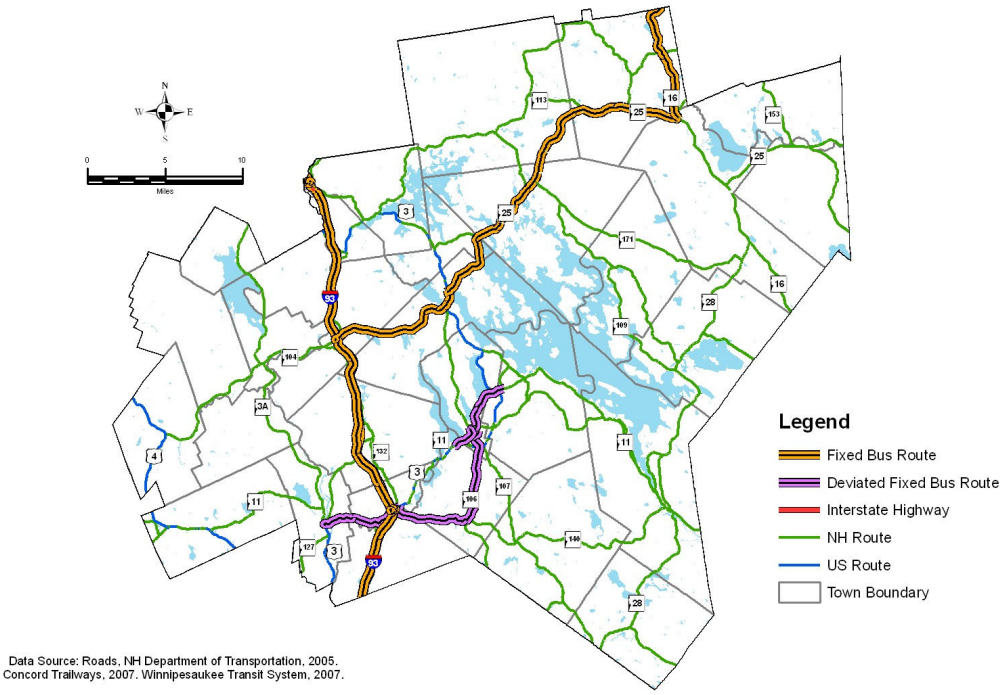


Residents and visitors to the Lakes Region of New Hampshire depend heavily upon their cars for transportation. Some of this dependence on auto travel may be associated with the limited public transportation that exists within the region. Currently two primary public transit systems serve the region. Concord Trailways runs two daily buses with stops in the Lakes Region, the Berlin-Conway-New Hampton and the Littleton-Plymouth-Tilton lines. These fixed routes include connections in West Ossipee, Center Harbor, Meredith, and Tilton.

The Winnipesaukee Transit System operates as a deviated fixed route between Laconia and Franklin with stops in Belmont, Gilford, and Tilton. Based on requests, the route will accommodate passengers within a quarter mile from the route, if the request is made one day in advance. A more limited Laconia area service is available on Saturday.

Recently, work has been conducted by the regional planning commission at a County scale to address public transit through the development of Coordinated Transit Plans. The plans are designed to study existing public transit options, to gain a better understanding of future needs, and to explore opportunities to enhance coordination among supporting agencies, service providers, and volunteers. Regionally many of the transportation needs of the elderly, disabled, and lower income populations are currently being addressed by small volunteer groups.

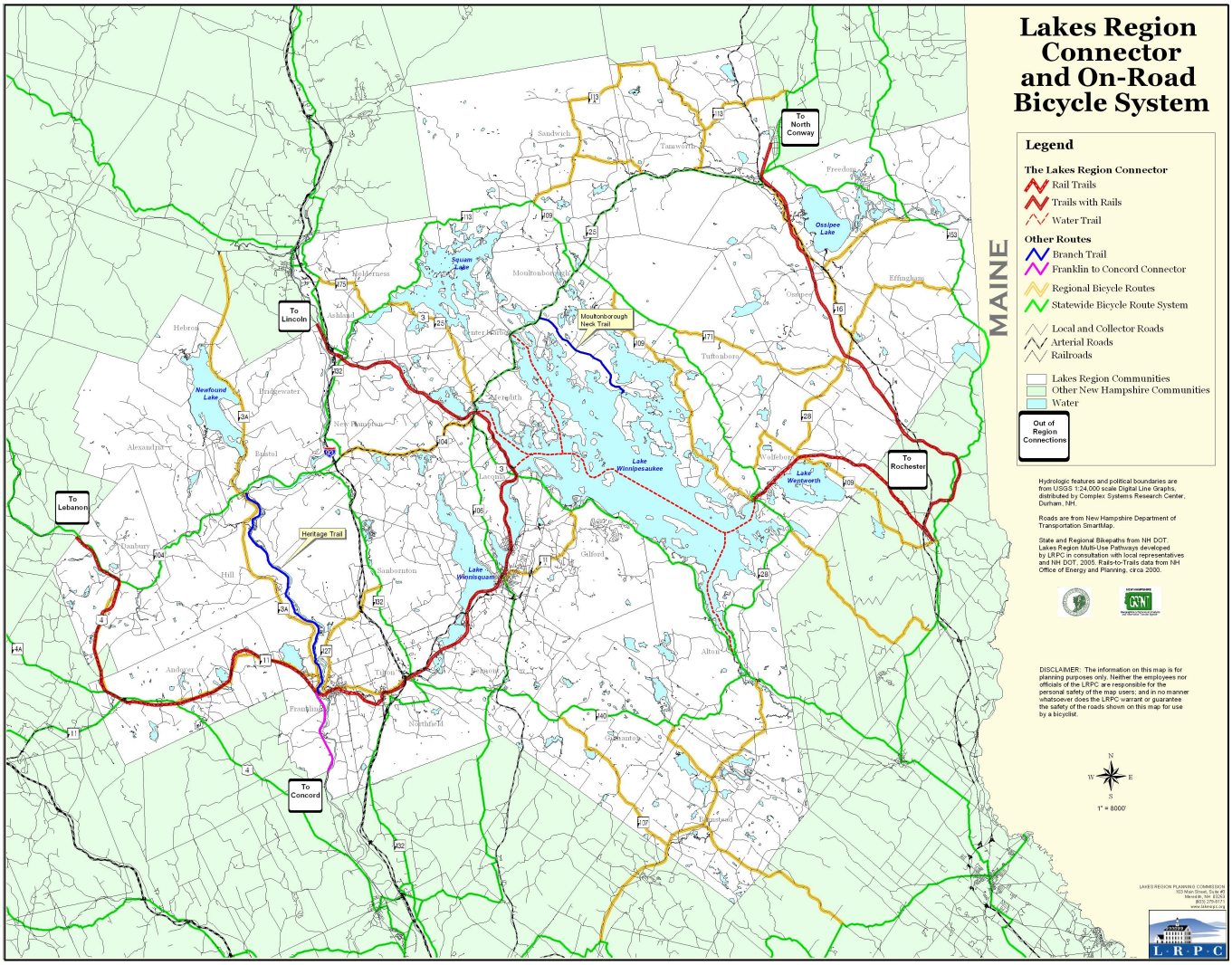
Map 7: Public Transportation Systems in the Lakes Region



The Lakes Region Connector is vision for an off-road regional pedestrian and bicycle pathway. The concept of a Lakes Region Connector first appeared in 1982 as a pathway from Franklin to Meredith. Today, the concept has been expanded to include the route of the old Northern Line in Danbury and Andover. In addition, the proposed route would continue over water via tour boats such as the Mount Washington in order to connect with communities and trail networks on the eastern side of the lake such as the Cotton Valley Trail in Wolfeboro and Ossipee Lake Trail in Ossipee. The towns along the proposed Connector have trail projects in all phases of planning and design, from projects that are under construction to those that are just beginning to explore design possibilities. An active group of Connector enthusiasts meets on a quarterly basis, sharing ideas and information on how to move conceptual ideas to implementation.

Map 8 shows the Lakes Region Connector and the on-road bicycle routes identified in the state bike maps. The bicycle maps are currently undergoing revisions at NHDOT. Important to the region are recreational opportunities for visitors and residents alike. The trails networks and bicycle routes are the types of experiences that enhance the natural and scenic beauty of the region.

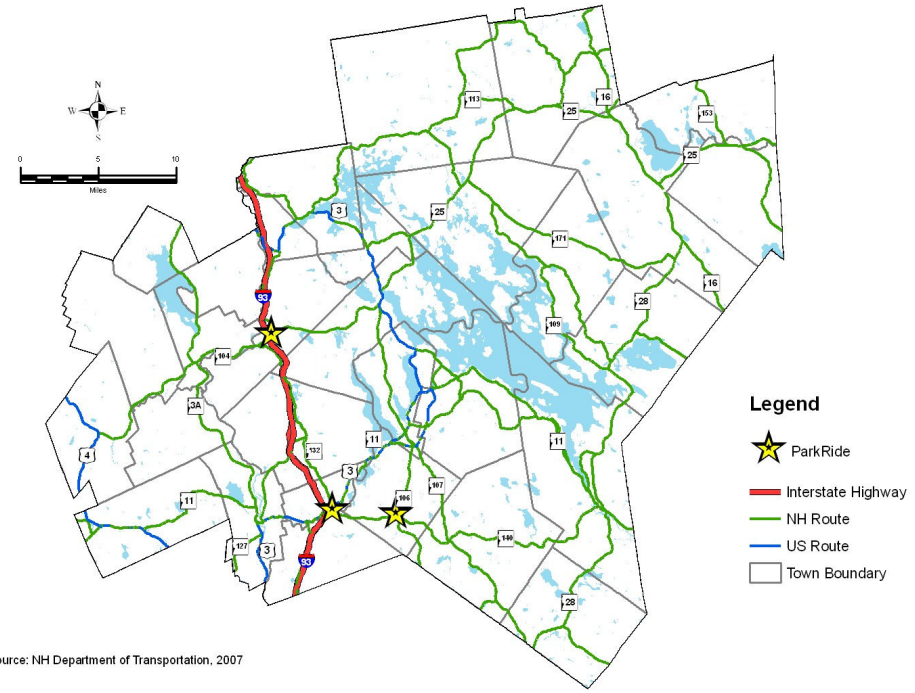
Map 8: Lakes Region Connector and On-Road Bicycle System



Environment and Quality of Life

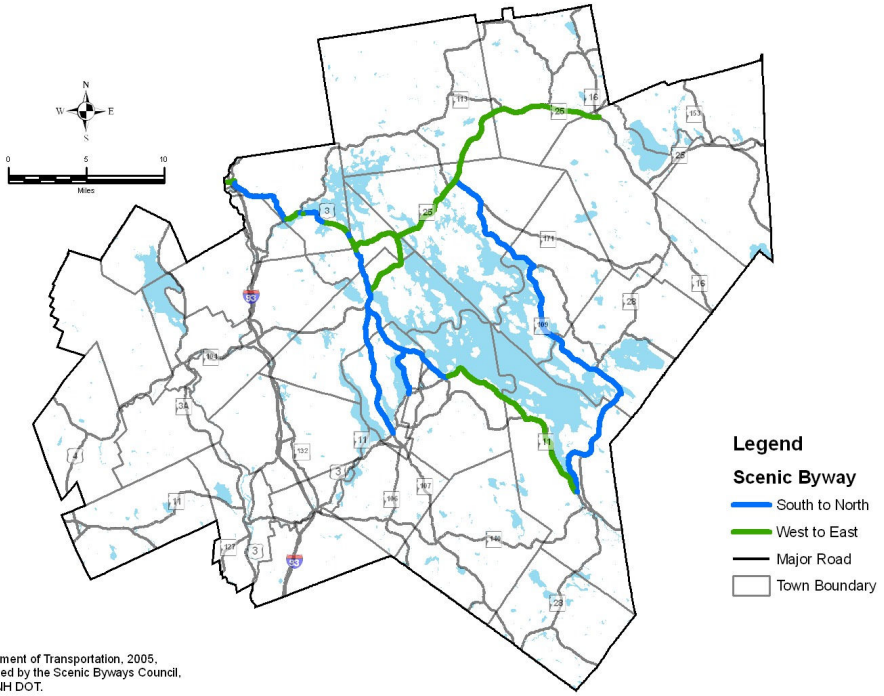
Park and Ride lots are constructed to encourage travel by bus, carpool and vanpool, saving on fuel, pollution, and congestion. Currently there are three Park and Ride locations in the Lakes Region, two maintained by NH DOT along I-93 and one built and maintained by the town of Belmont along NH Route 106 as part of a brownfield redevelopment project.

Map 9: Lakes Region Park and Ride Locations



Data Source: NH Department of Transportation, 2007

Map 10: Lakes Region Scenic Byways



Data Source: NH Department of Transportation, 2005,
Scenic Byways determined by the Scenic Byways Council,
data maintained by the NH DOT.

There are many roadways in the Lakes Region that present travelers with scenic vistas. In fact, that is what draws many visitors to our area. Many communities have designated 'scenic roads', resulting in an extra layer of protection for trees and stonewalls along these roads.

The Lakes Region Scenic Byway Tour is a State Scenic Byway, designated under RSA 238:19 "… to provide the opportunity for residents and visitors to travel a system of byways which feature the scenic and cultural qualities of the state within the existing highway system, promote retention of rural and urban scenic byways, support the cultural, recreational and historic attributes along these byways and expose the unique elements of the state's beauty, culture and history." Through this designation, these roadways are eligible to seek federal funds for interpretive centers, scenic overlooks, safety improvements, and marketing materials. Because the region's economy relies so heavily upon tourism, it is essential that travel throughout the region be an enjoyable experience; infrastructure and capacity must be maintained.

4. Key Transportation Issues

The transportation planning process in the Lakes Region is continuous, with each plan representing an update of the previous plan. As a living document, existing goals and objectives in the state transportation plan and the existing regional transportation plan were reviewed and updated to reflect contemporary transportation issues. The established mission for regional transportation is:

> To provide an integrated, all-mode transportation system in the Lakes Region which offers efficient, effective and safe movement of people and goods, and provides mode choice wherever possible while enhancing and preserving the character and livability of the neighborhoods and the natural, socio/economic, and historical environments where transportation facilities are located.

With this mission in mind, the following summarizes the region's most pressing long-range transportation planning issues:

Regional Economic Development

As a leading sector of the Lakes Region economy, tourism is highly dependent on quality natural resources and supporting infrastructure. Related to transportation are well-maintained roads and protected, conserved, and/or enhanced environmental, historic, and cultural resources. This is true of other expanding sectors of the economy as well, including healthcare, personal services, and specialty shops. Transportation planning requires consideration of the scenic experience (protection of views and vistas, etc.) and integration of community character balanced with the need to move volumes of traffic. This is especially challenging in a region where nearly all communities have a state highway as their main downtown street.

The NH DOT has recently embraced a planning technique referred to as context sensitive solutions (CSS). By considering transportation improvements in the context of the setting, and in consideration of all competing uses, regional and local values are more effectively preserved. This "new" approach is being piloted by NHDOT in several communities statewide; an example in the Lakes Region is US Route 3/NH Route 25 in Meredith. The study in Meredith began in 2006 with a targeted final improvement solution to be identified in 2008. The Project Advisory Committee (PAC) is comprised of more than 40 representatives of local, regional, and state groups and organizations. The PAC role includes the development of problem and vision statements, brainstorming alternatives, and determining a range of reasonable alternatives. Ultimately the PAC will reach consensus on the preferred alternative to be implemented.

Changing Demographics

Population growth and an aging population present unique challenges for the transportation system. As the region's population grows, so does transportation demand. For the ten-year period 1990-2000 the region grew by 15.8 percent. Projections for the period from 2000 to 2010 indicate the regional population will increase by 13.6 percent, equating to 14,500 additional residents.[3] At the same time, the number of vehicles registered to households has increased as well, compounding local demand on the transportation system.

[3] NH Office of Energy and Planning, Data Center.

The elderly, disabled, and low-income segments of the population place additional and unique demands on the system. For financial, health, or other reasons, the lack of personal transportation increases the need for public transit. For a rural region the opportunities for fixed route transportation systems are limited as reflected in the reduction of scheduled and on-demand service provided by the former Greater Laconia Transit Agency. Today, operating as Winnipesaukee Transit System, this service operates with limited routes and buses, while the region outpaced the state in the percentage of population 65 years of age and older (1990-2000). Safe and reliable alternatives to vehicle travel are in increasing demand as this segment of the population grows. While expanded transit would increase mobility, the cost of such services can be prohibitive. Population and highway statistics from 2002 indicate conservatively that, the percentage of New Hampshire citizens without a license or who can't drive due to a disability or poor health, is approximately one in four (25%) and increasing.[4]

Transportation Costs

The cost of vehicle ownership leaves little opportunity for savings. It is estimated that the cost of vehicle ownership and operation is between 43.9 and 61.7 cents per mile.[5] It is further estimated that the fixed cost of owning an automobile is 75 percent of the expense, while 25 percent is associated with operation costs. While the cost of ownership varies dependent on the type of vehicle, the associated costs of operation are difficult to control.[6] The need to own an automobile is especially high in rural areas where alternative modes of transportation are limited, if available at all.

The average family spends approximately 20 percent of their income on transportation, more than on food, education, or health care. Transportation expenditures as a percentage of income are highest for those that make the least. Expenditures for the purchase, operation and maintenance of vehicles for families earning less than $13,060 annually represented 42 percent of their total income according to 1999-2000 data. [7] As indicated in the New Hampshire Long-Range Transportation Plan, "lack of transportation choices is contributing to the inability of the poor to escape the cycle of poverty and joblessness." Higher transportation costs may likely affect younger generations as well, who when faced with high housing and transportation costs seek alternative areas to live.

Energy Consumption

"During the past century, the automobile has raised per capita consumption of both energy and space, thereby altering the form of 21st century American communities more than any other single variable."[8] Sound demand management and land use practices represent opportunities to preserve road capacity and reduce energy consumption. Policies and facilities that promote trip reduction such as park and ride lots, telecommuting opportunities, and viable options for alternative modes such as walking and bicycling all represent opportunities for reduced consumption and improved roadway capacity.

[4] Source: NH Long-Range Transportation Plan, Final Report – June 9, 2006.
[5] Source: American Automobile Association.
[6] Source: Surface Transportation Policy Partnership, *Driven to Spend,* 2000.
[7] Source: Surface Transportation Policy Partnership, Transportation and Social Equity Fact Sheet, April 2000.
[8] Source: American Planning Association, Policy Guide on Energy, April 2004.

Additional opportunities are dependent on thoughtful land use practices which emphasize integration of residential neighborhoods and commercial areas in order to promote walkability and social interaction over vehicle trips. The use of alternative fuels can help as well. The alternative energy industry has matured over the last several decades; promotion of this technology and education is needed.

East/West Travel

On a typical summer day it is extremely difficult to drive across the Lakes Region without encountering areas of congestion. Concerns expressed by citizens, legislators, and the transportation community have been centered around the need to concentrate efforts on improving our east/west transportation corridors. Consistent with this need, the LRPC recently successfully applied for State Planning and Research grants from the NHDOT to prepare the NH Route 104 and NH Route 25 corridor studies. The focus of the studies is on improved safety and capacity preservation. More studies are warranted for additional key east/west corridors as prioritized in consultation with the Transportation Technical Advisory Committee.

Key findings in the NH Route 104 study and preliminary findings in the NH Route 25 study support the current NH DOT focus on capacity preservation and improved safety. Examples include the recommendation for a frontage road in proximity to I-93 at Exit 23, where existing businesses and a proposed development would share off corridor access, limiting/reducing curb cuts in an already congested area. Conceptual safety improvements have been developed in both corridors based on extensive data collection (turning movements, speed, volume, and classification counts), historical accident data, a build out analysis based on existing zoning, and public input. The recommended improvements were prioritized by consulting engineers, and endorsed by the advisory committee and board of selectmen.

Land Use Development Patterns

Historically, many land use planning strategies have encouraged urban sprawl (the expansion of urban areas further and further out from the urban center) which has led to increased dependence on the automobile. Commuting distances have significantly increased as more people are locating their homes in rural areas, farther from their jobs. Local planning that separates commercial and residential areas into different "zoning districts" also encourages additional vehicle travel to shopping centers, malls, and other commercial businesses. As communities grow and physically spread out, vehicle miles traveled per household have increased. Land use patterns can be changed in ways that reduce vehicle miles traveled.[9]

Changes in land use development policies are incremental and implemented by local land use boards, adding to the challenges of successful comprehensive regional transportation planning. The identification of key state and regional transportation corridors and promotion of sound access management practices aid in arterial road capacity preservation. Supportive development patterns are needed as well. From 2002-2005, the Lakes Region surpassed each of the other eight planning commission regions in the number of single family houses permitted. As decentralized development occurs, greater demands are placed on the transportation system. Land development strategies that promote increased density, mixed

[9] Source: http://www.des.state.nh.us/ard/climatechange/schools_gov.htm accessed 09-14-07.

use, and a variety of centrally located housing choices can encourage alternative modes of transportation and lessen automobile demand.

Travel Patterns

Nationally, 87 percent of the daily trips taken are in personal vehicles. While 15 percent of the trips taken each day are for commuting to and from work, 72 percent of the trips are taken for shopping, errands, social visits, and recreation.[10] Average vehicle miles traveled are on the rise too. Vehicle miles traveled (VMT) on major New Hampshire highways increased by 34 percent from 9.8 billion VMT in 1990 to the 13.2 billion VMT traveled in 2004. It is estimated that vehicle travel in New Hampshire will increase another 40 percent by 2025 to an annual 18.5 billion VMT.

Freight transportation is on the rise in New Hampshire as well. Over-the-road freight transport accounted for the vast majority (93 percent) of the shipments compared to other modes such as rail (6 percent), water (less than 1 percent) and air (less than 1 percent) in 1998; when 61 million tons of freight was transported within, to and from New Hampshire. It is estimated that 88 of the 94 million tons (94 percent) of freight will be transported by highway in 2010, and 113 of the 120 million tons (94 percent) of freight will be transported by highway in 2020.[11]

As future development occurs in the Lakes Region it is interesting to note that population projections for 2000-2020 indicate communities outside the regional centers will grow faster than the projected rate of growth for the region. During this projection period, the towns of Alton, Barnstead, Effingham, Freedom, Moultonborough, New Hampton, Ossipee, Sanbornton, and Tuftonboro are projected to increase in population at a rate that exceeds the projected 1.4 percent annual increase regionally.[12] The implications are that the more urbanized adjacent communities of Ashland, Belmont, Franklin, Gilford, Laconia, Meredith, and Tilton will likely experience the impacts of additional commuter and personal trips as outlying community residents access work and services. Moreover, continued sprawl may push some of these services into the faster growing communities thereby suburbanizing more of the region.

The Lakes Region is home to one-third of the 18 New Hampshire roadways with the highest level of traffic congestion, based on level of service (LOS)[13]. Level of service ratings are based on letter grades A (free flow traffic) to F (stop-and-go traffic with low speeds and little or poor maneuverability). Each of the following Lakes Region road sections are identified as E&F LOS ratings:

NH Route 25 – from US 3/NH 25 junction to Moultonborough
US 3 & NH 11 – from 1-93 Exit 20 to NH 106 in Laconia
US 3 & NH 25 – from NH 104 in Meredith to US 3/ NH 25 junction
US 3 & NH 11 – Franklin/Tilton town line to 1-93 Exit 20
NH 104 – from NH 132 in Bristol to US 3 in Meredith

[10] Source: http://www.bts.gov/programs/national_household_travel_survey/daily_travel.html
[11] Source: Federal Highway Administration, OP-03-063, November 2002.
[12] Source: LRPC analysis of NH Office of Energy and Planning Population Projections.
[13] Source: TRIP, *Making the Grade in New Hampshire,* March 2006.

US 3 – from NH 11A in Laconia to NH 104 in Meredith

In some areas, such as the US Route 3 corridor, traffic congestion and traffic movement was identified as needing improvement for at least the last 20 years.

Transportation System Planning

Combining land use and transportation is essential to achieve success in planning transportation needs. The need is great because while the purpose of transportation is the movement of people and goods from place to place, the transportation system affects community character, the surrounding environment (both natural and human) and economic development patterns at the same time. According to the Federal Highway Administration:

> "Land use and transportation are symbiotic: development density and location influence regional travel patterns, and, in turn, the degree of access provided by the transportation system can influence land use and development trends. Urban or community design can facilitate alternative travel modes. For example, a connected system of streets with higher residential densities and a mix of land uses can facilitate travel by foot, bicycle, and public transportation, in addition to by automobile. Conversely, dispersed land development patterns may facilitate vehicular travel and reduce the viability of other travel modes."

In New Hampshire, many land use choices are made at the local level, therefore it is important for local land use boards to work together to coordinate land use and transportation in consideration of how they interact and affect each other. Poorly integrated land use and transportation planning can lead to safety issues, increased congestion, and increased reliance on auto travel as opposed to well rounded multi-modal travel choices.

Decisions about access require coordination at the local and state level as well. The issuance of driveway permits by NHDOT in the past has been based on limited input by local decision-makers. Agreements such as Memorandums of Understanding (MOU) can lead to coordinated efforts in the issuance of driveway permits to access state roads.[14] Additional opportunities for coordination among local, regional, and state officials that combine land use and transportation include the development of corridor management plans and studies. Corridor planning is a comprehensive approach that considers management in terms of the corridor qualities to be preserved and identifies the roles, responsibilities, and actions required to maintain the desired qualities.

Bridge and Road Conditions

Along with other states, New Hampshire was identified in 2007 as having the worst percentage (30%) of structurally deficient and functionally obsolete (SD/FO) bridges. The annual study by Best Roads magazine cites increasing construction cost as a reason only four states were able to reduce their inventory of SD/FO despite heightened national attention to the matter in the wake of the tragic I-35 bridge collapse in Minneapolis. Bridge inspection must occur every two years according to federal law. Sufficiency ratings are developed by the Federal Highway Administration. Structurally deficient bridges are considered more serious,

[14] Source: NH Office of Energy and Planning, Technical Bulletin 17, Spring 2006.

since they have structural problems that require limiting weight or more frequent inspections. Some must be closed. In New Hampshire the deficient bridges are approximately one half (about 51 percent) substandard and 49 percent functionally obsolete. Functionally obsolete bridges may be in good condition, but don't meet the needs of current traffic.[15]

A 2006 report developed by TRIP, a non-profit transportation research group, indicates nearly one-half (47 percent) of New Hampshire's roads are in 'poor' or 'mediocre' condition. A poor rating is based on badly cracked or broken pavement. The state received a below average grade (D) for bridge conditions as well, while safety and congestion were graded as average (C). In the Lakes Region NH Route 16 is on the list with eight other heavily traveled sections of road that have significant pavement deterioration and are in need of repair.

The costs associated with inadequately maintained roads can include lost time, decreased safety, and vehicle wear. A recent study in Virginia (September 2006) indicates roads that lack desirable safety features, have inadequate capacity, or poor pavement conditions add $1,000 per licensed driver per year in additional vehicle operating costs. Driving on roads in need of repair in Michigan is estimated to cost $2.6 billion annually in added operating costs that include accelerated vehicle depreciation; additional automobile repairs, increased fuel consumption, and tire wear.[16] According to the Federal Highway Administration, every $1.00 spent on street and highway improvement results in $5.40 in benefits associated with increased safety, reduced delays, lower vehicle operating costs.

Rural Road Safety

It is common that fatal accidents are greater in number on rural, non-interstate roads than on all other roads. In New Hampshire the fatalities on rural roads are more than double that on all other roads in the state. While 45 percent of the travel in NH is on rural roads this is where 61 percent of the fatalities occur.[17] While national trends indicate a general decline in fatality rates from 1990 to 2003, improvements have been more pronounced on all roads excluding non-interstate, rural roads (- 32 percent), compared to decreased fatality rates on non-interstate, rural roads (- 21 percent).

Technology Implementation

Intelligent Transportation Systems (ITS) is an initiative to add information and communications to the transportation infrastructure. Stemming from interest in resolving traffic congestion problems, ITS today is a diverse range of technologies designed to increase safety and efficiency, and to make the transportation system more environmentally friendly and efficient. An example of ITS that was recently implemented is the 511 telephone access to Northern New England Traffic and Travel Info, which provides commuters and travelers with information regarding weather-related road conditions, construction and congestion. New Hampshire is also working with Maine and Vermont in a broader program called "Trio" a cooperative effort to develop a regional traveler and tourism information system across Northern New England, referred to as Rural Advanced Traveler Information

[15] Source: Associated General Contractors of New Hampshire, *Rebuilding Our Neglected Roads,* December 2006.
[16] Source: http://www.tripnet.org/MichiganStudyMay2007.pdf
[17] Source: TRIP, Press Release, March 28, 2006.

Systems (RATIS). The tri-state program is a partnership of three state tourism agencies, three state transportation agencies, and the private sector.
The NHDOT maintains a statewide architecture for ITS that defines a communication and coordination structure. Regions can adopt this architecture or develop one of their own. Federally funded projects with IT components require an IT architecture to be in place as a prerequisite.

Funding
In 2007-2008, the funding situation and outlook for transportation projects are bleak. The NHDOT has indicated that in today's dollars the Ten Year Plan of needed statewide improvements will take between 30-35 years to construct. The outcome of the ongoing discussion remains to be seen, but the decision process includes reduction in the amount of work scheduled and exploring additional revenue sources. At this writing, the NHDOT has proposed a reduction of $1 billion to $4 billion in requests. This proposal is still $1 billion short of the $2 billion transportation budget. While the funding debate continues, the NHDOT has clearly stated a policy change that is preservation focused, meaning that adding additional capacity and reconstruction are not priorities. This preservation focus requires additional problem identification within the existing Ten-Year Plan, which concentrates efforts designed to improve safety, preserve capacity, and upgrade pavement condition.

Conclusion

The Lakes Region population is projected to grow at a faster rate than the rest of New Hampshire as a whole, increasing the 2000 year-round population by more than 30 percent by the year 2025. This has significant implications for future transportation infrastructure and land use patterns throughout the region. An adequate transportation system is essential to sustain quality of life and contributes to a healthy economy for all economic sectors. The economy of this scenic central section of the state depends heavily upon tourism; people visit and travel around the region to explore our small towns, recreate in the outdoors, and partake of the region's natural beauty. In order to maintain this sector of the economy it is important that the ever-increasing traffic volumes be accommodated or actively managed. Integrated land use and transportation planning and implementation are key to this success.

The costs of transportation related to vehicle ownership represent a significant portion of a family's budget. Where limited alternative modes of travel exist, vehicle ownership may preclude some people from living in the region. Despite these costs the number of registered vehicles per household and vehicle miles traveled continues to rise. Roads already stressed for capacity exist in the Lakes Region, as funding constraints for roadway expansion and increased demand continue; the need for creative solutions is heightened or the problems will persist and worsen. Intelligent Transportation Systems (ITS) may offer some congestion solutions by providing travelers with good information about delays, weather, construction and alternative routes.

While the state transportation infrastructure is in need of repair, the funding required to implement improvements identified in the current Ten-Year Plan is severely insufficient to complete the vast majority of projects within ten years. A result is a NHDOT focus on capacity preservation, pavement conditions, and safety, forgoing the more costly construction of new roads or expanding

the existing infrastructure. As a result of this focus, increasing population, vehicle miles traveled, and freight, the need for transportation system planning, coordination, and implementation are more pronounced. Coordination among local, regional, and state officials will help in the identification of preservation needs and actions required to meet these needs. Any gains in capacity preservation for existing roadways will require coordination with local land use officials where key land use decisions are made.

Gains in capacity preservation are possible for existing roadways, and such opportunities must be fully pursued to reduce reliance on costly system expansion, except where no other viable solutions exist. Even then, all concerned parties must identify revenue sources, sometimes beyond traditional state and federal sources for such projects to be implemented.

5. IMPLEMENTATION

Vision
The vision for transportation planning in New Hampshire is articulated in the New Hampshire Long-Range Transportation Plan as follows:

> "In the year 2030, transportation in New Hampshire will enhance environmental quality, promote sustainable economic development and land use, and preserve the State's unique character and quality of life.
>
> Transportation for New Hampshire provides safe and secure mobility and travel for all the state's residents, visitors and goods movement: is well maintained, efficient, and reliable; and provides seamless interstate and intrastate connectivity."

The following goals, objectives, and strategies were developed consistent with this Vision and the Lakes Region Transportation Mission Statement:

> "To provide an integrated, all-mode transportation system in the Lakes Region which offers efficient, effective and safe movement of people and goods, and provides mode choice wherever possible while enhancing and preserving the character and livability of the neighborhoods and the natural, socio/economic, and historical environments where transportation facilities are located."

These recommendations form the foundation for the Lakes Region Unified Planning Work Program (UPWP), the two-year work plan between the LRPC and the NHDOT.

Goals, Objectives, and Strategies

Communications
Effective communication both within and between interested parties is accepted as one of the more important components of the planning process. The communication of facts, ideas, and opinions can build a mutual awareness of problems and needs, which in turn serves as the basis for the development of politically acceptable solutions.

Goal: To improve the local awareness, understanding, and participation in transportation issues through public involvement within and between communities, the region, state, federal government, and related organizations.

Objective 1: To build and maintain a communications network involving all relevant stakeholders.

Strategies:

- Attend meetings on regional, state, and federal transportation issues.

- Maintain effective communication between the TAC and the LRPC which is responsible for making policy decisions.
- Ensure that transportation information is placed on the LRPC website.
- Encourage more towns to attend TAC meetings.
- Provide technical assistance and information on transportation matters to local planning boards, selectmen and the general public.
- Encourage inter-regional communication with other regional TACs

Objective 2: To ensure the public, local officials, and other stakeholders have a working knowledge of the transportation planning process.

Strategies:

- Post related information on the LRPC website.
- Develop TAC informational materials for new members.

Objective 3: To ensure equal opportunity for the public, local officials, and other stakeholders to participate in the transportation planning process.

Strategies:

- Evaluate and improve the citizen participation program so that all persons have an opportunity to participate in the process.

Objective 4: Outreach to non-participating communities for involvement on the TAC.

Strategies:

- Periodically change TAC meeting locations.

Integration and Consistency

The Lakes Region Transportation Plan 2008 is an update to Plan 2000. One of the goals of regional planning is to mitigate or avoid the negative "spillover" effects that can occur when planning decisions in one jurisdiction affect other jurisdictions. This can be achieved by ensuring that state, regional, and local transportation planning efforts are considered in transportation planning in the Lakes Region.

Goal: To promote the integration of state and local transportation planning efforts in the regional transportation planning process.

Objective 1: To ensure that local, regional and state transportation planning efforts are considered in the development of future regional planning initiatives and recommendations.

Strategies:

- Conduct a comprehensive planning initiative for the Transportation Improvement Program (TIP).
- Encourage NHDOT to attend local and regional meetings to provide information and comments regarding state initiatives in transportation.
- Support coordination and cooperation of Regional Planning Commission Executive Directors.
- Conduct meetings with regional transportation planners to allow information sharing as appropriate.
- Conduct an annual meeting for TAC members from adjacent regions as appropriate.
- Have regional planners from adjacent regions attend our TAC meeting at least once a year and report on activities within their regions.
- Attend adjacent regional TAC meetings at least once a year to provide information to those committees.
- Review up-to-date copies of local master plan transportation chapters and explore opportunities for coordination especially along common corridors (road, rail, trail, etc.).
- Ensure that the Transportation Improvement and Enhancement Programs are developed and facilitated to allow for recognition of local needs.
- Conduct information meetings to allow local communities and citizens to provide us with information related to their needs.

Objective 2: To ensure that the Lakes Region transportation planning efforts are considered in local and state level transportation planning.

Strategies:

- Attend and provide commentary at public information meetings, design meetings, and hearings.
- Apply for special NHDOT funding used to prepare corridor studies.
- Partner with NHDOT on corridor studies.
- Invite NHDOT to local and regional transportation meetings.
- Conduct informational meetings to allow local communities and citizens to provide us with information related to their needs.
- Encourage a broader engagement of the public through corridor plan development and Context Sensitive Solutions (CSS) project involvement.
- Evaluate the collective land use impact of projects proposed in the Ten-Year Plan.

Comprehensiveness

Comprehensiveness involves recognition that transportation planning is only one component of the regional planning process. Many concerns should also be considered with transportation issues, including the environment, land use, housing, and economic development.

Goal: To promote transportation planning and policy that protects, conserves and/or enhances other land uses and environmental, historic, and cultural resources in the Lakes Region and its communities.

Objective 1: To encourage participation of non-transportation parties who have an interest in transportation issues and the transportation planning process.

Strategies:

- Transportation staff should keep abreast of issues related to the cultural, historic, and natural environments as well as transportation.
- Staff should attend the Annual Travel and Tourism Conference and other related workshops.

Objective 2: To encourage awareness and understanding of other non-transportation concerns by those involved in transportation planning in the Lakes Region.

Strategies:

- LRPC staff should attend meetings and conferences put on by the different transportation groups.

- LRPC staff should convey any learned information to the TAC at their regular meetings.

Objective 3: To conserve and enhance open space, parklands, historic places, and scenic views and vistas.

Strategies:

- LRPC staff should provide input on projects at the design level, where appropriate

- LRPC staff should continue to work with all agencies relevant to transportation and other aspects of planning.

Objective 4: To conserve and protect the natural resources of the Lakes Region, including air quality, water quality, wetlands, prime agricultural lands, and wildlife habitat.

Strategies:

- Support access management and land use and transportation initiatives.

- Continue to invite environmental groups and agencies to the TAC meetings to provide information and/or comments on transportation issues.

- Partner with other regional efforts that focus on environmental and cultural preservation.

Objective 5: To encourage that transportation recognizes the value of tourism and recreation in the Lakes Region to its inhabitants and its economy.

Strategies:

- Act as a link on transportation issues between the travel and tourism industry and the NHDOT.

- Promote alternate modes of transportation as means not only of providing a congestion and air quality relief but also as important components of recreation and tourism.

Conservation of Existing Infrastructure
Conservation can be considered the guarding or protection from loss or deterioration through good management principles. In transportation planning, conservation involves recognizing the existing transportation system and, at the least, managing it for use by future generations.

Goal: To support a transportation strategy that maximizes and conserves the existing transportation network.

Objective 1: To maintain, enhance, and manage roads and bridges.

Strategies:

- Work with NHDOT Districts to coordinate access management proposals.
- Assist Lakes Region municipalities with understanding of NHDOT, FHWA, UNH T [2], and LRPC programs, goals, and opportunities.

Objective 2: To develop and use progressive, innovative, and creative approaches to all aspects of transportation planning, design, and maintenance.

Strategies:

- Support the Rural Advanced Traveler Information System (RATIS) program.
- Gain a better understanding of all freight travel (including air and rail) within the region and its impacts on the roads.
- Work with NHDOT and Lakes Region communities to further identify and describe priority concerns for existing Ten-Year Plan projects.

Demand Management
A Transportation Demand Management (TDM) Program consists of a set of strategies that are designed to reduce the number of vehicles using the transportation facility. The TDM Program allows us to break away from the belief that more highways serving more cars are the answer to our transportation future. The basic concept is that by following specific strategies we will make our existing highway system capacity go further and be more effective. A simple example of a TDM strategy is to promote flexible time work schedules. Furthermore, shifting the burden from one mode to another can result in a decrease of trips which are using an already congested mode. TDM not only conserves the capacity of our highways but it reduces the amount of energy consumed.

Goal: To actively support and promote Transportation Demand Management (TDM) strategies that reduces the amount of highway vehicle trips.

Objective 1: To maintain, enhance, and manage mass transit and aeronautical facilities.

Strategies:

- Support funding requests by public transit providers.
- Study regional transit needs and identify possible locations and routes with high ridership.
- Ensure transit providers are aware of potential funding sources.
- Encourage involvement in future state and regional transit and aeronautical planning initiatives, including plan updates.

Objective 2: To maintain, enhance, and manage infrastructure that facilitates, encourages, and supports viable pedestrian and bicycling movement.

Strategies:

- Provide technical assistance to communities that are planning multi-purpose trails (i.e. provide guidelines and recommendations to municipalities).
- Continue and enhance our research program of funding sources for communities and organizations to build multi-use pathways.
- Maintain an inventory of existing facilities.
- Work with towns to develop plans that compliment regional and statewide bicycle plans.

Objective 3: Encourage coordinated transit efforts within and between regions.

Strategies:

- Research and distribute information on Transportation Management Associations (TMAs) as appropriate.
- Coordinate with groups and agencies identified in the recently developed Coordinated Transit Plans to implement plan recommendations.

Objective 4: To support and promote van- and car-pool programs.

Strategies:

- Support car- and vanpool programs facilitated by the NH DOT.
- Distribute material and promote the concepts of car- and vanpooling throughout the Lakes Region.

Objective 5: To increase the number of car-pool lots.

Strategies:

- Apply for enhancement or CMAQ funding for proposed lots, where appropriate.

Objective 6: To use the tools of Intelligent Transportation Systems (ITS) for trip reduction.

Strategies:

- Encourage funding to support a traveler's rerouting system that connects message boards south of the Lakes Region with congestion within the Lakes Region.
- Support the Rural Advanced Transportation Information System (RATIS) program.

Objective 7: To work with commercial and industrial establishments that are major transportation generators in an effort to determine agreed upon strategies that will reduce both overall and peak trips.

Strategies:

- Encourage federal and state funding to work with commercial and industrial establishments.
- Educate commercial and industrial establishments on the benefits of employer sponsored trip reduction strategies, and the need for employer support of such strategies.
- Engage the public sector to make more efficient use of flex time and telecommuter policies, "guaranteed ride home" programs, and private transit services.

Supply Management

Supply management is the process of adding more capacity to the existing transportation system. It is a straightforward way of addressing congestion. It should be considered the means of last resort. When TDM, access management, and land use and transportation strategies fail or are not themselves sufficient, then we are left with only the opportunity of "building our way out of our problem." Supply Management addresses both adding lanes and building bypasses.

Goal: To ensure that there is a continuous process of upgrading the infrastructure of the Lakes Region transportation system through a locally driven public participation process that prioritizes projects by need.

Objective 1: Concentrate improvement efforts for "corridors" as identified within this Plan, with East/West Corridors having the highest priority.

Strategies:

- During the Transportation Improvement Program (TIP) process develop criterion which favors major corridors.
- Promote the "corridor" approach and the need to improve the corridors at local, regional and state meetings.
- Establish effective communication with municipalities along targeted corridors to balance regional and local needs.

Objective 2: Address minor improvements and safety hazard elimination on all roads and bridges within the Lakes Region.

Strategies:

- Ensure minor improvements and safety hazard elimination projects are considered in the Transportation Improvement Program (TIP).
- Attend annual and local safety committee meetings.

Objective 3: Ensure that all new construction addresses viewsheds and aesthetics and does not cause significant harm to the social and natural environments.

Strategies:

- Attend and comment at design meetings, information meetings, and hearings.
- Reply to NHDOT Bureau of Environment's request for comments on projects.

Technology

Over the past 20-30 years many aspects of technology have greatly influenced the way people live, work, and play. Perhaps the most noticeable evidence of the influence of technology on society is the role that computers have in our everyday activities. Evidence indicates that the role computers have in information processing and communication will continue to increase to the year 2025 and beyond.

Goal: To ensure that transportation planning in the Lakes Region maintains and enhances the use of technology as a tool for storing, managing, and communicating information in the future.

Objective 1: To promote the use of Geographic Information Systems (GIS) as a means of analyzing and processing information for use in transportation planning.

Strategies:

- Encourage the NH DOT to support the development of a GIS tracking program for regional projects.
- Investigate possible locations for a transportation GIS kiosk in the Lakes Region.

Objective 2: To promote the use of Geographic Information Systems (GIS) as a tool for communicating transportation issues to the public, local officials, and other stakeholders in the transportation process.

Strategies:

- Provide guidance on GIS via the Internet.
- Continue to use and enhance the use of GIS transportation planning.
- Explore options for integrating the use of GIS with the TAC and develop ways in which GIS can become more interactive in use.

Objective 3: To maintain and enhance the role that current and future information technology (e.g. the internet) has in all aspects of transportation planning.

Strategies:

- Support the Rural Advanced Transportation Information System (RATIS) program.

- Research information related to Intelligent Transportation Systems. (Find funding sources for ITS, develop proposals, and implement a project or projects).

- Assist towns in preparing for Intelligent Transportation Systems.

- Share current and future technology information with towns through information bulletins, workshops, and the TAC.

- Develop a regional ITS infrastructure or adopt the state model.

Objective 4: To maintain a process of continual data collecting to ensure that all maps, databases, and models are maintained and up-to-date.

Strategies:

- Continue the active data collection process.

- Expand the data collection program to satisfy modeling needs.

Equal Opportunities

Equality recognizes that no one is either inferior or superior. In transportation planning, this extends to the provision of equal opportunities to access the transportation system for all inhabitants, and visitors to, the Lakes Region.

Goal: To encourage public access for the transportation disadvantaged.

Objective 1: To ensure that equal access to transportation facilities and services is provided to the elderly, disabled persons, youth, and low-income persons in the Lakes Region.

Strategies:

- Work with and support organizations that are involved with providing access for youth, persons with disabilities, and the elderly with their basic needs.

- Support the development and growth of new and existing resources.

- Inventory resources, identify needs, and determine assistance programs.

- Support the implementation of recommendations outlined in the recently developed coordinated transit plans.

- Integrate transportation planning efforts with planning efforts in other areas, such as Community Development Finance Authority (CDFA) initiatives.

- Coordination with other state and regional agencies to implement recommendations in the recently developed coordinated transit plans.