New Hampshire
Long Range Transportation Plan

The report of the Community Advisory Committee to the Commissioner of the New Hampshire Department of Transportation

FINAL REPORT – JUNE 9, 2006

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Introduction

New Hampshire is a small, beautiful, but threatened state. The problems of growth and development are upon us. Sprawl, congestion and traffic jams are no longer something we read about in distant communities. They are issues of local concern. Transportation is now the stuff of family dinner (and breakfast) conversation, and it is not a pleasant discussion. The time has come to act.

The Community Advisory Committee (CAC) was convened by New Hampshire Transportation comissioner Carol Murray in the fall of 2004 to develop a Long Range Transportation Plan for New Hampshire. Specifically, our charge was "to establish strategic direction for future investment in, and management of, state transportation assets over the next 20 years."* This is our report in response to this charge.

Over the 18 months that we worked together the CAC realized that the NHDOT cannot by itself meet the state's transportation needs. Transportation is too important an issue to leave solely to transportation planners. Effective transportation solutions require partnerships – across agencies, across jurisdictions, and in collaboration with private and non-profit organizations. Every citizen of the state is a partner in this effort. We therefore submit this report to the Legislature and to the Executive, both the Governor and the Executive Councilors as well as to NHDOT. We are also publishing this report for general circulation and discussion among the NHDOT's "core customers" – our citizens.

*Commissioner Murray's full charge to the CAC is included as Appendix A.

A. The way we think about transportation

The CAC hosted more than 19 public meetings in preparing this report. These meetings were well attended and the conversation was spirited and heartfelt. We spoke, but mostly, we listened. Here are some conclusions from what we heard:

- We spend a lot of time thinking about transportation and how it affects us personally and within our communities,
- We are frustrated that little is being done to address the affect congestion, sprawl, traffic is having on our on communities and our personal lives, especially the stress it is causing to our health, our pocketbooks, and to our sense of community.
- Despite the pervasive impact transportation has on our quality of life, we seem to have fewer and fewer transportation choices.
- We despair that anything will be done to make the situation better.

Change *can* and *is* happening, and that change can be for the better. However, the challenges are great and the hour is late. Whether we control change or it controls us is up to us. As one speaker remarked, "We are a small state but we can do things bigger states can't do – we can work together!" While the Committee is impressed with the leadership demonstrated by NHDOT in establishing a broad mandate for the CAC, little change is possible absent a broad, statewide conversation about transportation, growth and development.

This report reflects the views of the great majority of members on all issues, and the consensus of the CAC on many issues. It does not represent the consensus of all members on all issues. There was sharp dissent from a small minority of members who challenged the breadth of the report. While the great majority of the CAC sees basic transportation access as a central public responsibility a minority feel that we should leave it to family and other private networks to provide transportation services to groups who cannot drive or do not have access to a car, such as the elderly, the unemployed, the sick and the disabled.

The Committee sought throughout this process to understand how we as a community think about transportation in New Hampshire. Here is a summary of what we learned. It will be followed by our findings, our recommendations for action, and our proposals for immediate implementation of our recommendations.

Transportation is a complicated issue, and it requires leadership.
Transportation affects every aspect of our lives, and almost everything we do affects transportation. The members of this committee come from organizations with interests that are directly affected by and depend upon transportation – health, education, philanthropy, local government, natural resource conservation, affordable housing, special needs groups, etc. We recognize that NHDOT cannot address all issues of public concern regarding the impacts of transportation

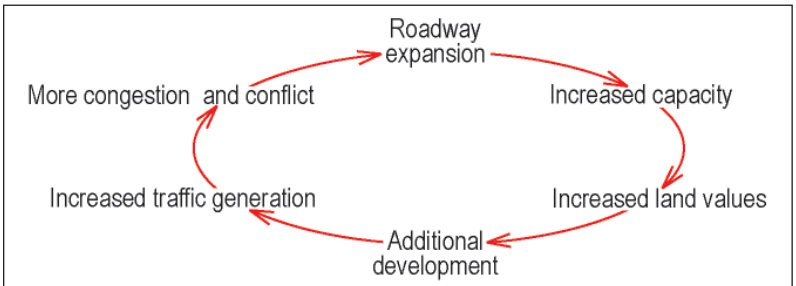
on our quality of life. However, it can help, sometimes directly and sometimes as a convener and advocate when they have no authority to act on the root causes of transportation impacts – land development decisions, for example. Transportation agencies can help, and in many cases provide leadership on these issues. We are hungry for leadership.

Partnerships are a key piece of this equation.
Effective management of transportation for societal outcomes will require a unique set of partnerships at almost every level: across state agencies, between state, regional and local governments, and public-private partnerships. Intra-regional and inter-state partnerships are needed as well. It will be hard to manage such arrangements efficiently, so all available and affordable tools (process, technology, data collection and analysis, etc.) must be employed in this effort.

We need to address transportation as a system.
The Department of Transportation does not control the entire transportation system. Our municipalities own and manage local roads, streets, transit services, sidewalks, bicycle facilities and trails. Businesses and non-profits provide private transportation services. Rail, freight, air and marine transportation are a mix of public and private partnerships. Other state agencies also have a significant amount of buying power for transportation services outside of the Department, usually to assist in meeting the needs for the large portion of our population that does not drive – the young, the elderly, low-income populations and the disabled. We cannot ask the Department alone to meet all our transportation needs. A more comprehensive, statewide initiative is needed encompassing all sources and uses of public and private transportation funding.

TRADITIONAL NEIGHBORHOOD DESIGN VERSUS SUBURBAN SPRAWL NEIGHBORHOOD DESIGN (IMAGE COURTESY OF DUANY PLATER-ZYBERK & COMPANY)

Transportation is a community asset.
We often think about transportation only when it is a problem – when we are stuck in traffic, when our bus is late, when a street or bridge is shut down for reconstruction, when we can't walk to the corner store etc. Yet few of us want less mobility. To the contrary, we want more. Still, transportation can be a



THE CYCLE OF SPRAWL (COURTESY OF FHWA)

community asset, actually improving mobility, access and our overall quality of life. Our main streets can be true town centers. High volume roads into town (called arterials) can become boulevards that serve traffic at reasonable speeds while also sharing road space with local residential and commercial foot traffic. Our train stations, bus terminals, even parking lots where we "transfer" from car to foot travel can serve other community goals such as gathering places for events, public markets, and information centers through shared use. Improved parking management, especially around transit stations, was identified as an area of interest at the public meetings.

We must coordinate transportation and land use planning…

Transportation influences land use, and land use also directly affects our transportation choices. The number of children who walk or bicycle to school has dropped from about 70% to less than 10% in the last 35 years as towns suburbanized and schools moved out of town centers. The public sees the transportation needs of the young as an important issue, especially those too young to drive. Zoning policies, which were adopted many years ago to separate land uses (industrial commercial, residential) for public health and safety reasons, have had the unanticipated effect of reducing transportation options and increasing dependence on the automobile for most trips. We encourage municipalities to revisit their master plans and related zoning policies which result in land use patterns which make walking and bicycling between destinations more difficult. If the public purpose which led to adoption of those policies no longer exists, we encourage municipalities to amend their plans and zoning ordinances to create communities which are less dependent on the automobile for transportation.

Inefficient land use also leads to sprawl, which leads to inefficient and expensive transportation systems. Transit service is not cost-effective when development spreads people out across the landscape. Sprawl also makes New Hampshire less attractive to businesses and visitors, and reduces the forest and farmlands on which we depend for jobs and income.[1] Transportation construction can both contribute to, and result from, sprawl. The protection of our "working landscapes" (family farms) was identified by the public as an issue of concern, and as an issue where NHDOT can help.

The percentage of commute trips over 45 minutes has increased 39% in New Hampshire over the last 15 years as the distance between jobs and housing has increased.[2] Nationally, the average time commuters spend each year stuck in traffic in our major urban areas has increased from 16 hours to 62 hours.[3] Researchers have found that every additional 10 minutes of driving by commuters reduces all of their civic activities – voting, visiting friends, volunteer work – by 10%.[4] Our municipalities are highly dependent on citizen volunteers to assume the duties of governance. We can't afford to lose these services.

... But little local or regional funding exists to do so.

New Hampshire assigns primary responsibility for land use control to local governments. However, our municipalities struggle to find sufficient resources to control or even guide land development, especially uses stimulated by road expansions. Also, except in the most limited way, municipalities are not required to take regional implications of their land use decisions into account. Regional Planning Commissions (RPCs) help with land use coordination when invited to do so, but have no regulatory powers.

Furthermore, community membership in RPCs is voluntary and these agencies have limited capacity and small budgets. Local governments also have small budgets which must support all local services such as schools, fire and rescue, police and public safety, water and sewer services, and keeping the roads maintained and plowed. Much town planning is done by volunteers. More planning assistance is needed, especially to improve RPC capacity to train local land use managers and more direct technical assistance to local planning boards. More resources, not mandates, are needed to integrate transportation and land development decisions at the local level.

B. Findings

There is little doubt that travel demand and, with it, congestion will continue to grow in New Hampshire. We found a strong sense of urgency among citizens that transportation problems – including congestion and all the negative impacts that come with it – are growing faster than our ability to cope with them. This is a quality of life issue, with statewide implications. As stated at one meeting: "If Keene chokes (on congestion), the whole region chokes." There is also a general feeling that congestion is a core NHDOT responsibility and the public looks to NHDOT for leadership in confronting this problem.

That said, we heard more about the needs of people for access and mobility than the need to move cars; and more about the need for more transportation choices than for new highway capacity, though we need both. We also heard about the varying transportation needs within the different regions of the state ("don't make this a 'one size fits all' plan") with public sentiment in the North Country focused more on reconstructing highways to improve the economy, and less interest in evaluating their non-transportation impacts ("more projects, less planning"). However, one finding stands out as representing the sense of the citizenry as expressed in the public outreach process:

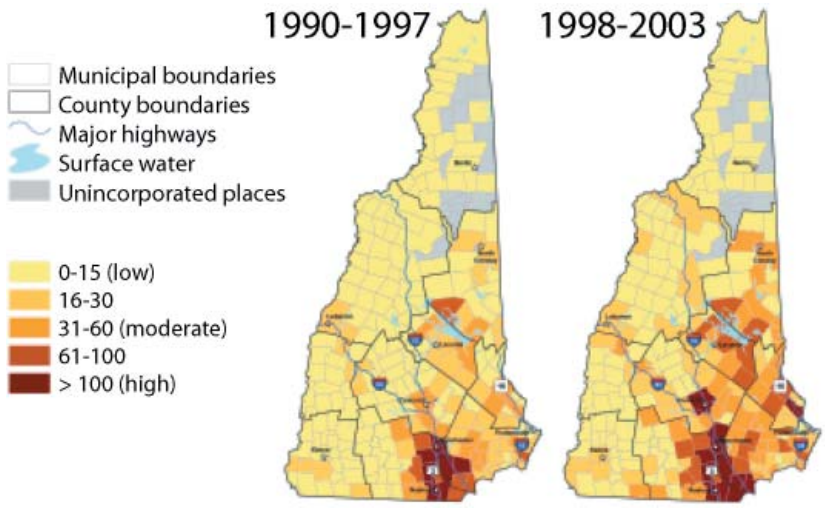
Transportation is not an end in itself; its purpose is to serve common community aspirations for a better quality of life. Unfortunately, transportation is increasingly becoming a threat to quality of life in New Hampshire, not its handmaiden. Unless forceful action is taken now to reverse this trend, our quality of life will deteriorate. This is particularly true with respect to three of our greatest community assets: our small town character, the prosperity of our growing small cities and the beauty of our great outdoors. We recommend the initiation of a broad conversation on the future growth and development of our state.

This view was expressed with a sense of urgency at virtually every public meeting, almost always as a majority opinion. Some of the quality of life issues raised at the meetings as under-represented in the Interim Report include:

- Lack of affordable housing near job centers, making transportation a barrier to securing a job for low-income workers and the young;
- Transportation needs of the aging (New Hampshire has the seventh oldest population in the country);
- Tourism access and the economy; plus the effect of second homes on travel demand. (New

Hampshire is now tied with Vermont as the state with the highest percentage of second homes in the nation);

- Sprawl and the need to protect "working landscapes" (family farms);
- Parking and parking policy;
- Land fragmentation and other environmental impacts of transportation – we now have more than 2.5 acres of developed land for every person in New Hampshire;
- Lack of transportation choices, including passenger rail, bicycle and pedestrian infrastructure, water transport (ferries) and airports – more than 25% of our population does not drive. They need access to transportation as well.



LAND IN NEW HAMPSHIRE IS BEING CONSUMED FASTER THAN POPULATION GROWTH, PARTICULARLY ALONG THE MAJOR TRANSPORTATION ROUTES. (IMAGE COURTESY OF THE SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS)

We do not doubt the validity of these concerns and include them here as statements of public concern which may best be addressed in a location-specific fashion. The need to connect transportation to land use, a central theme of this report, also pertains to these issues.

Despite this shortfall in addressing every impact and implication of transportation, sufficient data does exist at the statewide level to support our general finding that New Hampshire faces urgent transportation challenges. More specific findings, and data in support, include:

"Business as usual" is not sufficient to meet new challenges.
Overall, our population grew 17% from 1990 to 2004, twice the rate of the rest of New England. Projections are that we will grow another 27%, from 1.3 million to 1.646 million, by 2030, for an annual average increase of just over 1%.[5] Vehicle miles traveled (VMT) are projected to grow much faster, at an annual average of between 2.5% and 3%.[6] Traditional or "business as usual" practice would address this growth in travel demand through engineering and design solutions, with a focus on accommodating new traffic growth by adding more lanes to roads. Given funding and other constraints on available land this traditional approach may not be enough. This translates into more congestion, longer commuting times, and an overall decline in quality of life.

While some selected capacity improvements will be necessary it is clear that just building more roads isn't the answer to our state's transportation future. Addressing congestion by increasing road capacity is often just a temporary fix and, in any event, we just don't have the money. However, these growth rates are not inevitable. In particular, the VMT growth rate assumes no change in land use plans. It represents the "business as usual" trend of continuing to grow in primarily a pattern of low density residential and commercial development. We can change

this trend. In addition, these VMT growth trends assume no significant change in transportation energy costs. In the course of the committee's work (October 2004 to May 2006) the price of oil has risen from less than $30 per barrel to more than $70 per barrel. We need to have a plan in case gasoline remains at $3 per gallon gas prices or goes up higher. We don't have one.

New Hampshire has several regions, each with its particular transportation needs:
The fastest growing areas (in percentage terms) will be the Lakes Region and the I-89 corridor. However, we will continue to absorb most of the growth (in absolute terms) in the southeastern part of the state. The North Country will grow least (in terms of permanent population but is seeing significant seasonal/second home development) and needs to focus on preserving the health of its existing road system. Citizens in the North Country also feel that transportation, especially preserving roads, is necessary to stimulate the local economy. Outside of gateway communities such as Conway, which serves as an entrance to the White Mountain National Forest, congestion is less of a problem than lack of economic development.

The increased isolation of an aging population is a major concern. This will create new demands for transportation services to meet the needs of seniors for access and mobility. The Lakes Region is a major tourist destination; it and other areas will need to serve this tourism market without becoming overrun with traffic. The Upper Valley and Southwest share a river border with Vermont, creating a demand for good bridges while protecting our transportation infrastructure from flood damage.

The southern (especially southeastern) region needs to manage new travel demand, and expand transportation choices, in an increasingly urbanized environment. This is especially true in Hillsborough and Rockingham Counties which now represent more than 50% of the total state population.[7] The southern areas of the state face a particular challenge: interstate commuting. In 2000, over 82,000 New Hampshire commuters traveled to jobs in Massachusetts daily, while 23,500 Massachusetts commuters traveled to New Hampshire.[8] In these areas commuters are traveling further which, along with rapid population growth, increases congestion problems.

Transportation needs cannot be measured by simply looking at population growth, jobs, absolute amount of traffic growth, or even total system usage. People who don't travel may have even more severe transportation needs than those who do – if the reason they don't travel is because they have no options. A strong majority of public feedback favored the creation of more public transportation options, particularly in the more rural areas and particularly for access on the regional and inter-regional levels. Some sort of basic, statewide public transportation service is needed.

A growing percentage of our citizens don't drive…
The percentage of New Hampshire citizens who don't have a license, or can't drive due to a disability or poor health, is about 25% and growing.[9] The average age in New Hampshire is 39 – higher than New England as a region (38) and the nation as a whole (35).[10] Indeed, New Hampshire is currently the seventh oldest state in the nation. Over the next 25 years, as baby boomers age, the number of Americans age 65 or older will increase nearly 80% to more than 62 million. For this group isolation is a real problem; more than one in five (21%) do not drive

and more than 50% of those who do not drive stay home on any given day due to lack of transportation options.[11]

The percentage of New Hampshire citizens who are over 65, now about 12%, is also growing, and an increasing number need more travel options. Compared to older drivers, older non-drivers make 15% fewer trips to the doctor, 59% fewer shopping and dining-out trips, and 65% fewer trips for social, family and religious activities.[12]

Whether NHDOT has a responsibility to address the transportation needs of the state's non-drivers and, if so, how well these needs are being met, was a question we explicitly asked at the public meetings. The overwhelming response was that this issue is a serious, even urgent concern. While the public does acknowledge that restrictions on the use of gas tax revenues to highway use limit the options directly available to NHDOT, it does see this as a state responsibility. It also looks to NHDOT, as the state's leading transportation agency, to assure that the state has a plan to do so. The public told us clearly that meeting the transportation needs of non-drivers requires public leadership, and cannot be left to self-help efforts alone.

… and we are not meeting their transportation needs.
Fewer than 30 of New Hampshire's 234 municipalities have fixed route transit or bus service (bus service along a specific route and schedule) and, even among those that do, frequency and coverage of service is limited. According to a recent statewide survey, more than 20,000 of our citizens have lost a job or been turned down for a job because they didn't have a reliable ride, and thousands more report missing health care appointments for the same reason.[13] New Hampshire ranks 42nd in state spending for public transportation.[14] Since expenditures from the state highway trust fund can only be used for public highways, transit service agencies rely on federal agencies to fund their operations, mostly the Federal Transit Administration (FTA) and Health and Human Services (HHS).[15] FTA assistance (about $9 million annually) must be matched – 50% for operations, 20% for capital equipment.[16] The difficulty of our municipalities – especially rural towns – to raise local match funding is restricting transportation services to those who can't drive.[17]

We are paying too much for travel.
For those who can drive, the cost of travel is placing an increasing burden on household budgets. Nationally, more than 20% of the average household budget is spent on transportation, making it second only to the cost of housing. Low income households spend more than 35% of their budgets on transportation.[18] Lack of transportation choices is contributing to the inability of the poor to escape the cycle of poverty and joblessness. The recent spike in gas prices brings the high cost of travel to the forefront, but the lack of choices that forces travelers to pay these prices, or prevents them from reaching their desired destinations, is a larger concern.[19]

Freight traffic is growing.
We are a nation of consumers, responsible for about 50% of annual global natural resource consumption. Demand for raw materials and finished products generate freight traffic flowing

through our ports and airports and onto our rail and highway networks. Trucks presently haul about 68% of the nation's freight, a figure that is estimated to increase to 75% by 2016.[20]

In New Hampshire, trends show total tonnage and value of freight will approximately double in the next 20 years.[21] Total commercial truck mileage on New Hampshire roads is also forecasted to grow from about 900 million VMT today to over 1.4 billion VMT by 2018, at which time it will represent about 8% of all vehicles on New Hampshire roads.[22] By weight, most of this traffic will take place on the Interstate system – the I-95, I-89 and I-93 corridors. By mileage the freight traffic is more distributed over our road network. However, by value the biggest increase will be in consumer goods – more than triple today's number. These goods will flow from distribution centers across the entire state and local road network.[23] Rail, which handles heavy commodities such as coal, sand and gravel, will also play a bigger role. Manchester airport is the third largest air freight hub in New England.

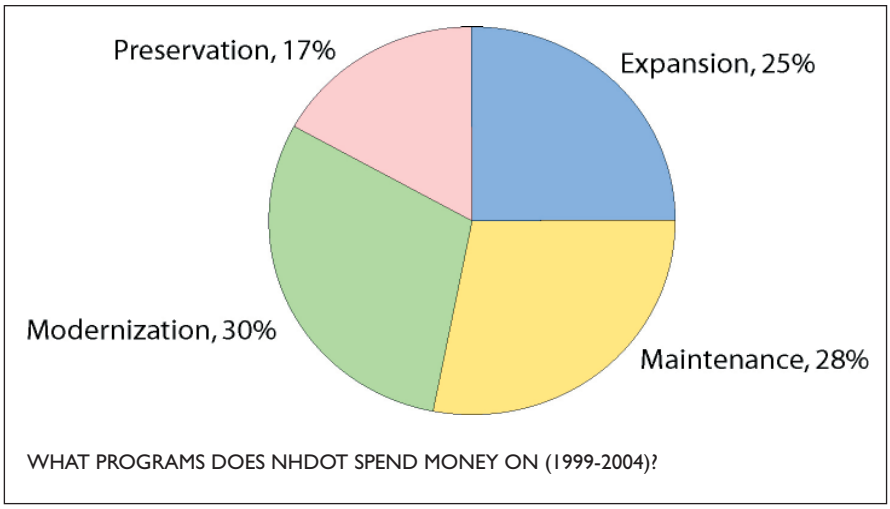
Freight will place growing demands on our state transportation system. We must find ways to manage this growth while, at the same time, minimizing the impacts of freight traffic on our infrastructure and our communities. Since trucks, especially large trucks, cause more wear and tear on our roads and bridges than is represented by their share of total vehicle mileage, the accelerated growth of truck traffic is going to mean that our highway system will wear out faster. This will require additional resources to keep the system in good physical condition. We must identify those resources now so we are not surprised when confronted with these additional maintenance and reconstruction costs. While customer demand for "just in time" freight service is contributing to the rise in freight traffic, it is more appropriate to take steps now to make sure we can accommodate this freight growth than trying to reduce truck access to our state highway system. [24]

Technology can help.

The public meetings revealed a widespread view that technology can help address the challenges identified in the Interim Report. We agree. Some beneficial applications of technology already in place, and mentioned at the public meetings, include (1) the EZ Pass system, (2) telecommuting support, (3) technological support for ridesharing and transit brokerage initiatives, and (4) use of alternative fuels (fuel technology). Technology can also be applied to favor trips that increase public benefits (by increasing trip choices) and reducing public costs (such as reducing air and water pollution). With a high portion of its workforce in technology or technology-related jobs, we have an opportunity in New Hampshire to apply this special expertise to meet our need for improved mobility, access, and community development. [25]

The present transportation funding structure cannot meet these needs.

The Department received about $540 million in transportation funding in 2005. About $255 million came from the state highway trust fund, and about $88 million from Turnpike funds (tolls and construction bonds), with the rest mostly from the federal government (about $165 million). Another $31 million came from other sources. About $40 million of these funds were allocated to cities and towns to assist in building and maintaining local roads and streets (about 12,000 miles).[26] After costs of administration and other programs (airports, transit etc.) were deducted the state spent about $366 million on the state highway system (about 4,800 miles).



WHAT PROGRAMS DOES NHDOT SPEND MONEY ON (1999-2004)?

These funds are allocated across three broad categories of work: (1) *maintaining and preserving* the existing system, (2) *modernizing or reconstructing* the system, especially the interstate system which is reaching its 50-year design life, and (3) *expanding* the transportation system's capacity to meet the needs of our growing economy and population.[27]

The results of this review are revealing:

- Actual federal and state transportation revenues over this period, assuming a 3.0% inflation rate and no new funding sources, will decline to the equivalent of about $386 million in 2005 dollars.[28] At best, federal transportation aid is expected to remain flat;

- Maintaining the system at its present level (not letting the existing system decline) across all three spending categories (maintenance/preservation, modernization and expansion), would cost about $450 million a year;

- Based on current spending, 45% percent of available funds are spent on maintaining, preserving and keeping safe the state system (everything from snowplowing and cutting grass in the rights-of-way to making sure the bridges are properly maintained (see chart). As the transportation system continues to age the proportional amount the Department spends on maintenance and preservation will only increase;

  Funds committed to four major projects (I-93 Salem-Manchester, Manchester Airport Connector, Conway Bypass and the Newington-Dover Little Bay Bridges), if built, will consume about 15% of the Department's total transportation funding over the 2005-2009 time period;

- The present 10-year planning process (GACIT), which summarizes the capital spending of the state system over a 10-year time horizon, is at least 50% under funded, meaning projects already in the plan may take up to 15 years to complete. Local (non-state) roads, which represent 70% of the entire road network, will experience even greater shortfalls in capital and maintenance funding.

The implications from this analysis include the following:

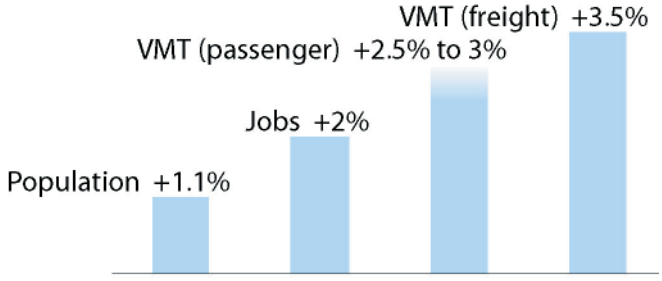
- ***Unless we change the way we do business our transportation network will not be able to serve future growth.*** Absent cooperative action at all levels of government, as a state we may be forced to choose between either (1) keeping our present system safe but

increasingly congested, or (2) addressing congestion at the expense of system maintenance and preservation needs. Both of these choices are unacceptable.

- ***Money is not the entire issue. By ensuring that projects are designed to fit within the character of our municipalities and landscapes, by improving land use planning, and by improving connections between modes, we can make better use of our existing highway system and reduce project costs.*** Agency staff can also provide technical assistance to cities and towns to help reduce the growth in new travel demand which can eliminate or at least delay the need for costly road-widening projects. Municipal officials and developers also have expertise and ideas to contribute.

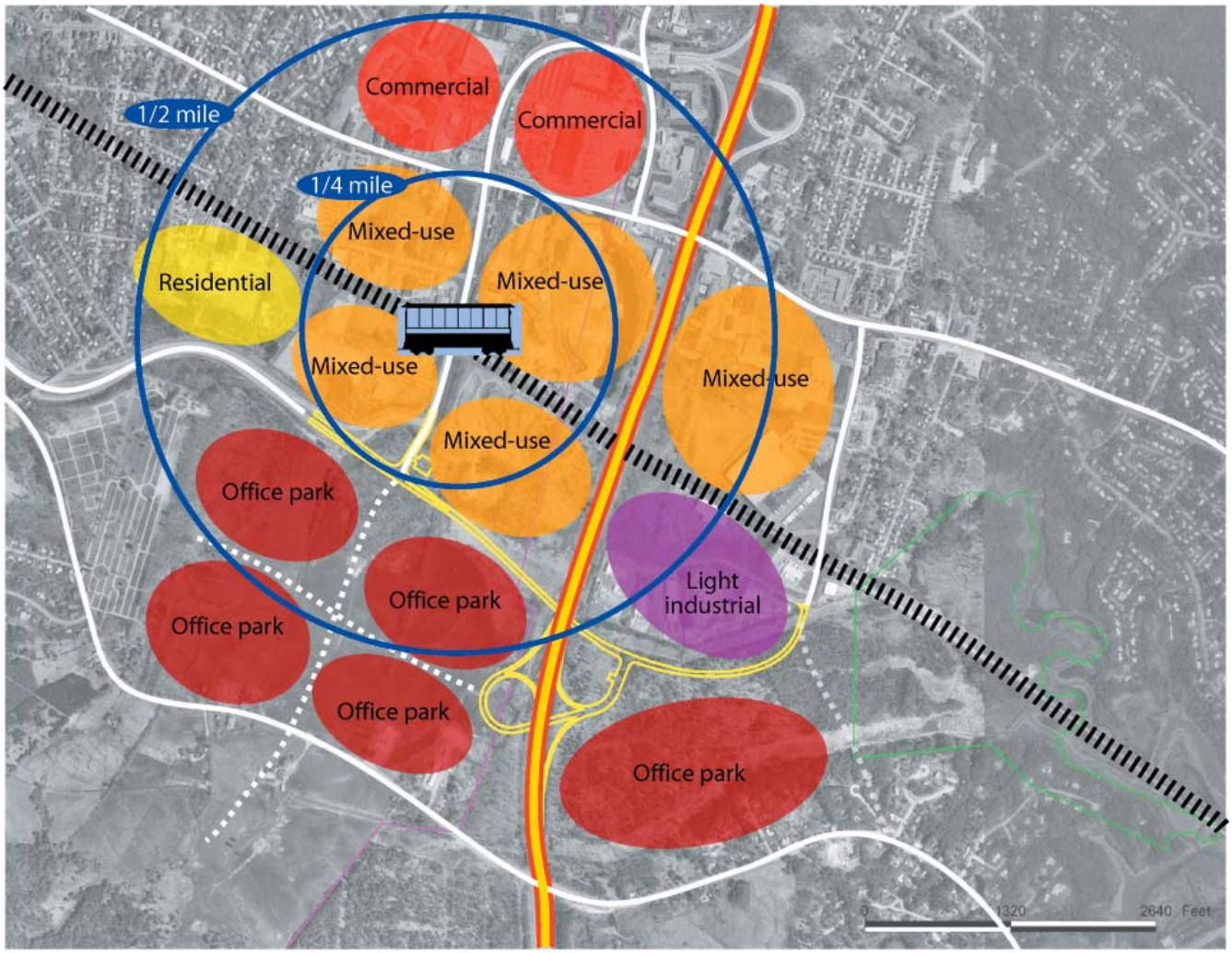
- ***Money is part of the issue.*** We must meet the needs of our growing economy to move people and goods. The 10-year capital transportation investment plan is significantly underfunded. However, there are many funding options beyond the state Highway Fund to address this problem. Potential funding sources include (but are not limited to): (1) federal transit funds which can be used to create transit brokerage services such as United We Ride, (2) tax-increment financing (TIF) which dedicates the increases ("increment") in property tax revenues resulting from transportation improvements to retirement of bonds issued to finance such improvements,[29] (3) congestion pricing, parking fees, vehicle fees etc., and (4) local highway impact fees or locally-mandated off-site improvements, and (5) public-private partnerships.

- ***Land use is the other part of the issue.*** Unless local land use decisions are better coordinated with transportation decisions the amount of traffic on the state system will continue to accelerate. During the 1980s and 1990s New Hampshire's population grew 17% but the amount of developed land increased by 45%.[30] In the southern tier counties, low density single family home development has been responsible for most of the land developed since 1950 and most of the roads constructed have been within subdivisions.[31] This form of development generates disproportionate amounts of traffic, creates poor road connectivity, contributes to congestion on the state highway system by funneling more traffic onto it, and is expensive to provide public services.[32] The redevelopment of unused rail yards or old rail rights-of-way to other uses is another type of land use decision that eliminates our ability to restore rail service in the future. Ideas expressed to address this issue included support for Transit-Oriented Development (TOD) as well as compact villages or "Village Oriented Development" (VOD) – a term we hadn't heard before.



EXPECTED ANNUAL INCREASE IN POPULATION, JOBS AND VEHICLE-MILES TRAVELED

- ***We need to address freight from both the supply and the demand side.*** Freight truck traffic is forecasted to grow faster (about 3.5% in VMT growth annually) than population growth (1.0%), jobs (2.0%) and car travel (about 2.5% to 3%). From a congestion standpoint, freight vehicle miles traveled (VMT) is the issue. From a



OPTIMAL TRANSIT-ORIENTED DEVELOPMENT LAND USES (IMAGE COURTESY OF WILBUR SMITH)

system preservation standpoint weight, specifically the growth in heavy trucks (4+ axles), is the issue because of the wear and tear on roads and bridges. This raises choices between ways to accommodate this new growth, improve inter-modal connections, and improve the overall efficiency of freight traffic while still meeting the needs of freight customers for timely service.

While a majority of the committee supports the proposition that NHDOT cannot ignore, and should address, the varying societal implications of the choices we make regarding investment of public transportation funds, a minority of the committee members disagree. They feel that the NHDOT should not directly address such societal issues as childhood obesity, even if the lack of safe places to walk or bicycle has been identified as contributing to this problem.

A minority also feels that targeting transportation assistance to projects that support compact land development patterns and more transportation choices violates the rights of those who

prefer a more rural lifestyle. Their view is that NHDOT cannot focus on every issue that touches on transportation, and that trying to do so will inhibit their ability to get projects built. Instead NHDOT should focus on the planning and construction of state roads, highways and bridges and avoid actions that appear to mandate urban style development.

The majority response to these views is that NHDOT has both the right and the obligation to invest its resources in projects that maximize public benefits and minimize public costs, and that evaluating societal affects in the course of making those investment choices in entirely appropriate, and even required. In particular, the effect of transportation investment decisions on land use (and land use decisions on transportation) is a central societal concern since it affects the physical design of our communities and, ultimately, our state. Making the connection between transportation and land use was also an element of our charge as a committee. The purpose of these findings is simply to encourage public debate on transportation and its affect on broader societal issues, not to resolve them.

Finally, the majority of the CAC supports the finding that the NHDOT, and the state generally, needs to dedicate more resources to addressing the mobility, access and societal concerns addressed in these findings. However, the committee did not discuss, and did not make, any findings with respect to how these resources would be secured. Any discussion of transportation finance raises complicated economic, technical and legal issues. Delving into these issues was not in our charge and is not within our area of expertise. A minority of the committee felt that a finding on the need for new (or more) resources was inappropriate and that "we should learn to live within or means." We disagree. Moreover, the fact that we make no finding here as to the most appropriate mechanism for securing those resources does not detract from the necessity of doing so.

C. Our vision for transportation in New Hampshire

We need a strategic statewide vision for transportation. As stated at one meeting "Identify the vision and you will find the funds." On the basis of these findings, the public meetings, and the Committee's understanding of the inter-relationship between transportation, economic development and land use, the CAC offers the following strategic vision for transportation in New Hampshire:

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 in New Hampshire provides safe and secure mobility and travel for all of the state's residents, visitors and goods movement: is well-maintained, efficient, and reliable; and provides seamless interstate and intrastate connectivity.

This vision statement is our guide to the following recommendations for action.

D. Recommendations

Despite a growing sense of urgency about transportation issues, the situation is far from hopeless. Indeed, the public meetings demonstrated that "Yankee ingenuity" is alive and well in New Hampshire when it comes to transportation. It is possible to meet our needs for mobility and access while also protecting our traditional town centers, revitalizing our urban areas, and preserving out natural landscapes. Institutionalization of best transportation practice through specific project initiatives, as discussed in the previous section, is a start. The committee also recommends the following actions that NHDOT can take to assist in this effort.

Community-level

The best forum for coordinating land use and transportation is within our cities and towns. For transportation to become an asset to our communities we recommend the following state and local actions.

1. ***Design transportation solutions in traditional municipal centers and downtowns to fit the context of the community.*** The state should allow flexibility in design, in travel speeds, and in allowable uses when the state and municipalities plan for people, cars and freight in our historic municipal centers. Flexibility in design, in travel speeds, and in allowable uses should dictate when planning for people, cars and freight in our historic town centers. There are no set standards deciding these issues – New Hampshire has no formal design guidelines. Instead we should let the context decide, reducing design speeds as necessary.[33]

   Nationally, these flexible policies are called "context sensitive solutions" – CSS. However, we see them as ***common sense solutions*** (see sidebar) and recommend that they be adopted as state policy through inclusion in this plan.

Common Sense Solutions
"The New Hampshire Way"

- The project satisfies the purpose and need as agreed by a full range of stakeholders
- Communication with all stakeholders is open and honest, early and continuous
- All relevant disciplines are included on the project team
- The project development process is tailored to the circumstances and examines multiple strategies to address the purpose and need
- The selected strategy is in harmony with the community and preserves environmental, scenic, aesthetic, historic and natural resource values
- Upon completion the project is seen as having added lasting value to the community
- Faster, better and more efficient strategies win over bigger, slower and more expensive

Specifically, we recommend:

a. Promote zoning that encourages traditional downtown development and redevelopment by promoting street connectivity, on-street parking, pedestrian-friendly environments, reduced minimum parking requirements etc. Main streets and traditional municipal centers are the lifeblood of our communities – their protection should be our priority.

b. Review all Main Streets and key local roads classified as state highways (Class II) for possible reclassification as local roads (Class V) or programmatic exemption from state minimum design speeds.

c. At local option, keep all reconstruction of roads, bridges and streets within their existing width and scale ("footprint").

d. Encourage coordination of local master plans with neighboring municipalities, especially along common transportation corridors (road, rail, trail corridors etc.). Consider the idea of "Village Oriented Development" (VOD), where the distinct character of villages within a municipality is maintained and strip development between villages is avoided.[34]

2. ***Focus on pedestrian safety*** – especially in residential areas. Eliminate speed-based performance measures ("Level of Service") for state roads in urban areas at local option.[35] Actively promote bicycling and walking by connecting and adding sidewalks wide enough for people to meet and talk. Streetscape improvements, brick sidewalks and crosswalks, traditional street lighting, benches and other amenities increase street life as well as property values.

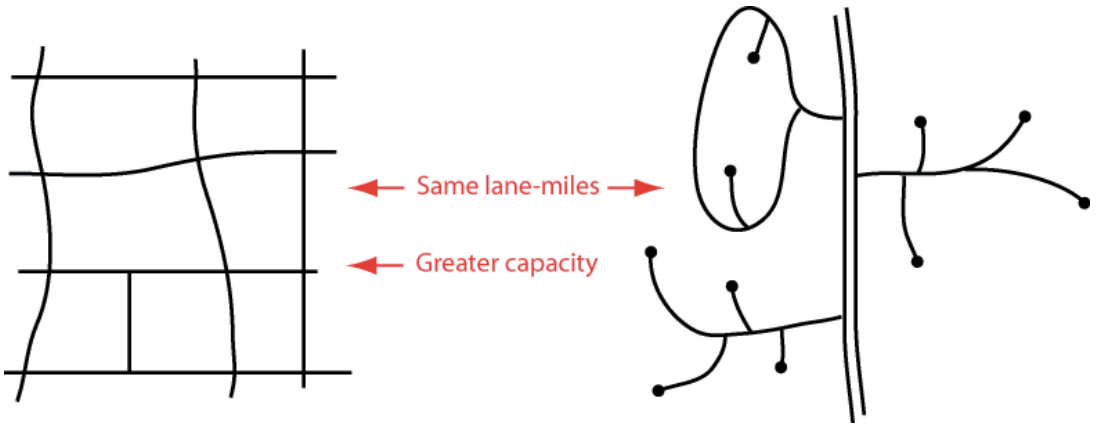
3. ***Create incentives to coordinate land use and transportation at the local level:*** The most effective place to make the transportation and land use connection is within our cities and towns. The state could favor such local initiative through such actions as (1) more funding to cities and towns to address transportation and land use issues simultaneously, (2) higher priority for funding of projects where such coordination is evident, (3) more technical assistance as well as funding for this purpose, and (4) targeting and expanding state-aid bridge and highways funds to areas where RPCs and towns have adopted integrated transportation and land use plans.

4. ***Increase local technical assistance:*** Our municipalities are doing a great job, but they often lack the resources to plan effectively. Development proposals drive the process, which can become haphazard. The Community Technical Assistance Program (CTAP), developed to address community impacts of the I-93 expansion, is a good model for statewide implementation. Cross-agency, local-assistance planning SWAT teams are another. Public education services for local planning boards are a third. See appendix for a discussion of proposed NHDOT action to make CTAP tools and programs available to all communities.

5. ***Engage the private sector*** to make more efficient use of the transportation system

through such initiatives as implementing flex time and telecommuting policies, "guaranteed ride home" programs, and private transit services. The employer-funded public transit service of the Upper Valley Transportation Management Association (UVTMA) is a good example of a local private sector initiative in this area.

6. ***Increase street connectivity to preserve state highway capacity:*** Sometimes the best way to fight congestion is to remove trips from the state system. We can do a better job of keeping traffic off state highways by increasing the connections of local roads, and otherwise restoring and protecting the traditional street grids of our cities and towns (see graphic).



A CONNECTED STREET NETWORK IS MORE EFFICIENT THAN A DISCONNECTED STREET NETWORK.

We received feedback at the public meetings that this graphic, showing the benefits of connected street grids over disconnected streets (called "cul-de-sacs") failed to acknowledge that some people like disconnected streets because they eliminate through-traffic, making streets safer. We agree that streets are safer with less traffic traveling at slower speeds. However, connected streets also reduce traffic, by diffusing it across the network, and can lower speeds through flexible street design (narrower lane widths, wider sidewalks, tree plantings, etc.). Good neighborhood street design uses a combination of interconnected streets and good cul-de-sacs (e.g. smaller residential circles that don't create long dead-end streets). The point is to avoid channeling all traffic onto a single road (usually a state road) that cannot support it.

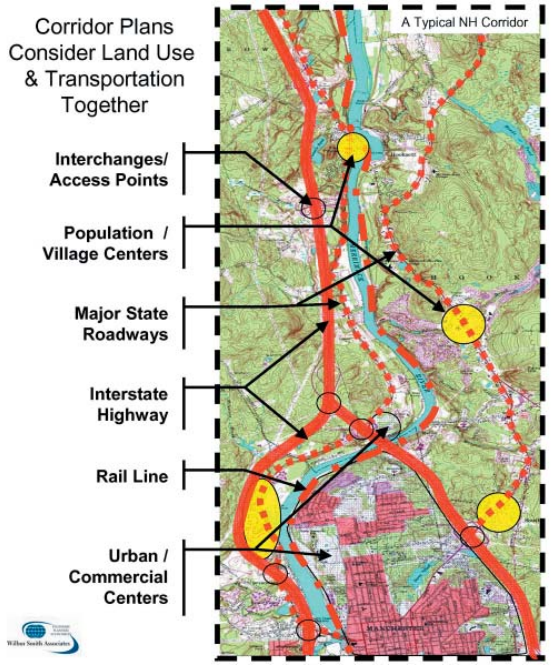
Regional

Strong local-regional partnerships can foster support for both improved transportation capacity to assist local problem-solving and regional connectivity. The nine Regional Planning Commissions are the logical forum for such cross-jurisdictional collaborations. Recommendations for action to improve regional efforts include:

7. ***Build RPC capacity to integrate transportation and land use planning:*** RPCs have the important job of collecting and vetting transportation projects for inclusion in the 10-year plan, but few have the capacity to effectively evaluate their collective land use impacts. The

Department could assemble inter-agency teams to provide education, training, technical assistance and funding through RPCs to connect zoning and transportation plans across jurisdictions. This program could also provide cross-training between disciplines to integrate transportation and land use planning ("lend an engineer, borrow a planner"). The bottom line, however, is that RPCs need more reliable and adequate sources of funding.

8. ***Develop multimodal corridor plans to better understand, and coordinate transportation and land use:*** Whenever possible, before the Department builds a new road segment or otherwise expands capacity, it should develop a "corridor plan" to study how traffic will be generated and distributed along the road (see sidebar on corridors).[36] These plans can also be a vehicle for engaging local leaders in a discussion of how expansion, reconstruction, or increased access will affect adjoining land uses and of tools, techniques and programs to avoid strip development.



CORRIDORS ARE ROADWAY SEGMENTS, INCLUDING ALL RELEVANT ROADWAY FEATURES, CONNECTING TRANSPORTATION ROUTES AND ADJACENT LAND USES, THAT TOGETHER REPRESENT A PROJECT AREA.

9. ***Develop corridor management plans to protect our road investments:*** Once a project is built the Department cannot preserve system capacity without local help. This requires joint development of corridor management plans that outline the roles and responsibilities of state and local governments in managing corridors in terms of the qualities to be preserved and the actions by all parties to maintain these qualities. Agreements implementing such plans should be negotiated before corridor improvements begin. Where local technical assistance is needed for implementation, the state should provide such assistance.[37]

10. ***Broaden citizen engagement in regional transportation planning:*** Our participation on this statewide committee has educated us on the pervasive role of transportation in the social, economic and environmental well-being of our communities. More citizen engagement on transportation issues is critical. While regional Transportation Advisory Committees (TACs) help develop and prioritize projects for 10-year plan consideration, they are mostly made up of public officials – both appointed and elected, including members of city councils, boards of aldermen or boards of selectmen. The voice of private and independent sector groups, as well as transportation consumers such as the interests represented on this committee, should be added to these regional conversations.

Statewide

We need to think inter-regionally, both internally (across RPC jurisdictions) and externally (across state lines) to address transportation/land use connections at different geographic levels.

The Department has been a leader in promoting conversations around building regional and local capacity to effectively make these connections. Recommendations include:

11. ***Develop a truly comprehensive, statewide transportation plan that serves a broader vision for the state:*** Include other state agencies with resources to contribute in the development of this plan. These include, at a minimum, the Departments of Health and Human Services (transit funding for youth, the elderly, disabled and low-income groups), Resources and Economic Development (economic development planning and public/private partnerships), Environmental Services (promotion of alternative transportation services), Office of Energy and Planning (smart growth planning) and Department of Safety (traffic law enforcement and assistance). We recommend that this comprehensive state transportation plan be included as an element of the legislatively mandated, but never implemented the State Development Plan.

12. ***Adopt a "wellness" program approach for the state system:*** Partner with municipalities to fund small projects now which, when combined with local land use plans, can keep the system healthy, prevent future problems and may even eliminate the need for major infrastructure improvements in the future. The goal should be "faster, better and more efficient" over "bigger, slower and more expensive." These "common sense solutions" should be the focus of project planning, in cooperation with local partners, at all stages of state project planning.

13. ***Clarify transportation language and information to make the process transparent and accessible to the non-professional:*** For citizens to affect transportation decisions transportation planning must become meaningful and understandable. Local, regional and statewide planners should also be able to draw from common data so everybody is "on the same page" about transportation trends, impacts, alternatives, processes and financing. The GRANIT center at UNH, which collects and maps data on geographic information systems (GIS) is one possible partner in the development of this common platform.[38]

14. ***Develop new performance measures for transportation health:*** Traditional transportation performance measures focus on vehicle speed (faster is better) and vehicle congestion (less is better). We recommend people-oriented measures, such as making trips times more reliable, increasing trip choices, and reducing household costs of transportation. We also support periodic "customer satisfaction" surveys and other on-going public outreach to encourage easy communication between the department and its various customers.

15. ***Improve statewide public transportation services.*** Three actions that NHDOT can take within present restrictions on uses of state gas tax revenues include (1) joint development and management of statewide ride-sharing programs and road improvements such as park-and-ride lots, (2) encouragement of Transportation Management Associations (TMAs) in urban areas, and (3) road and street improvements in support of transit-oriented development projects (TOD).

Another theme that emerged from the public hearings was the idea of taking personal responsi-

bility for our traveling behavior. This means considering our individual choices about how, when and where we travel. While the committee's recommendations are directed to the NHDOT, the Executive, the Executive Council and the state legislature, we also acknowledge that we as consumers of transportation services can do more to meet our own needs for mobility and access through our choices on where we live and how we choose to travel. While living 50 miles from work may suit our individual lifestyle, it by be too much to expect NHDOT to deliver a congestion-free, easy commute to work as a result of such a choice.

These statewide recommendations have a common purpose – to help state, regional and local transportation and land use decision-makers better coordinate their efforts to implement our transportation vision for New Hampshire. How do we know if we are making a difference? Some indicators of successful coordination on transportation and land development issues include (1) the number and quality of transportation elements of local master plans, (2) the effectiveness of zoning and building ordinances to create and preserve traditional downtowns and neighborhoods, (3) the quality of projects proposed for the 10-year plan, (4) the visual quality and economic value of our transportation corridors and (5) more transportation choices for our citizens.

E. Let's start now! Five initial action items

Recommendations without actions are just words. We were particularly moved by the very strong message – heard over and over in virtually every community meeting – that change actually occur. An equally strong message, heard almost as frequently, was that nothing *would* happen, that the system was impervious to change. But change can – and should – happen *now* – not wait for two decades to pass. We believe it is critical to give people hope that change is possible, that new ideas can be acted on, that citizens have reason to commit their energies to improving the state's transportation plans.

The CAC decided to speak directly to these concerns. It has identified five best practices that are *already underway* in New Hampshire and which exemplify the ideas outlined in our recommendations. The CAC recommends that NHDOT act immediately to implement the recommendations by institutionalizing these best practices in its project work. Nothing would do more to give hope and promise to New Hampshire that action is possible, and would demonstrate the immediate relevance of this plan as an action plan.

The CAC has worked with NHDOT to single out five specific projects that exemplify the core ideas we heard over and over again, which give life to the recommendations we have made in this report, and which advance the goal of institutionalizing existing best practice. What better way to show that change can happen than by seeing it happen? These projects, and the recommendations they support, are as follows:

1. The Conway Bypass: Restoring traditional town centers

The problem: SR 16 through Conway serves both as the town's Main Street and as a primary transportation route into the White Mountain National Forest. Congestion caused by through traffic reduces regional access as well as access to, and enjoyment of, the town center for its citizens. The town high school is also located on the road, causing safety problems for students walking to school. While a bypass south of town is presently contemplated to relieve downtown congestion, there is a danger that it will draw local retail traffic away from downtown. The town has adopted a master plan envisioning a revitalized, walkable town center, but the bypass proposal does not explicitly assist the town in realizing this vision.

Existing best practice: The New Hampshire Main Street program is a cooperative effort between the public agencies and private volunteers to restore traditional town main streets, primarily through support for downtown businesses, as well as design solutions for downtown streetscapes. New Hampshire DOT is already supporting such efforts through the funding of placemaking charrettes and streetscape improvements in Littleton, Chocorua, Meredith and elsewhere. This practice should be institutionalized within NHDOT wherever a town center is a state highway.

The solution: The CAC recommends that NHDOT locate and design the Conway bypass south of town in a manner that is close enough to the town center to provide access to downtown retail stores. We further recommend that a planning team of state, regional and local representatives be assembled to develop a corridor plan that explicitly supports the town master plan objective of creating a compact village with walkable neighborhoods. A boulevard design could be considered, along with connections to the existing street grid. SR 16 through the town center could be reclassified as a town road and restored as a traditional Main Street, with improved bicycle and pedestrian access to the high school.

2. Connecting transportation and land development: Expanding passenger rail in New Hampshire

The problem: More than 80,000 New Hampshire citizens commute across the border to Massachusetts every day, almost all by car. The average morning commute from Nashua to Boston is about two hours. Sprawling land uses make transit difficult, and state support for transit is limited due to constitutional restrictions on the use of state gas tax revenues. As a result, commuters have few options but to drive, further clogging our highways.

Existing best practice: Nashua area officials have almost completed the environmental and engineering analysis needed to secure federal funding for extension of commuter rail from Lowell to Nashua. Zoning changes needed to support "transit-oriented development" near the rail stations are underway, and private sector interest in such development is high. By concentrating dense, mixed use development around designated station sites the project can bond against the increased property tax revenues from these developments to pay part of the capital costs. Dense ("transit-oriented") development will also increase ridership, offsetting operating costs.

The solution: We recommend that NHDOT work with its sister state agencies to assist regional and local partners in facilitating transit-oriented development around prospective transit stations. This can be done by providing road, street, and parking infrastructure in support of the project. Parking fees can also be used to offset operating costs. NHDOT and its sister agencies can support "commuter choice" programs.

3. Helping non-drivers get where they need to go: A comprehensive statewide program for all non-drivers

The problem: About 25% of New Hampshire citizens don't drive (and this percentage will grow as the population continues to age), but there is currently no integrated statewide transportation planning process. There are countless community transportation planning efforts, but many are carried out in isolation, with rider access restricted by region or funding stream. Special service vans funded by public and private sources have excess capacity and travel redundant routes. The result is inefficient planning and services: workers lose access to jobs, seniors miss medical and social appointments, and low-income populations can't get to needed services. In addition, almost all inter-regional travel requires a car.

Existing best practice: To meet the overwhelming need for improved transportation resources, Easter Seals New Hampshire spearheaded "Getting There." Through "Getting There," Easter Seals developed a framework that integrates transportation plans with critical needs such as housing, employment, public safety, after school programs, etc. Easter Seals developed a model for providing statewide Transportation Demand Management services for non-drivers, including a call center that works closely with all transportation providers, social service agencies, private industry, municipalities, regional planning entities, and the State. This model builds on the transportation needs of all non-drivers and leverages funding for maximum responsiveness.

The solution: We recommend that NHDOT support, help design, and manage a statewide transportation program that brings together state and local transportation providers with social service agencies, private industry, planning entities (state, regional, municipal), and citizen groups to better serve the needs of non-drivers. We are impressed by what Easter Seals has already accomplished to meet a need that has been poorly met here and in most states; we support this model as being particularly suitable for New Hampshire, including relying on local providers and not turning over the delivery of human service transportation to a large, out-of-state provider. A Transportation Demand Management model will produce more trip choices for NH citizens, the greatest service expansion, improved efficiency and more public-private funding partnerships by leveraging the transportation needs of all non-drivers with a very broad range of resources (medical, vocational, educational, social, commerce, etc, serving seniors, immigrants/refugees, people with disabilities, low-income families, and others in need of transportation). NHDOT should support this with the development of a statewide action plan to provide public and community transportation services between regions.

4. Reducing downtown congestion in Concord

The problem: Lack of transportation choices is not limited to those with special transportation needs; if affects everybody, even those who drive. More choices are needed, especially in our municipal centers. Two structured parking garages are proposed in downtown Concord because too few options exist to driving downtown. The thriving Concord hospital is also expanding and employee parking contributes to the pressures on local streets. More choices are needed.

Existing best practice: The Upper Valley faced this same issue and came up with an innovative alternative to building more parking. Private employers (Mary Hitchcock Hospital and other employers) created and funded the Upper Valley Transportation Management Association (UVTMA) to improve employee public transit services in the Hanover-Lebanon region. By coordinating with Advance Transit, the regional transit service in the Lebanon-Hanover area, employers were able to provide free transit service to their employees, avoid the cost of building new parking facilities, and reduce traffic.

The solution: We recommend that DOT partner with Concord Area Transit (CAT), as well as local private and public sponsors to create a similar Transportation Management Association for the Capital Area Transportation Management Association (CATMA), which may have the potential to reduce the need for new structured parking. We also recommend that the City consider, in conjunction with its Opportunity Corridor Master Plan, an option for an intermodal

center hosting several public transportation service providers be considered to serve as a focal point and catalyst for the TMA. NHDOT could collaborate with CAT to integrate its service with CATMA routes and encourage ridership for state employees, shoppers, and others needing to be downtown, at the State Hospital, other major employment centers, and other destinations.

5. Helping communities manage growth: I-93 Community Technical Assistance Program

The problem: New Hampshire communities are experiencing problems of growth and development, especially along the southern tier and the Lakes Region. The wide range of challenges include how to protect traditional town centers, minimize sprawl, contain the cost of new public infrastructure (water, sewer, utilities, roads, etc.) and traffic. With limited local budgets for planning, zoning and enforcement, our communities feel ill-equipped to meet the transportation and land use challenges that come with growth.

Existing best practice: NHDOT is presently helping the 26 communities facing challenges relating to growth and development along the I-93 corridor from Manchester to Massachusetts through a cooperative Community Technical Assistance Program (CTAP). This CTAP program provides planning tools, techniques and assistance to these towns, both directly and in partnership with the RPCs, to build local planning capacity.

The solution: We recommend that NHDOT partner with the Office of Energy and Planning (OEP), other sister state agencies, and the RPCs to provide tools, techniques and education programs on dealing with growth and development to all New Hampshire Communities. Some of these tools and programs are already developed under the existing Community Technical Assistance Program (CTAP). Working with its state and regional partners, NHDOT could pool state agency resources, coordinate technical assistance programs across agencies, and provide community assistance services similar to CTAP to all the RPCs and their constituent communities.

Community Technical Assistance Program (CTAP): A Smart Growth Corridor Initiative

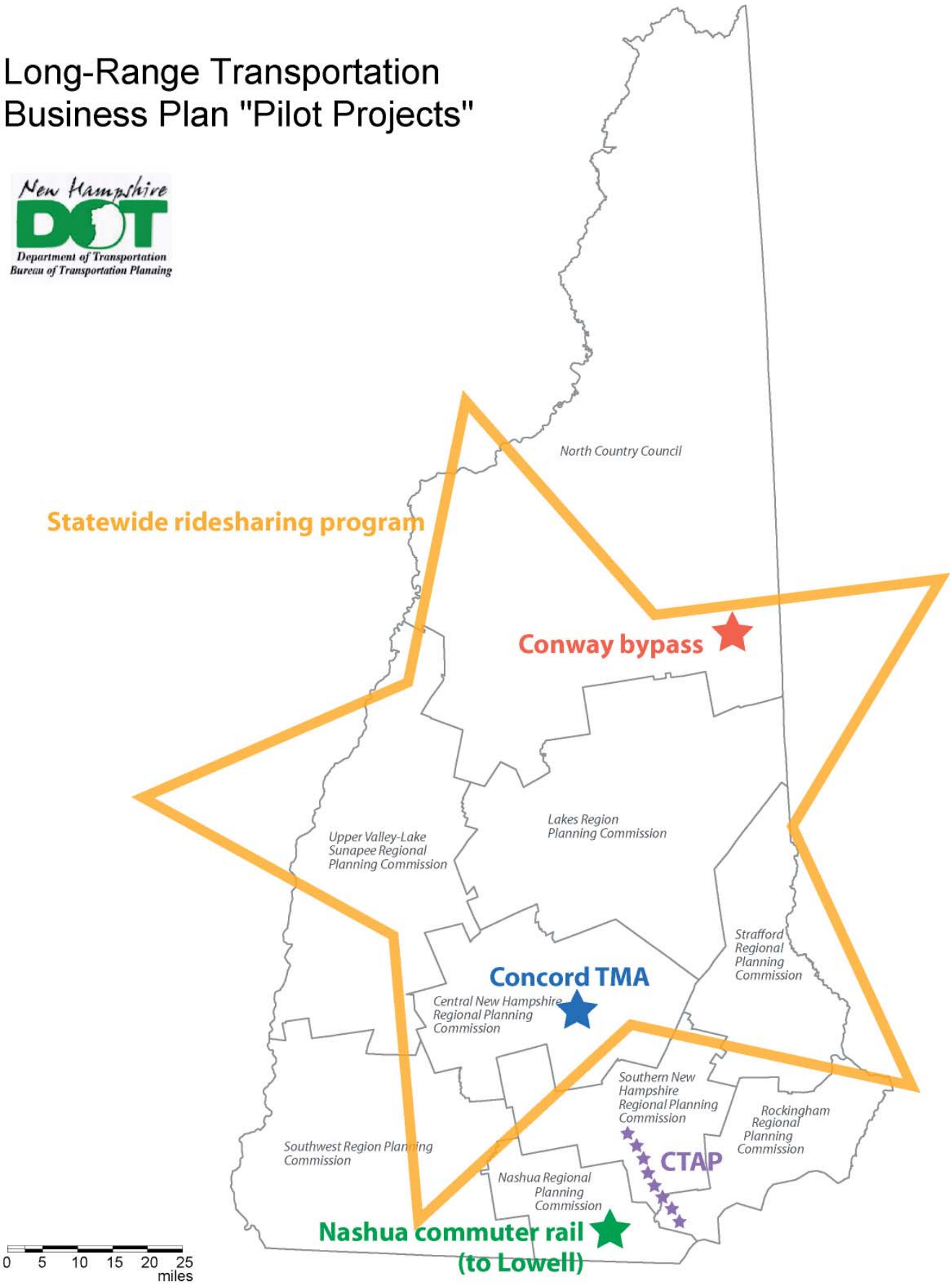
What it is:
An initiative to help the 26 communities in the I-93 corridor develop and implement a blueprint for growth through technical assistance and innovative land use planning.

Principles:

- Growth is inevitable, sprawl is not
- The communities are the customer
- Community character drives growth
- The agencies (federal and state) are a resource
- Consensus is the goal, collaboration is the process
- Agencies, communities and non-profit organizations are equal partners
- Agencies collaborate to provide one-stop shopping for planning tools and assistance
- Assistance includes financing help and staff expertise
- The process is transparent and open to the public

This is not the end of a statewide action agenda for transportation – but it is a start. The goal is to leverage existing best transportation practices and to institutionalize them in statewide transportation practice. NHDOT can provide additional leadership by coordinating with its sister state agencies to also institutionalize these practices for common benefit.

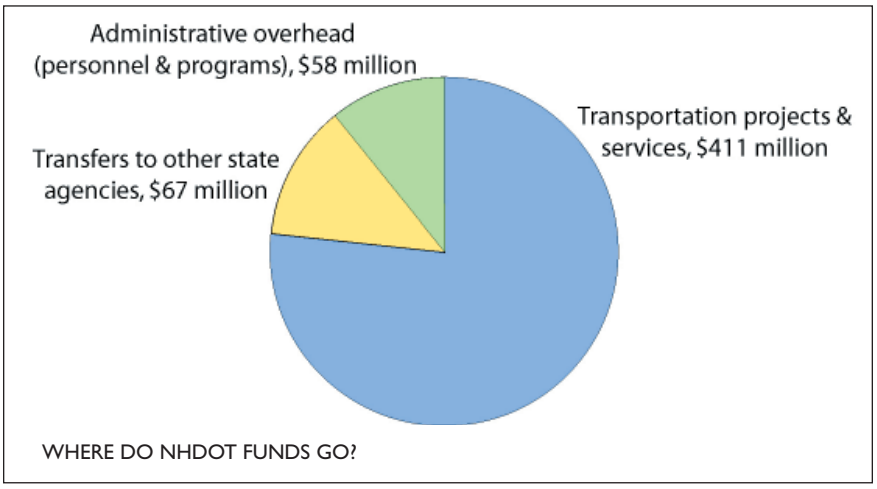
Long-Range Transportation Business Plan "Pilot Projects"



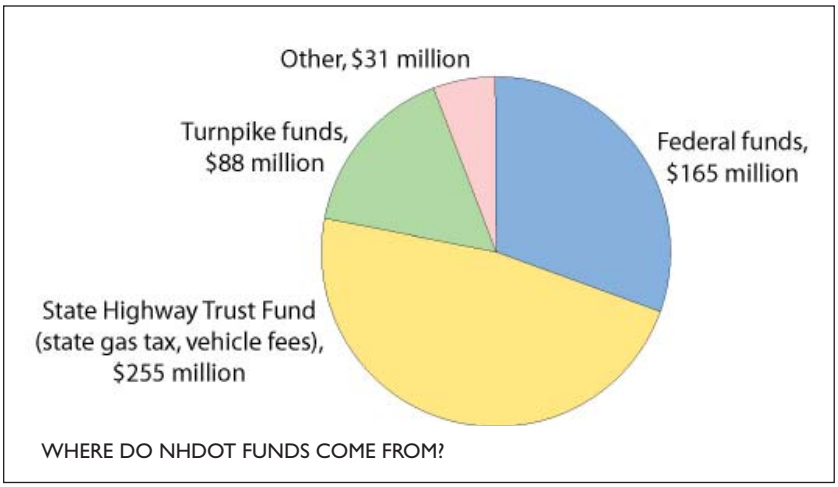
F. Investment strategies that diversify the system

We left the issue of transportation finance for last for two reasons: (1) we have a tradition of small, low-cost government and throwing money at a problem should be our last, not first, option, and (2) more money, without a clear investment strategy to achieve specific public outcomes, often simply makes matters worse. Congestion keeps getting worse. Our landscape continues to deteriorate. We need a different strategy. Here are some ideas:

16. ***Leverage public funds with private investments.*** Transportation improvements add value to land. The Department can leverage that value to secure developer participation in the cost of access roads or transit improvements to serve that development. This is especially important for developments around transit stations where private funding and/or new property tax revenues can be used as a local match for federal transit assistance since state gas taxes cannot be used for this purpose.



WHERE DO NHDOT FUNDS GO?



WHERE DO NHDOT FUNDS COME FROM?

17. ***Creative tax strategies can work:*** Rail and transit services need clustered, more dense developments to justify service. Such developments yield high tax revenues per developed acre. Nashua Rail is considering bonding against these future tax revenues to help fund extension of rail service to Nashua. This "tax increment financing" (TIF) approach is worth watching as a model.

18. The federal ***Congestion Mitigation and Air Quality (CMAQ) and Transportation Enhancement (TE) programs*** pay 80% of the costs of transportation projects that reduce air pollution and support non-highway transportation improvements.[39] CMAQ funds can be used creatively to encourage employers to set up alternative transportation programs for their employees, such as carpools, vanpools, guaranteed-ride-home programs and transit vouchers (which can also be used as tax credits) using private funds from benefiting companies as the match. TE funds could be targeted towards denser areas to increase walking and bicycling.

19. When the Department takes public open space, wetlands or other valuable lands for highway projects it often supplies mitigation funding to replace the lands lost. These mitigation funds could be combined with the states to maximize conservation value while promoting transportation-efficient land uses. A pilot program is underway implementing this idea. We recommend its continuation and expansion while also leveraging other excess lands owned by the Department for this purpose.

We have made no funding recommendation related to potential increases in, or indexing of, the state gas tax. While several speakers at the public meetings asserted that transportation is underfunded and pointed to the gas tax as a potential source of new funding, the CAC was divided on this issue. While many members agree that new resources are needed there was also a view expressed that we should learn to live within our means, not look for new funding sources.

Likewise, no consensus exists whether to expand allowable uses of the gas tax to "non-highway" purposes, as is presently required by our state constitution. While there is significant support within the committee for increased state funding of alternative modes of travel, other members hold the view that our highway needs alone will exceed the revenues raised through gas taxes and that priority should be assigned to highway needs from taxes generated by highway users.

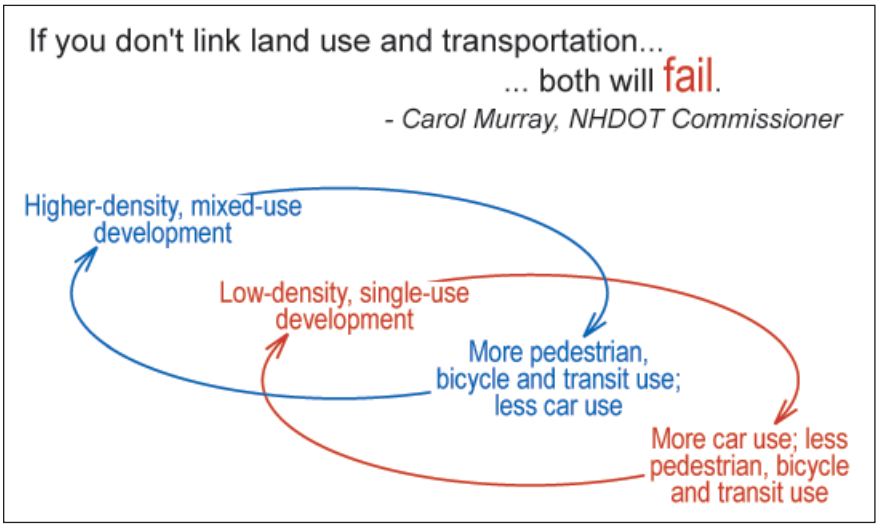
Finally, while a majority of the committee supports the recommendation that highway mitigation funding be leveraged with other state funds to preserve open space and promote transportation-efficient land development, a minority holds the view that state highway funds should not be used to set aside land as undeveloped areas.

The point here is to use new funding strategies to (1) diversify funding streams and (2) increase transportation choices while avoiding the inevitable conflicts that arise when increases in, or expanded uses of, the state gas tax are proposed as strategies for achieving one or both of these objectives. At 37.9 cents (18.3 cents federal, 19.6 cents state), New Hampshire ranks 35th in total state gas tax burden as a percentage of the cost of gasoline.[40] Nevertheless, a funding

stream characterized by a diversity of sources and uses does more to improve the overall transportation system than one restricted to a single mode of travel. Expansion of sources of transportation funding beyond the gas tax are needed, especially sources that can be used for non-highway modes.

Conclusion: We need a comprehensive vision for statewide growth and development

Transportation is a powerful tool. Well-managed, it can shape communities, provide essential access to jobs and services to citizens of all ages and abilities, connect friends and families, help us enjoy – and preserve – the special places and destinations of our state, get goods to market and children to schools, connect young and low-income workers to jobs that can help them get a start in life, and promote public health. Poorly-managed, it can destroy sense of community and place, isolate populations that have special transportation needs, undermine our economic foundations, fragment ecosystems, pollute the air and water, and generally reduce our quality of life. It is the proverbial two-edged sword, a sword each of us wields every day in the choices we make about where – and how – we live, work and play. If we have learned anything during our service on this committee it is the recognition that personal responsibility plays a big role in the success of failure of public efforts to serve the transportation needs of our state.



At our first meeting as a committee Commissioner Murray said she decided to develop a citizen-based transportation plan because "transportation is the game board which everything else is played upon." During the past 18 months we have come to understand the wisdom of that statement. We have also been impressed with the level of attention, sincerity and staff support provided by the Department in the development of a citizen-based long-range transportation plan. Remarkably, it is the first and only effort nationwide to "put the customer in the driver's seat" of transportation planning. We appreciate the opportunity to serve as the public's voice in this process.

We end with the observation that a long range transportation plan only makes sense in the context of an overall vision for the state and its regions. We have offered that vision here for transportation, but we need to tie it to a broader statewide vision to make sure we are serving our customers in the context of broad societal goals. We also need regional visions to serve the particular needs of our various growth regions. They also could serve as the basis of project screens for the 10-year plan that implements these visions and goals.

New Hampshire is a small, beautiful, but threatened state. We cherish our heritage as a collec-

tion of small communities that work together to manage the duties of public governance, and to get things done. However, the problems of growth and development are upon us. It is not a question of if we will grow, but where and in what manner. We hope that this citizen transportation plan will help guide the NHDOT, and all of us, as we grapple with these important public choices.

Footnotes

[1] Findings from Office of State Planning, "Report to Governor Shaheen on Sprawl," (1999). In response the Legislature created a Growth Management Committee to "examine the effects of sprawl on the economy, taxes, loss of open space, air quality, water quality, wildlife habitat, community identity and quality of life (HB 207, 1999).

[2] Draft recommendations, p.2.

[3] Texas Transportation Institute, Urban Mobility Report (2002).

[4] Robert Putnam, Bowling Alone (1999).

[5] All figures based on 2000 census. See www.dataplace.org.

[6] New Hampshire Statewide Transportation Model 2005 and historical trends.

[7] White Paper, (WSA) p.3

[8] WSA White paper at 17.

[9] Based on population (2002) of 1.26 million divided by 955,000 active NH drivers' licenses. Highway Statistics (2002). The percentage is probably a bit higher since some people who don't drive still retain a driver's licenses for identification purposes and the licenses number covers both commercial and regular licenses. Some people have both.

[10] WSA White Paper at 5.

[11] Surface Transportation Policy Project, Aging Americans: Stranded Without Options (2004). Statistics from National Personal Transportation Survey (2001).

[12] Stranded without Options at 1.

[13] All figures from Institute on Disability, "New Hampshire Speaks out, We want Public Transportation!" a random statewide telephone survey of 749 adult residents, 2005 ("New Hampshire Speaks Out").

[14] Bureau of Transportation Statistics, Survey of State Funding for Public Transportation, 2003.

[15] This restriction on the use of state highway fund revenues is written into the state constitution.

[16] FTA operational assistance is allowed only in areas of less than 200,000 population. Both Manchester and Nashua are expected to reach this population threshold by 2010 at which time they must assume 100% of the cost of their transit operstions.

[17] New Hampshire law allows towns to add up to $5 to motor vehicle registration fees for "transportation" purposes, including transit, but only three towns have done so.

[18] Surface Transportation Policy Project, Driven to Spend (2005).

[19] There was no public consensus on what to do about gas prices, nor was the price of gas viewed as a strategic issue. The expressed strategic issue was lack of transportation options to avoid paying high gas prices, not the price of gas itself.

[20] American Trucking Associations, Inc. Freight Forecast to…2016. Prepared by Global Insight, Inc. and reproduced in American Transportation Research Institute (ARTI), Trucking Industry Trends in New Hampshire, (undated).

[21] WSA white paper. Figures are from 1998-2020.

[22] All figures from ATRI.

[23] The combined state and local road network is about 17,000 miles, broken down as 4,800 miles of state highways (including 225 miles of Interstate highways) and about 12,000 miles of local roads and streets.

[24] We heard both the view that public policy should "limit truck traffic" and the opposing view that "rail freight is dead." As a citizen commission we can report public concern about rising freight traffic, but we cannot report any consensus, or even majority opinion, on what to do about it. This issue needs more expert analysis.

[25] State agency purchase of alternative fueled vehicles has been adopted as a state DOT policy in other states (California, Massachusetts. Maine, New Jersey etc.) and a "hydrogen highway" has been designated in New York State to serve hydrogen fueled vehicles.

[26]12.% of state gas tax revenues are allocated to municipalities as a formula block grant. The rest is discretionary state-aid bridge and highway support and other discretionary aid. While cities and towns maintain more road miles than the state, the state supports more lane miles since state highways are much wider. The state system also serves the most traffic.

[27] The NH Supreme Court ruled in April 2004 that the state can fund only public highway projects with state gas tax revenues, which are constitutionally restricted for "public highway" purposes. While federal transportation assistance can fund other travel modes, the requirement that the state match those funds (usually with state gas tax revenues) means that almost all federal funding assistance is also allocated to roads and highways.

[28] This includes new funding assistance to New Hampshire under the federal SAFETEA-LU law enacted in September 2005.

[29] This is a possible strategy for partially financing the Nashua Rail project

[30] The Forest Society, "New Hampshire's Changing Landscape," (1999).

[31] "Fifty Years of Growth: Analysis of the Impacts on the Nashua Region" NRPC (2001).

[32] State actions also affect transportation and land use, especially in the siting of state facilities. Former Governor Jeanne Shaheen issued two Executive Orders noting the rapid rate of land consumption in the state and directing all state agencies to consider the land use effect of their decisions. See E.O. 99-2, 2002-8.

[33] Many local main streets are state highways which, by law, must have a safe design speed of at least 30 miles per hour. However, waivers of this requirement-called design exemptions—are allowed through application to the Department.

[34] The Concord 2020 "City of Villages" vision plan is a good example of this best local panning practice.

[35] Level of service is a letter-based performance metric keyed to desired vehicle speed. It is the speed a car should be able to travel on any specific roadway on the 15th most congested day of the year at peak hour traffic. For example, a Level of Service (LOS) of "C" means that a car should be able to travel at an average speed of 30 mph at the peak hour of the 15th most congested day of the year along the roadway.

[36] A "corridor" is a road or highway segment, usually defined by mileposts or other physical features, within which all transportation infrastructure and land uses are considered together for planning purposes. Corridor plans allow transportation projects and adjacent land uses to be planned together, not separately. This is also known as integrated transportation and land use planning, the goal of which is to assure that transportation improvements and adjacent land development activities are mutually supportive.

[37] A key issue in these plans is how to manage corridors for both local and regional or even statewide needs. Local interests may want to restrict traffic in order to advance community values, while regional or statewide interests may require that municipalities accommodate traffic going across their boundaries to serve the transportation needs of a broader area. Usually, trade-offs are required. Managing traffic for multiple outcomes and multiple constituencies is the function of corridor management planning.

[38] Geographically Referenced Analysis and Information Transfer (GRANIT) is a collaborative effort of state, regional, municipal, non-profit, university, federal and private partners to deliver GIS data, maps, technical tools and training to users in the state and region.

[39] CMAQ funds actually can be used on some highway projects as long as the purpose of such expenditures is not to provide additional capacity for single occupancy vehicle use.

[40] American Petroleum Institute (September 2005). In comparison, New York ranks first at 62.3 cents and Alaska last at 26.5 cents. These figures include the 18.3-cent federal gas tax as well as the state gas tax.

Appendix A: Charge to the Advisory Committee for the New Hampshire Transportation Business Plan

October 1, 2004

Your charge, as a member of the Advisory Committee for the State's first Long Range Transportation Business Plan for New Hampshire, is to help DOT transition to a new transportation environment in which we must consistently apply best business practice to the delivery of our services to our core customer - the citizens of the state. Specifically, your central role is to establish a strategy for implementing and institutionalizing the new focus on building partnerships to meet the needs of New Hampshire communities.

To help develop the Business Plan, your charge is to establish strategic direction for future investment in, and management of, state transportation assets over the next 20 years. Key desired outcomes for the Advisory Committee include:

- A review of existing agency performance against established federal, state and community transportation goals and objectives.

- Market research of customer demand for outcomes of state transportation service delivery through public outreach and stakeholder engagement. Establishing and embedding a culture of respectful communication with agency customers is a core desired outcome of the Business Plan. Participating in an "in-reach" process to provide training and support for new strategies is included in this charge.

- A realistic Transportation Vision for meeting customer demand in the context of anticipated constraints on future federal, state and local transportation revenues over the 20-year planning horizon.

- Explicitly connecting land use and transportation decisions and practices to help New Hampshire communities better protect their quality of life and community character while growing and adapting to change.

- Identifying and prioritizing alternative strategies for implementing the vision through the 10-year State Transportation Improvement Program (STIP), agency strategic plans, inter-agency agreements, and regional and local partnerships.

- Improvements in the project development process to serve customer needs faster, better and cheaper through early and continuous public engagement, and help to meet community needs in a time of shrinking federal resources.

- A monitoring process to assess agency performance against specific metrics or a

> "dashboard of indicators" that tracks overall transportation system performance in real time. Establishing and supporting a culture of transparency and accountability for outcomes is a core objective of the Business Plan.

Transportation decisionmaking in New Hampshire is guided by the New Hampshire Department of Transportation's Mission Statement:

> To plan, construct and maintain the best possible transportation system and State facilities in the most efficient, environmentally sensitive and economical manner, utilizing quality management techniques consistent with available resources and mandated controls.

With direction from the 1995 State Long Range Transportation Plans, the selection and timing of specific projects is governed by NH's Ten Year Plan. Established by HB 228:99, the Ten Year Plan process has established transportation priorities for over ten years.

In the most recent update of the Ten Year Plan (2005 – 2014), many issues were raised concerning the selection process, allocation of funds, and the timing of projects. As the final authority in the process, the NH Legislature chose to maintain the priorities of previous versions of the Ten Year Plan while acknowledging that funding shortfalls had produced a fourteen-year plan.

As the bi-annual process begins again, the issues of transportation needs, the time to address these needs, funding for solutions, and dissatisfaction with the Ten Year Plan and its process all need resolution.

In this context, the role of the Advisory Committee, with input from the public and the Department's Staff In-reach Committee, is to establish a strategic direction to address these issues.

Thank you again for agreeing to serve as a member of the Long-Range Transportation Business Plan Advisory Committee.

Appendix B: Members of the Advisory Committee for the New Hampshire Transportation Business Plan

Lew Feldstein, Chair	NH Charitable Foundation
Raymond S. Burton, Vice Chair	Executive Councilor
Michael King	North Country Council
Shawn LaFrance	Foundation for Healthy Communities
George Bald	Pease Development Authority
Steven Lewis	SLI Consulting
Patti Carrier	NH Ball Bearings
Chris McMahon	Easter Seals
Maura Carroll	NH Municipal Association
Claira Monier	NH Housing Finance Authority
Jane Difley	Society for the Protection of NH Forests
Senator Chuck Morse	Vice Chair, Senate Transportation Committee
Cynthia "Mil" Duncan	Carsey Institute, UNH
Chuck O'Leary	Former NHDOT Commissioner
David Fink	Guilford Rail
Bill Norton	Norton Asset Management
Nancy Girard	Conservation Law Foundation
Bob Sculley	NH Motor Transport Association
Kathy Hersh	Nashua Community Development Director
Cliff Sinnott	Rockingham Regional Planning Commission
Jim Jalbert	C&J Trailways Bus Co.
Ed Smith	NHDOT Policy Director
Dave Juvet	BIA/Safe Roads NH Coalition
Carol Murray	NHDOT Commissioner