The Northern Forest Sustainable Economy Initiative:
The Maine and New Hampshire Context

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# Table of Contents

Section 1. Executive Summary .................................................................................................................................................. 3  
1.1. Report Overview .............................................................................................................................................................. 3  
1.2. Cross-Cutting Findings .................................................................................................................................................... 3  
1.3. Assessment of the Five Preliminary Strategies ............................................................................................................ 5  
1.4. Tier 1 Multi-State Best Picks ........................................................................................................................................... 5  

Section 2. Assessment of Preliminary Strategic Directions .................................................................................................... 6  
2.1. Strategy #1  
**Strengthen, re-build, and connect the region’s core communities (population centers, service centers) as a foundation for new economic growth and as an antidote to sprawl.** .......................................................................................................................... 6  
2.1.1. Overview .................................................................................................................................................................... 6  
2.1.2. Affiliated Strategic Options and Opportunities ........................................................................................................ 7  
2.1.3. Best Practices and Key Resources ......................................................................................................................... 9  
2.1.4. Gap Analysis .............................................................................................................................................................. 9  
2.1.5. Tier 1 Opportunities .................................................................................................................................................. 10  

2.2. Strategy #2  
**Develop the region as a leader in sustainable, renewable energy development and use.** ............................................. 11  
2.2.1. Overview .................................................................................................................................................................... 11  
2.2.2. Affiliated Strategic Options and Opportunities ........................................................................................................ 13  
2.2.3. Best Practices and Key Resources ......................................................................................................................... 14  
2.2.4. Gap Analysis .............................................................................................................................................................. 14  
2.2.5. Tier 1 Opportunities .................................................................................................................................................. 14  

2.3. Strategy #3  
**Establish the region as a top-notch destination for adventure and heritage tourism, while honoring tourism sub-brands of each state and sub-region.** .................................................................................................................. 15  
2.3.1. Overview .................................................................................................................................................................... 15  
2.3.2. Affiliated Strategic Options and Opportunities ........................................................................................................ 15  
2.3.3. Best Practices and Key Resources ......................................................................................................................... 16  
2.3.4. Gap Analysis .............................................................................................................................................................. 17  
2.3.5. Tier 1 Opportunities .................................................................................................................................................. 17  

2.4. Strategy #4  
**Retain, expand, and diversify our farm and forest industries with a focus on sustainability and new emerging markets (e.g. certified wood, organic foods, local foods, etc.).** ................................................................. 18  
2.4.1. Overview .................................................................................................................................................................... 18  
2.4.2. Affiliated Strategic Options and Opportunities ........................................................................................................ 18  
2.4.3. Best Practices and Key Resources ......................................................................................................................... 20  
2.4.4. Gap Analysis .............................................................................................................................................................. 20  
2.4.5. Tier 1 Opportunities .................................................................................................................................................. 21  

2.5. Strategy #5  
**Create innovation and economic opportunity based on our natural and cultural assets through R&D and incubators. Link educational institutions with the natural resource opportunities and private sector applied research needs.** ........................................................................... 22  
2.5.1. Overview .................................................................................................................................................................... 22  
2.5.2. Affiliated Strategic Options and Opportunities ........................................................................................................ 22  
2.5.3. Best Practices and Key Resources ......................................................................................................................... 23  
2.5.4. Gap Analysis .............................................................................................................................................................. 23  
2.5.5. Tier 1 Opportunities .................................................................................................................................................. 25  

Section 3. Appendix .................................................................................................................................................................. 26  
3.1. Topic #1 Best Practices in Sustainable Development .................................................................................................. 26  
3.2. Topic #2 Farm and Forest Products .............................................................................................................................. 30  
3.3. Topic #3 Knowledge and Creative Economy .................................................................................................................. 35  
3.4. Topic #4 Infrastructure .................................................................................................................................................. 38  
3.5. Topic #5 Heritage and Nature-Based Tourism .................................................................................................................. 41  
3.6. Topic #6 Energy ............................................................................................................................................................... 44
Section 1. Executive Summary

1.1. Report Overview

The Northern Forest Sustainable Economy Initiative (SEI) embarks on an ambitious undertaking at a compelling time. The analysis contained in this report is designed to assist the SEI Steering Committee and project staff in understanding the policy, research and community economic development context within Maine and New Hampshire to inform the direction of the SEI. The method of inventory and analysis was a literature review, supplemented by interviews and personal knowledge. The content of the reports and initiatives reviewed were used to assess the appropriateness of the five preliminary strategic directions being considered by the SEI Steering Committee.

The report is organized in 3 sections:

Section 1 identifies overall cross-cutting findings and advice of the authors regarding promising directions and cautions.

Section 2 contains an assessment of each of the 5 preliminary strategic directions, beginning with an overview and going on to identify affiliated strategic options and opportunities, notable best practices and resources, areas needing further research (gap analysis) and Tier 1 opportunities for the SEI to consider in moving that strategic direction forward.

Section 3 summarizes the results of a literature review of reports and initiatives in Maine and New Hampshire since 1998 within six topic areas: (1) best practices in sustainable development, (2) farm and forest products, (3) knowledge and creative economy, (4) infrastructure, (5) heritage and nature-based tourism and (6) energy. The literature review was supplemented by a number of interviews. The full list of resources identified are contained in an electronic data base and do not appear in this report.

1.2. Cross-Cutting Findings

1.2.1. The Nature of Regional Engagement

The nature of how the Northern Forest Region embraces a unified approach to economic development is a major cross-cutting theme and worthy of lengthy discussion by the Steering Committee. How can a 4 state region move forward in a coordinated and mutually-reinforcing manner when so much of the actual economic activity occurs on the ground in hundreds of distinct communities that are working to discover and market their own unique assets? What is the process for developing grassroots engagement and buy-in for the regional initiative so that it is not perceived as top-down or competing with local and state efforts?

While there is likely no one right answer to this question, it is important for the SEI to provide region-wide leadership, yet support local, sub-region and statewide initiatives that are consistent with its goals. Five overall approaches seem especially potentially useful:

1. Developing region-wide systems that package, coordinate and add value to state and local initiatives. For example, the SEI could organize a collaborative region-wide trail network, market the services available to multiple users of these trails and raise funds to support trail development and maintenance.
2. **Creating an overarching identity brand for the North Woods** that could be applied across products and therefore not compete directly with sub-regional branding efforts that currently apply to a number of local foods, forest products and tourism regions. We suggest that branding the entire *quality of life and values* of the region may be the most promising approach, as this does not appear to have been done, is consistent with the current focus on quality if place in New Hampshire and Maine, and could have broad utilization into the future. This will require grassroots engagement to build psychological relationship of the region’s residents to this regional ecosystem in which they live and wish to prosper. Policy leaders and advocates in both Maine and New Hampshire are keenly aware of and discussing the need to preserve quality of place and market their states but an effort to capture these in a state level brand has not commenced to our knowledge. This brand could incorporate values such as a clean environment, community engagement, creative thinking, healthy lifestyles and collaborative action and provide a framework for directing R&D dollars across the entire region into products that build that brand (renewable energy and green chemistry, for example).

3. Identifying opportunity for new region-wide **economic clusters**. We suggest that **renewable energy** (already identified), **green chemistry** and **drinking water** (new suggestions) offer promising areas within the region. In each of these arenas, the competitive nature of universities and private companies must be recognized and addressed.

4. Developing **sustainability indicators** for the region that will unify the effort over time and provide a way to measure progress.

5. Creating an **ongoing collaborative leadership and communications vehicle** to sustain the regional effort.

### 1.2.2. Human and Civic Infrastructure

The five strategic areas as presented and six topics assigned for research did not address the importance of social capital as a critical component of the initiative. Attention must be paid to this area regardless of which strategic directions are selected. Within the context underlying the region are serious challenges for rural community survival that could undermine any economic strategy if ignored. These include stresses on delivering K-12 education, health care, transportation, social services and workforce/entrepreneurship/small business training. While it is beyond the scope of the SEI to solve these weighty challenges, the Initiative must address social capital, leadership development and recognize the challenges in delivering essential services to the region’s residents as it considers the region’s economic future.

### 1.2.3. Smart Growth Connection

As the SEI is being developed, momentum in both states, but especially in Maine, is very strong around protecting and investing in our quality of place. In both states the focus is understandably on addressing the needs of fast-growing communities. There is a very real danger that the Northern Forest region and communities addressing issues of decline will be frozen out of the conversation beyond land conservation and green infrastructure values. It is critical that the SEI position itself as relevant to these conversations and become engaged at the table. Resources available to implement SEI initiatives at both the community and R&D levels should be part of what becomes available from the Smart Growth discussions underway in both states.
1.3. Assessment of the Five Preliminary Strategies

It does appear following analysis that each of the five areas being explored has relevance and potential, except that the branding of farm and forest products will be difficult given existing state and local efforts. We recommend taking the branding idea to a higher level. We have noted critical omissions and process concerns that we have observed within this Executive Summary.

1.4. Tier 1 Multi-State Best Picks

Following our analysis, the following opportunities come to the forefront for addressing at a regional scale across at least Maine and New Hampshire:

- Overall North Woods Clean & Healthy Lifestyle Brand
- Connect with Smart Growth movement in both states (separately if necessary)
- Renewable energy cluster
  - Regional Greenhouse Gas Initiative
  - Bio-energy development coordination
  - Wind farm siting guidelines
  - Distributed generation support for community scale production
  - 2007 Farm Bill linkage
- Clean drinking water
- Coordinated trail system
- Broadband development technical assistance
- Nature & heritage tourism system, workforce training assistance
- Work closely with CanAm Connections transportation project
- Continue to work with Congressional delegation to establish Northern Border Regional Commission
- Coordinate resource clearinghouses
- Green chemistry cluster
- Forge university R&D collaborations around clusters
- Develop sustainability indicators and system for measuring results
Section 2. Assessment of Preliminary Strategic Directions

2.1. Strategy #1

*Strengthen, re-build, and connect the region’s core communities (population centers, service centers) as a foundation for new economic growth and as an antidote to sprawl.*

2.1.1. Overview

Quality of place has been recognized in both states as a shared value and strategic competitive advantage for attracting residents, businesses and tourists. Retaining our revered quality of place, however, is challenging.

Both states struggle with the form of their growth management frameworks and the relative weakness of the state’s role in the form growth takes. Community master plans in NH have been found not to be followed, especially with regard to strip development along major arterials. Comprehensive plans in Maine have also by and large been ineffective at reigning in sprawling development patterns. Key obstacles include lack of community investment capital in the infrastructure needed to support attractive dense development and political will to require sensible solutions such as floor area ratios for mall areas that would force development upward rather than outward. Increasing private development costs in big box zones would also strengthen the relative position of downtown retail districts. The hunger for economic activity and property tax base in both states, coupled with highly valued property rights and individual freedoms, has produced a weak zoning structure in most communities. As a result, the outskirts of our service centers are looking like “Anywhere USA” and threatening our brand.

Both Maine and NH have been working to address Smart Growth concerns at the state and community levels. Both states have recognized and not yet solved the critical lack of effective regional land use planning and management systems. At the state level, systems exist for reviewing aspects of developments that rise to state concern for impacts on the environment and traffic, but little or no master planning is done to “set the table” for desired development. Most of Maine’s land area within the Northern Forest Region is unincorporated and managed by the Land Use Regulation Commission (LURC). Resources have not been committed over the years to prepare LURC for the dramatic shift in forest landholdings and increasing pressure for second home development. Tensions between and among conservationists, sportsmen, landowners and community residents are running high and LURC is challenged to return the right decision. The agency is doing a thorough job now of revising its Comprehensive Plan; however this is occurring in the shadow behind the difficult review of the Plum Creek rezoning proposal for the area surrounding Moosehead Lake. As noted in Section 2.2, the lack of pre-zoning for uses such as wind farms has created a high barrier and uncertain investment environment for wind energy developers.

Both Maine and NH participate in the National Main Street Program. Communities within the Northern Forest region who are engaged include Littleton, Norway, Skowhegan and Van Buren. This program is highly successful and is clearly aligned with Strategy #1. North Conway has an active Streetscape Committee. Other places such as Lancaster, Bethlehem, Berlin, Bethel, Rumford, Wilton, Farmington, Dover-Foxcroft, Houlton and Calais have also recognized the importance of their downtowns and have made investments to bring business and activity back.

Both the Maine and NH Departments of Transportation have invested time and money in working collaboratively with communities and regional planning agencies on highway corridor plans and access management strategies. Routes 2, 3 and 16 in New Hampshire are
noteworthy examples. The North Conway bypass is an example of what needs to be done when mobility through a service center becomes impossible. Funds and environmental permitting for such treatments are very difficult to obtain at this point; communities must work with state assistance to design development in such a manner that mobility is maintained. Funding for shared access road development, signage and streetscape improvements are critical partnering tools to enable thriving retail areas to co-exist with highway mobility. The Gateway 1 project on coastal Route 1 in Maine, terminating at the entrance to the Northern Forest Region at the Penobscot Narrows river crossing, offers a 21 community corridor planning and management model that might be considered for further region-wide East-West Highway improvements along Route 2.

There is statewide momentum right now in both NH and Maine to move forward collaboratively with the Sustainable Economy Initiative (SEI). CORD has just issued a smart growth status report and GrowSmart Maine is sweeping the state with its “Charting Maine’s Future” Brookings Report. However, the emphasis of both reports is addressing the challenges of fast-growing areas, only a few of which are located within the Northern Forest Region of either state. The SEI has an opportunity – and perhaps a duty – to develop and raise the visibility of the need for proactive economic stimulation to sustain the small communities as well as larger service centers within the region.

State policies regarding aid to schools, health care services and transportation have critical implications for the sustainability of our rural communities. Given the difficult decisions to be made at the state level, it is very possible that northern Maine and NH communities will be fighting for their survival as state leaders address shortfalls in general and highway funds and are challenged to make smart investments to rein in development sprawl. Unless economic arguments can be made for sustaining core infrastructure such as schools and health clinics in our rural regions, they may disappear. Current and anticipated federal budget contractions, especially in Medicare and Medicaid funding, pose a serious threat to our critical area hospitals in the region.

2.1.2. Affiliated Strategic Options and Opportunities

In December of 2006, the NH Council on Resources and Development (CORD) presented its 4 year report to Governor Lynch on the status of the state’s smart growth efforts. A number of successful collaborations are occurring among NH’s state agencies in putting their resources toward smart growth and further opportunities were identified. CORD issued findings in keeping with the proposed SEI Strategy #1 and is an important allied partner to engage in the deployment of this strategy. CORD finds that:

Recent decades of growth and development in New Hampshire demonstrate the need to preserve the unique character of the state’s natural, agricultural, forest, and cultural landscape. One root of New Hampshire’s economic prosperity is the diversity of density in its towns, cities, and villages within a predominantly rural setting. This ‘green infrastructure’ provides and supports the quality of life in New Hampshire in many ways: air and water quality, wildlife habitat, aesthetic character and viewsheds, recreational opportunities, and economic productivity through travel and tourism, second home development, and farming and forestry.

Among CORD’s recommendations that are worthy of note and collaboration with the SEI this year are the creation of a NH State Mission Statement regarding Smart Growth and a system for reviewing all state and federal investments for Smart Growth impact. The latter would ideally be coordinated with the creation of any Northeast Regional Development Commission or other government-supported construct that might support implementation many of the SEI recommendations.
The momentum of the Brookings Report in Maine with its attention to quality of place and the need to invest in our communities is a critical allied opportunity. There is a need to both embrace the message and ensure that the resulting attention to fast-growing areas does not take critical resources away from rural places. As Maine looks for ways to reduce spending on K-12 Education and Health Services, which account for almost 70% of all state and local spending, the cost of serving small populations in geographically isolated regions separated by deteriorating highways will be reviewed closely. Rural communities need to be vigilant, collaborative and innovative in finding ways to provide critical services in the most cost-effective manner possible. GrowSmart is proposing a $190 million bond package to provide investment capital largely for sustainable community development projects. It is important that not only fast growing places qualify for funding from these state investments.

Maine Rural Partners’ Harness the Wealth! initiative is about combining grassroots capacity building with the support of a statewide resource network. It may provide a model for linking the various community-driven sustainable development initiatives across the region as a common region-wide vision and framework for sustainable prosperity is developed via the SEI. MRP’s Community Exchange Center has established a searchable resource clearinghouse geared for rural community economic development interests.

The Carsey Institute and Cooperative Extension at UNH, supported by several programs and NGO’s including GrowSmart Maine and NH’s OEP, have established the Clearinghouse for Growing Communities. Several of these same tools may be used effectively by communities combating decline as well as they relate to efficient growth, quality of place and collaborative processes. Carsey’s regional project regarding the sustainability of and collaboration among social service organizations is also highly relevant to the human and social infrastructure needs of the region – part of the foundation of capacity needed to move forward.

The Maine Economic Growth Council is tasked by the Maine Legislature to measure progress toward sustainable development targets and its goals are very much in line with those of the SEI but for the state as a whole. The Council’s vision is a high quality of life for all Maine citizens. The Council further recognizes that achieving this vision requires “a healthy and vibrant economy supported by vital communities and a healthy environment” – entirely consistent with the SEI. The Growth Council puts out an annual Measures of Growth in Focus, which tracks performance in 23 indicators. Each of these indicators has a potential relationship with the SEI. If the SEI identifies additional trackable measures, the Growth Council can be asked to adopt them. This would ensure that they are given annual focus when this report is done, which is very highly regarded and widely read by policy makers and program managers.

The Maine and NH Community Foundations and their affiliate funds are both critical partners to engage in moving the SEI forward. They have funded many of the best practices and initiatives taking place in both states. And finally the Comprehensive Economic Development Strategies of each of the economic development districts provide critical region-specific prioritized context for investment priorities.

The Center for Rural Partnerships at Plymouth State University is at the very least an allied research partner to engage in better understanding opportunities and in delivering entrepreneurship training and hopefully also a partnership builder to support the initiative ongoing.

John Richardson, the new Commissioner of the Department of Economic and Community Development in Maine is very committed to investing in Maine’s riverfront communities during his term in office. A $20 million riverfront bond is being proposed. The larger population centers, many outside of the Northern Forest region, may compete most strongly for these funds if appropriated.
**CanAm Connections: Integrating the Economy and Transportation.** The core focus of this study is the relationship between transportation links and the economic performance of communities within the study area. The states and provinces are already coordinating on this massive regional initiative which is a notable strength and achievement. It is critical that the Sustainable Economy Initiative coordinate with this major related study underway simultaneously.

### 2.1.3. Best Practices and Key Resources

There are dozens of wonderful sustainable development initiatives taking place within the Northern Forest Region of both states. It was beyond the scope of this project to collect sufficient information to fully inventory all engaged activities, much less learn about each as a case study and share the knowledge gained. **The following list is illustrative** of relevant sustainable development initiatives that are worth learning more about. It is neither complete nor judgmental in comparison with other initiatives that do not happen to appear on the list.

**On Line Information and Technical Assistance:**
- Clearinghouse for Growing Communities (UNH)
- Community Exchange Center (Maine Rural Partners)
- GrowSmart Maine
- Achieving Smart Growth (NH OEP)

**Asset-based Community Development:**
- Maine Winter Sports Center
- Southern Piscataquis Outdoor Recreation Map & Guide

**Downtown Revitalization:**
- Littleton Main Street Program
- Norway Main Street Program
- Dover-Foxcroft Downtown Revitalization
- North Conway Streetscape Program
- Wilton Mill Redevelopment

**Leadership Development:**
- Piscataquis Leadership Institute
- Lead Western Maine

**Collaborative Partnerships:**
- Aroostook Partners for Progress
- Women’s Rural Entrepreneurial Network
- Piscataquis County Economic Development Council & Appalachian Mountain Club
- Piscataquis Higher Education Center
- Greenville & Sanford Wood Products Incubator
- Western Maine Sustainable Development Collaborative

**Corridor Planning:**
- Routes 2, 3 & 16 in NH
- Bethel Region Access Management Plan (AVCOG)
- Gateway 1 in ME; Penobscot Narrows Observatory

**Indicators:**
- Measures of Growth in Focus (Maine Economic Growth Council)

### 2.1.4. Gap Analysis

The strategies overall do not address human infrastructure – leadership, education, health care, workforce development or social service provision and these are all important factors to incorporate into the SEI, even if just in support of the existing 5 strategic initiatives. **Leadership and communications are key to initiating and sustaining the SEI;** the Northern Forest Center is playing a critical role in establishing that rapport and infrastructure among elected leaders, the business community and NGO’s in all 4 states.
As mentioned above, the attention being paid by state smart growth engines to other than fast-growing communities is marginal at best and could leave the Northern Forest Region out of the game.

We did not find in our research the status of the 2000 Managing Growth in New Hampshire: Changes and Challenges recommendations. It would be helpful to know what has or has not been implemented and why.

The NH Main Street Program’s web site has not been updated since 2003. The status of that program needs to be ascertained, as it is clearly a relevant partner for SEI Strategy #1.

The Center for Rural Partnerships web site at Plymouth State University indicates that there is an asset based development project slated for Coos County; follow-up contact should be made to learn more about the project and perhaps integrate it with the SEI.

2.1.5 Tier 1 Opportunities

2.1.5.1. Multi-State:

- A unified or at least connected and coordinated set of information clearinghouses and communication centers

- Building relationships with CORD and GrowSmart Maine to be integrated with smart growth planning movement and investments made therein (could convene multi-state discussion to determine if collaborative action is desired; if not, can pursue with each state separately)

- Model regional planning and development framework (Maine, NH and VT all actively struggling with getting a system to work; difficult problem)

- North Woods quality of life brand that transcends all strategic areas, featuring efficient designs, renewable energy sources, environmental quality, local foods, high rates of volunteerism, engaged citizenry, collaborative problem solving, innovative resource sharing, optimistic mindsets & healthy lifestyles

2.1.5.2. Single State:

- Integration with Maine Economic Growth Council (existing benchmark connections or perhaps new ones, adding benchmarks for SEI strategies i.e. renewable energy, nature-based tourism growth, # of patents issued)

- Integration with CORD regarding smart growth lens for state and federal investment and program development (since both states have similar policy objectives, this could be brought to the Land and Water Resources Council as Maine state agency counterpart for consideration, with linkage to Maine Economic Growth Council and Community Preservation Advisory Committee)

- Integration with Brookings Report outcomes in Maine Legislature

- Consider alignment with Maine Riverfront Bond if appropriated
2.2. Strategy #2

*Develop the region as a leader in sustainable, renewable energy development and use.*

2.2.1. Overview

2.2.1.1. Our Renewable Opportunities:
The high cost of energy – particularly electricity, but also heating and transportation costs across a cold climate and large geography -- is one of the region’s top barriers to sustainable development. The region is making inroads in the exploration of a number of renewable energy opportunities. Three sources have particular competitive opportunities for the Northern Forest region due to topography and land cover – wind, hydro and biomass/biofuels. All have environmental trade-offs, regulatory challenges and controversial elements from the siting perspective. In addition to these three multi-state assets, tidal power has great potential and is being seriously explored in Washington and Hancock Counties of Maine. Hydrogen, while not enjoying any particular regional advantage, is also being explored in Maine.

Both NH and Maine are parties to the Regional Greenhouse Gas Initiative and actively engaged. The Northern Forest Region has a great deal of opportunity to sell carbon credits and promote the value of a large forested area for the region’s air quality.

2.2.1.2. State Renewable Energy Policy and Connections to Public Health, and Environment:

NH’s 2001 Clean Power Act set a national precedent for reducing fossil fuel emissions and established NH as a leader in public health and environmental concerns. While the State continues to support an increase in its renewable portfolio, no state incentives have been enacted to move this forward although municipalities may exempt renewable energy investments from local property tax assessments and over 60 towns do so. The State does have 2 programs to assist state and municipal vehicles fleets use alternative fuels.

Maine has established a 10 year state goal of increasing renewable energy generation by 10% by 2017 and a policy that favors new renewable resources and capacity that has zero net greenhouse gas emissions. Maine has also enacted climate change policy goals to reduce greenhouse gas emissions to 1990 levels by 2010, to 10% below 1990 levels by 2020, and, in the long term, to levels sufficient to eliminate any dangerous threat to the climate.

Maine has enacted solar panel and biodiesel tax credits and the State Energy Program maintains a comprehensive on line listing of federal tax incentives and reference materials to promote renewable use and energy conservation. Legislation is being introduced this session to stimulate consideration of state aid for renewable energy systems in schools. Air quality issues related to wood furnaces need to be addressed both at the back yard and community facility (e.g. school) scales.

As mentioned above, both NH and Maine are very engaged in the Regional Greenhouse Gas Initiative. The form of the credit market is being developed at this time in both states and bears watching for opportunities to promote sustainable forestry and renewable energy development.

2.2.1.3. Biomass, Bio-oils and Biofuels:

PSNH, supported by many public and private sector partners, has developed a new wood fired generator in Portsmouth that came on line in December 2006 and is sourcing wood chips locally. This is a remarkable biomass energy project. The progress over time in wood supply, economic viability and air quality should be monitored and shared.

Biomass energy conferences were held during 2006 in both NH and ME, allowing for widespread sharing of activity among various sectors, however there is no official coordinating
body masterminding the opportunities to best advantage. The VT-based Biomass Energy Resource Center and NFC regional Biomass Steering Committee offer working opportunities for collaboration but are not institutionalized to facilitate coordinated action by the states and many institutions that might comprise a system. Such a formalization may become a logical SEI implementation step.

Given the privatized nature of electric generation, only so much collaboration will occur between and among competing private sector initiatives – whether on the R&D front or in establishing generating or fractionation facilities. NH has made a major feasibility investment and learned that it does not have wood product plants large enough to support a companion bio-oil refinery absent public subsidy. Maine's Fractionation Development Center, a non-profit supported by state funds, has an investor looking for an appropriate partner in Maine and is in active negotiations to select a site for a refinery. The research going on at UMaine in bio-ols and biofuels establishes Maine as a leader in this area. There is potential to develop this into an integrated system over time. UMaine is also a leader in climate change research.

2.2.1.4. Wind Power:
Wind power has great potential in both states but relatively little activity is occurring in New Hampshire. Many of NH's best sites are in the National Forest and unavailable for commercial use. In Maine the trade-offs between clean energy and negative site impacts have not been resolved and result in controversial and expensive development proposals and regulatory proceedings addressing the conflicts on a site-by-site basis. A public zoning of places where wind farms are allowed would be a challenging process but result in a far more conducive climate to encourage private investment.

The Land Use Regulation Commission, responsible for zoning and permitting most of Maine’s mountainous terrain, is currently working on its comprehensive plan and recently rejected a staff recommendation to approve a 40 turbine wind farm in Redington Township in Western Maine. The proposal split environmental advocates who struggle with the energy vs. avian and aesthetic impacts of the wind farm. Evergreen Wind Power, LLC has recently completed a 42 MW wind farm in Mars Hill (southern Aroostook County) and the same developer is proposing a larger $100 million 57 MW wind farm on Stetson Mountain in Northern Washington County (LURC jurisdiction), where the view from Baskahegan Lake is the most notable aesthetic impact. Noise from the Mars Hill turbines has proven to be a nuisance to neighbors; the new proposal is in a far more isolated region, with only 1 seasonal camp within ½ mile. Wind studies are underway for several community scale wind projects that are beginning to be explored.

2.2.1.5. Hydro Power:
Hydro power has been on its way out for some time but Maine’s Penobscot River Restoration Project is a best practice collaboration that has found ways to maximize the multi-use of the river for fish passage, recreation and energy production.

2.2.1.6. Tidal Power:
Maine Maritime Academy is doing research in the Bagaduce River near Castine regarding tidal potential and marine impacts. A private company is doing similar research in Eastport. Environmental impacts will be a major area of concern for any tidal installation but the potential for eastern Maine to take advantage of this natural asset is tremendous.

2.2.1.7. Hydrogen:
Governor Baldacci in 2006 signed an Executive Order creating a Hydrogen Energy Fuel Cell Partnership to speed the development and deployment of commercially available hydrogen production, storage and distribution technologies. The Chewonki Foundation is a leader in this partnership.
2.2.1.8. Challenges with the Electric Grid:
Energy is created and delivered as a private sector for-profit endeavor. And yet there is an enormous public interest in effective and efficient supply and delivery systems. The balance of public and private sector roles in energy production and distribution has always presented a public policy challenge and remains one today – a relevant one for the Sustainable Economy Initiative to address on behalf of the region. Deregulation of electrical energy production has reduced public sector influence over electric generating capacity. The balance between centralized and decentralized energy production and homegrown vs. commercial energy production policies and regulation presents a challenge for the states and the region to address as well.

Both Maine and NH have net metering tariffs that allow small-scale decentralized producers to barter excess capacity with the grid for drawing power down when needed. In Maine going to the next level as a small power producer to receive cash for excess generation creates an enormous barrier that needs to addressed in fairness to all parties. Returns from sales would facilitate small scale installations to occur but there must be equitable treatment with competing power producers saddled with significant regulatory requirements.

The relationship among the states within the ISO New England grid is seriously stressed and is increasing discussions between Northern New England states and their neighboring provinces to the north and east. Maine is in discussions with New Brunswick to arrange power sharing opportunities.

2.2.1.9. Summary:
All in all, Maine and NH do have the potential to contribute to the SEI goal of the region’s development as a leader in sustainable, renewable energy development. The recognition of this goal as establishing a competitive advantage and branding of place in a manner that is inclusive of all renewable energy forms and engaged participants would provide a platform to move forward. The Brookings Report in Maine has recommended funding to support emergent clusters and renewable energy could well become one. Workforce training such as that being done on Cape Cod for wind technology in electrician training is an important component. Maine’s additional niche regarding tidal power is a promising component of the region’s branding potential in this area.

2.2.2. Affiliated Strategic Options and Opportunities

University of Maine Biofuels Research & Climate Change Center. The research going on in these two areas should be coordinated with any renewable energy cluster.

Biomass Energy Resource Center. The SEI is already closely aligned with BERC so nothing more will be noted here. The Biomass Energy Steering Committee is a good forum to continue discussion in this area.

Fractionation Development Center. This project is a catalyst for getting a bio-oil refinery up and running.

Regional Greenhouse Gas Initiative. Discussed above and below, this is a timely initiative that NH and Maine are very engaged in. The linkage between air quality and renewable energy is important to build upon; concerns about wood-burning furnaces on air quality need to be recognized and addressed.

Maine Green Power Council. The Council markets green power as a consumer choice and would be a good partner in an renewable energy initiative.
2.2.3. Best Practices and Key Resources

Energy for Maine’s Future: A Call for Leadership
A Primer for Maine: Regional Greenhouse Gas Initiative
NH Dept of Environmental Services web site
Maine PUC web site

2.2.4. Gap Analysis

UNH has an active on-campus energy efficiency program. Resources devoted to state needs were not identified but may exist.

2.2.5. Opportunities

- **Renewable energy cluster.** This idea is certainly ripening in Maine and could be approached at the multi-state level. Ideally R&D, commercialization, workforce training and state policy development would become integrated. Public and private sector roles need to be clarified.

- The **Regional Greenhouse Gas Initiative** and federal incentives to capture carbon offer forest and agriculture landowners opportunities to reap economic rewards for land stewardship. The potential to draw funds from consuming states to natural resource producing states within the regional system provides a boost to forest landowners. This can be approached in both states and across the region although each state will determine how to market its credits.

- **Biofuels system R&D.** This research is occurring at UMaine and the NFC Biomass Energy Steering Committee is a logical place to discuss systemic advance support for moving research into commercialization down the road.

- **Wind farm siting guidelines.** Since this issue transcends the states, the SEI could take the initiative to assist the states with a collaborative stakeholder process and finding the right standards to apply.

- **Define and integrate community scale generators into regulated environment.** For distributed generation to grow beyond net metering arrangements, a new class of generator needs to be created with appropriate expectations and in fairness to existing generators. This would have to be implemented separately by each state PUC but common research.

- **2007 Farm Bill opportunities.** Renewable energy funding can be anticipated by the SEI to approach from a regional perspective.
2.3. Strategy # 3

Establish the region as a top-notch destination for adventure and heritage tourism, while honoring tourism sub-brands of each state and sub-region.

2.3.1. Overview

Like all places with natural resources as fragile as they are attractive, Maine and New Hampshire Northern Forest communities have long had a love-hate relationship with tourism. While tourism is by any measure a major economic contributor, local anti-tourism sentiment is not uncommon. Critiques of tourism commonly include:
- seasonal congestion stresses social & environmental carrying capacities
- majority of jobs created by tourism are low-wage and seasonal
- potential degradation of natural, cultural and historic environments
- often conflicts with patterns of production in working landscapes

Unlike types of mass tourism, where the experience of mass consumption itself is part of the appeal, the attractions of Northern Forest – pristine landscapes, traditional communities, wildlife - risk being devalued by the very attention they attract. In other words, they are in real danger of being loved to death.

There has been significant attention given in the last decade to addressing these issues while retaining the economic benefits of tourism. The general consensus favors low-impact, quality-over-quantity approaches such as experiential tourism, adventure tourism, nature-based tourism, heritage tourism, and agritourism. In general, these approaches seek to create higher-quality (and it should be said, more exclusive) experiences which extract more dollars per tourist, while offering a depth of experience which is more conducive to consumer education about resource use and sustainability.

With regard to “adventure” tourism, the region’s wilderness expanse is unique to the northeastern US and does provide opportunities for whitewater rafting, bear hunting, fly-in fishing, hunting and trekking, wilderness canoeing, 4000’+ mountain climbing, Tuckerman’s Ravine skiing, and the “100 Mile Wilderness” stretch of the Appalachian Trail. The snowmobile and ATV trail systems may qualify as adventure tourism opportunities. To some, photographing a moose is adventure tourism. The literature research topic for this report did not cull out “adventure” tourism opportunities.

Strategies promoting nature and heritage tourism generally identify three areas of emphasis:
1) small business support
2) regional integration of effort, and
3) strategic approaches to branding.

2.3.2. Affiliated Strategic Options and Opportunities

CenTRO and Maine Tourism Advisory Council. CenTRO and the Advisory Council provide a link between the tourism industry and the research and training capabilities of all of Maine’s higher education institutions. Research is being done on North Woods resort marketing. Hospitality training courses have bee established. This is an important network to coordinate with in Maine.

Maine Tourism Commission & Office of Tourism. This Commission oversees the Department of Economic and Community Development's Office of Tourism and needs to be involved in the SEI in order to coordinate resource allocation. The Commission and DECD are responsible for following up on the Fermata Nature-Based Tourism Strategic Plan. A bill in the
Legislature now calls for this follow up to occur by February 2008; this process should be linked with SEI’s #2 strategy development.

**Small business support.** As economist David Vail points out, tourism “is not one industry but rather a diverse mix of good and services.” In Maine and New Hampshire, these goods and services are almost always provided by businesses with fewer than 50 employees. There is a clear need for supporting sustainable tourism by providing small business education, including best managerial practices.

**Regional and multi-sector integration of efforts.** Because the industry is so diverse, tourism depends on clusters of complementary goods and services to thrive. Businesses depending on tourism, locally and regionally, should be encouraged to think of themselves as more of a community and less as competitors. More could be done to analyze the elements of successful sustainable tourism clusters, to map existing community assets, and identify additional needs or the unrealized potential for efficiencies and complementarities with existing resources. Strategies and support for regional coordination of services and major events is important.

**Strategic Branding.** Coordinating inter-state, state, regional and local approaches to branding is an appropriate goal, but difficult. How is this best accomplished and who should take the lead? There is a need for a more thoughtful approach to branding of local assets in a manner which promotes sustainability and responsible use. Ecotourism Certification is an example of this. There is also an opportunity to explore collaborative branding at the community level through place-based education projects which explore approaches to accurately and responsibly represents locally-specific assets such as culture and heritage.

**North Woods Resort Developments.** While NH has long had The Balsams and other Class A resorts, Maine has not. However there is a proposal for one at Hammond Ridge west of Millinocket and as part of the Plum Creek proposal, both before LURC. A third major resort is in the planning and fundraising phase for Brownville. The owners of these future anchor locations should be involved in the development of activities their customers would utilize and may be able to coordinate with market research and funding of necessary infrastructure.

**Hut System.** The effort to create a hut system across the Western Mountain region of Maine is an innovation with fundraising and planning well underway and should be linked with the SEI work.

**ATV & Snowmobile Trail Systems.** Local clubs, with some support from state agencies, do a tremendous service to tourists by locating and maintaining trail networks in cooperation with local landowners. These clubs are challenged by volunteer stress, little funding and “starting all over” every time there is a property sale or management change. The SEI could perhaps build cross-state networks and help coordinate and advertise the systems, some of which are multi-user and others not.

### 2.3.3. Best Practices and Key Resources

**2000 – Planning for Ecotourism on the Coast of Maine**

**2002 – Shaping the Northern Forest Economy: Strategies for a sustainable future** This report published by the Northern Forest Alliance identifies “recreation and tourism based on the region’s cultural, heritage and ecological values” as one of three primary strategies for a healthy sustainable economy in the Northern Forest.

**2003 – Blaine House Conference on Maine’s Natural Resource-Based Industry: Charting a New Course Conference.** Tourism and Outdoor Recreation are addressed as one of four major natural resource-based industries. Comprehensive cross-cutting and sector-specific
recommendations are made for building a sustainable natural resource based economy in Maine. Progress is tracked annually.

**2004 – Rural Matters! Invest in New Hampshire. 2004 NH Rural Summit.** Organized by the New Hampshire Rural Development Council, this summit resulted in a number of specific Policy and Action recommendations directly related to sustainable tourism.

**2005 – Strategic Plan for Implementing the Maine Nature Tourism Initiative.** This plan, developed by FERMATA, Inc., was a direct outcome of Charting a New Course. It establishes strategic plans sustainable natural-resource based tourism in three Maine regions: The Western Mountains, the Highlands, and Downeast.


**2005 – CenTRO established at U. Maine.** Recognizing the need to better support Maine’s largest industry, CenTRO was established to coordinate all research, outreach and student programming on all of Maine’s public and private higher education institutions and reports to the Maine Tourism Advisory Council.

**2006 – Southern Piscataquis Regional Recreation Map and Guide.** This Guide is the product of a remarkable partnership between the Cultural and Heritage Eco-Tourism Committee of the Piscataquis County Economic Development Council and the Appalachian Mountain Club and represents a significant breakthrough and model in building trust between local economic development interests and away-based conservation and recreation organizations.

**2006 – University of Maine Extension appoints full-time Nature Based Tourism educator for Western Maine based in Franklin County.**

**2.3.4. Gap Analysis**

Identified needs:
- Analysis and mapping of tourism clusters
- Analysis/market research on relationships between existing branding campaigns
- Niche market assessment
- Community participation in determining the research agenda
- Dissemination of research

**2.3.5. Tier 1 Opportunities**

- Coordinate state tourism offices and **propose region-wide branding and marketing**
- **Develop region-wide trail guide** with local contacts, support local clubs (thru state agencies as liaisons)
- Create **“What every North Woods resident should know about their region”** that might be used for Tourism Hospitality education across the region, to be supplemented with more local information
- **Multi-state Heritage Tourism Conference** to share best practices
2.4. Strategy # 4

*Retain, expand, and diversify our farm and forest industries with a focus on sustainability and new emerging markets (e.g. certified wood, organic foods, local foods, etc.).*

2.4.1. Overview

Clearly agriculture and forestry are quintessential to the Northern Forest regions of Maine and New Hampshire, economically, socially and culturally. Indeed, the economic health of the forest and farm product industries has been treated as paramount in both states over the last decade, recognizing that working landscapes and the healthy, sustainable harvesting of natural resources serve as the nexus from which so much value stems.

Similar themes have emerged in both states in the past decade:

1. The importance of secondary and value-added products in retaining more of the natural resource dollar in-state.
2. The necessity for local markets for low-grade and underutilized wood.
3. The potential for both states to capitalize on emerging markets for bio-fuels and other bio-products.
4. The potential of direct and niche-marketing to capitalize on the remarkable strength of the Maine and New Hampshire ‘brands’ for farm and forest products.
5. The links between working landscapes and heritage and nature-based tourism.
6. The socio-cultural and heritage value of forestry, agriculture and other natural resource production/extraction industries is a key contributor the ‘quality of place’ resources which are so key to the knowledge and creative economy.

Generally speaking the focus for farm products in both states has been on branding and direct marketing, while most of the focus for forest products has been on secondary markets, value-added manufacturing and bio-fuel technology clusters.

There is a great deal of positive momentum in this area with numerous grassroots initiatives underway. The Western Mountains Alliance has run a very successful Smart, Eat Local project since 2005 that has resulted in a great deal of positive momentum around local food production and consumption by individuals and institutions. The Oxford County Local Food Group is a new effort that has just held 3 meetings around the county learning about ways to increase local food consumption. As this report goes to press, Hannaford and Walmart have both agreed to proudly feature Maine potatoes, apples and tomatoes in their stores.

Backyard Gardens in Madison, Maine has created a year-round source of tomatoes for the northeast market. Other vegetables will follow and this could be rolled into a marketing campaign recognizing the Northern Forest Region as New England’s natural vitamin and fresh food production center. Native wild blueberries already hold a key place at the anti-oxidant table.

New bio-product development is important for the region. U. Maine is collaborating with Interface Fabrics in Guilford to explore the potential for making fabric from potatoes. Green chemistry is an additional opportunity area that could be explored on a regional basis, coupling biodegradable products with the renewable energy brand that would project a stellar environmental image for our quality of life and sustainable lifestyles.

2.4.2. Affiliated Strategic Options and Opportunities

**Maine’s Eat Local Foods Coalition.** This coalition is collectively moving the ball forward with regard to state policy as well as connecting numerous efforts on the ground supporting Farm to
School efforts, Farmers Market support, the Senior Farm Share Program and institutional buying initiatives. It is coordinated by Roger Doiron with strong support from the Maine Organic Farmers and Gardeners Association.

**Maine’s Community Kitchen Coalition.** This network of organizations working to share experience in establishing shared community kitchens for adding value to agricultural products began meeting in January 2007. It is coordinated by Mark Hews of the Threshold to Maine RC&D Area.

**Get Real, Get Maine.** This is the official State marketing brand and is being used to promote recognition of Maine foods in Maine supermarkets as well as outside Maine.

**Eat Smart, Eat Local Project.** A project of the Western Mountains Alliance in partnership with the Maine Alternative Agriculture Association funded in 2005-06 by the Kellogg Foundation that has built relationships among schools, farms, communities, hospitals and farmers to increase market demand and farm production in Franklin and Somerset Counties. It has been very successful, has great momentum and is seeking funding to continue.

**Cooperative Marketing.** Maine WoodNet runs the Sugarwood Gallery in Farmington and allows its 50 wood artisans from the Western Mountains region market their goods collectively in a shared storefront. Forest sustainability is connected to high value added products to brand the connection.

**Creative connections with outdoor recreation and tourism.** Since the farm and forest industries are clearly significant contributors to the character and appeal of the Northern Forest, there may be untapped opportunities for creative and synergistic partnerships between the industries. “Agri-tourism” (which encompasses both agricultural fairs and the promotion of farms as tourist destinations through tours, corn mazes, etc.) is recognized as a means of producing direct connections with consumers. There seem to be fewer examples of capitalizing on the scenic and cultural value of forest lands in a similar manner.

The touristic appeal of direct connections to the ‘locality’ of Northern Forest farm and forest industries may have untapped potential for direct marketing of products via internet sites connecting linking consumers and producers. Projects such as [www.YouGotMaine.org](http://www.YouGotMaine.org) – which uses tags to allow lobster consumers to learn where their lobster came from and send lobstermen messages should be explored as models for the farm and forest industries. Such projects have the potential to create direct marketing opportunities while educating world-wide consumers about the role of sustainable natural resource industries in local economies.

**Farm to School and connections with education.** Increasing formal and informal opportunities for local students to learn about their local farm and forest industry history and heritage can help create invested and connected communities. Pride of place is a critical factor in creating the motivation to sustain local farm and forest industries in both producers and consumers. An increased understanding of the economic and cultural value of farm and forest products is an invaluable piece of ‘buy local’ campaigns. It can also lead to a better local understanding of best practices for sustainability. The [Maine Agriculture in the Classroom](http://MaineAgricultureInTheClassroom) program has made a rebound in recent years and now features its own specialty license plate, having collected the amount of signatures and funds required in state law.

**Potato Bioproduct Research.** The U. Maine and Interface Fabrics research into natural fiber resin from potatoes is worth watching for new opportunities that could contribute to an overall strategy toward a toxic-free region.
2.4.3. Best Practices and Key Resources


2002 – Assessing Maine’s Technology Clusters – Maine Science and Technology Foundation. “The forest products industry demonstrates the strongest cluster characteristics of any sector in Maine”

2003 – Saving Maine’s Farmland – A Collaborative Action Plan – Maine Department of Agriculture, Food and Resources. Includes a series of recommendations focusing mostly on tools to help keep land in agricultural use (easements, current use tax, etc).


2003 – UNH Cooperative Extension - Buying Products Directly From Farmers and Valuing Agriculture: Behavior and Attitudes of NH Food Shoppers. Study assesses opportunities for ag. direct marketing in NH, makes recommendations.

2003 – New Hampshire Department of Agriculture – marketing research and recommendations “Encounters with Agriculture” links to experiential tourism, direct encounters, etc.


By Innovative Natural Resource Solutions, LLC for ME DECD – Office of Innovation

2.4.4. Gap Analysis

Brand Coordination. A 2005 NEFA report notes that coordination of state and local brands is more feasible than creating a regional Northern Forest brand for forest products. The question remains however: how do you best horizontally coordinate efforts among brands which are often in competition with one another?

Bio-fibers and Green Chemistry. This area holds promise and should be on the radar screen.

Building Products. Has an analysis of where building supplies are coming from been done to determine if there are market niches for more local products? Non-toxic materials such as cellulose vs. fiberglass insulation?

Human Infrastructure. Workforce training, support for logging professionals, creative retirement plans and other related needs have not been addressed and perhaps should be considered.

Commercialization of clean potable water. Water is not considered a forest product but is a high-value natural resource kept clean in large part by our forests and wetlands that will grow in demand. It is perhaps the greatest opportunity not addressed in the literature or strict reading of
this strategic direction. The public-private interest in groundwater and public debate over extraction fees are playing out in Maine.

2.4.5. Tier 1 Opportunities

There are many existing state and local branding initiatives for farm and forest products, making creation of a region-wide super-brand difficult. However, a super-brand for the region could be used for products that have not yet been regionally branded such as North Woods Water or future green chemistry bioproducts.

And while region-wide branding might not fit where brands already exist, cooperative marketing strategies of a mix of products to the same consumers might be a value added service to pursue.

The following farm and forest areas related to energy were identified in Section 2.2:
- Regional Greenhouse Gas Initiative
- 2007 Farm Bill Coordination to secure resources
- Bio-energy exploration
2.5. Strategy # 5

Create Innovation and economic opportunity based on our natural and cultural assets through R&D and incubators. Link educational institutions with the natural resource opportunities and private sector applied research needs.

2.5.1. Overview

With The Rise of the Creative Class in 2002 Richard Florida changed how America described the way in which people live and work. Florida coined what is now known as the creative economy—a term which identifies knowledge, not labor, capital, nor natural resources as the dominant means of economic production. In turn, this knowledge produces innovation, and this is how much of today's economy is measured. Since the knowledge economy is based upon people’s creativity, and these people are mobile, a region must develop ways in which to attract them. Richard Florida’s work examined cities which best exemplified the creative economy. He found that in order to attract creative people, generate innovation and stimulate economic growth, a place must have talented workers (who have access to training and continued educational opportunities), state-of-the-art technologies, and a community of tolerance including diversity for national origin, culture, sexual orientation, age, etc.

Florida’s work primarily examined the creative economy as it pertained to urban locations. However, his work sparked rural interest as well. As excitement grew about the creative economy, individual areas and states began to adopt their own definition of what is meant by a “knowledge” or “creative” economy. For example, Maine’s Creative Economy Report focused on two economic factors as central to the development of its creative economy (1) the rising importance creative workers in creating new jobs and companies and in helping industries retool for the future; and (2) the recognition of arts and cultural assets as more than contributors to quality of life in a particular place, but as important economic drivers for the region.

The New England Region has also worked to foster its vision of the creative economy. The New England Foundation for the Arts and the New England Creative Economy Council in conjunction with the Maine Arts Commission, the New Hampshire State Council on the Arts, the Vermont Arts Council, the Massachusetts Cultural Council, the Rhode Island State Council on the Arts and the Connecticut Commission on the Arts came together to create the New England Cultural Database (NECD). The database is an online data warehouse that contains financial, demographic, geographic, and other related information about businesses, cultural organizations and individual artists in New England. With currently over 19,000 records it includes descriptive data on cultural organizations with financial information (derived from Internal Revenue Service Form 990 returns) and special datasets provided by cooperating cultural agencies. [http://www.newenglandarts.org/public/about.aspx](http://www.newenglandarts.org/public/about.aspx)

Since 1996 the New England Foundation for the Arts has been tracking the economic impact of nonprofit cultural organizations in Maine and throughout New England. However, the creative economy as a movement in Maine did not fully materialize until May 2004 when the Governor hosted a conference on the Creative Economy. Since that time a Creative Economy Council was convened and several reports have been generated in an effort to develop the creative economy in Maine.

New Hampshire took notice of the “new economy” when in 2001 then Governor Jeanne Shaheen released the first-ever comprehensive economic development plan for the State of New Hampshire. The plan was the result from a two-year initiative under Gov. Shaheen that was managed by Dept. of Resources and Economic Development and Office of State Planning. “New Hampshire in the New Economy” identified three overarching goals critical to New Hampshire’s future:
1. New Hampshire must maintain its strong economic position through innovation, education and workforce development.

2. New Hampshire must retain its high quality of life and quality of place. In an economy where businesses can locate anywhere, individuals and businesses are drawn to New Hampshire because of its natural environment, its history and its culture.

3. New Hampshire must extend economic opportunity to every citizen in every part of the state.

Connectivity to the rest of the region and globe are paramount infrastructure needs for the developing knowledge and creative economy in the Northern Forest Region. Chief among connectivity concerns are telecommunications services – especially broadband Internet service and wireless phone service. Both NH and Maine also have very similar statewide concerns and activities within the telecommunications arena. The governors and legislatures have taken action to investigate and support the need to spur private investment in broadband facilities and stimulate demand to support these investments. Both states struggle with the balance of public and private sector responsibilities in making investments within a competitive service environment. Proprietary data regarding existing infrastructure investments retard the ability to avoid potential redundancy of investment. The recent sale of Verizon to Fairpoint, who has pledged to invest in the region, provides an opportunity to move forward.

2.5.2. Affiliated Strategic Options and Opportunities

Maine R&D funding, Cluster Development, Maine Technology Institute. This is where Maine’s R&D resources are headquartered. Any SEI strategy aligned with the identified clusters or that builds a new one will have enhanced funding opportunities from this source.

Maine Creative Economy Council. This organization, staffed by the Margaret Chase Smith Policy Center at UMaine, is the coordinating body to stimulate the creative economy and should be engaged with the SEI as it explores this strategy.

NH Forum on the Future. An alliance of higher education, business and policy leaders to create sustained awareness and communication among New Hampshire’s leaders on those issues, trends, strengths, weaknesses, and opportunities which require collective focus and decision making. What are the future educational, social, technological, environmental, cultural, and economic realities, challenges and opportunities facing the State of New Hampshire, and how can we best prepare for our collective future? http://www.nheconomy.com/index.php?page=economic_leader

2.5.3 Best Practices and Key Resources

2003 - Knowledge New Hampshire emerged in 2003 with the gathering of its first forum "Finding Gold: Recognizing Opportunities in the Knowledge Economy." The event convened about 40 executives from high tech, banking, legal and government institutions. The organization, Knowledge New Hampshire, is a consortium of businesses and organizations that provide regular forums on productivity and innovation in a knowledge economy.

2003—October 28th Knowledge New Hampshire holds forum, “Understanding the Knowledge Economy.”


2004 - A mix of 90 business, arts, and government leaders came together to launch New Hampshire’s Creative Economy Network, a state sized variation of New England’s Creative Economy Council. An ongoing partnership between the New Hampshire Business Committee
for the Arts and the New Hampshire State Arts Council (with the aid of sponsors Ocean National Bank, PSNH and Business NH Magazine), launched the New Hampshire Creative Economy Network steering committee to design a way of moving research forward into action for the state. The steering committee aims to help spark new conversations about ways the creative sector can keep New Hampshire competitive in a changing economy and address the urgency of supporting and investing in that sector.

2005 - **An Act to Extend Civil Rights Protections to All People Regardless of Sexual Orientation** (LD 1196): passed in March 2005, this law prohibits the denial of rights of employment, housing, public accommodations, credit and educational opportunity to individuals based on their sexual orientation.

2005 – **Center for Rural Partnerships**, Plymouth State University. This Center pulls together multi-disciplines for bringing research resources to bear on rural New Hampshire sustainable development issues.

2006—“**Maine’s Creative Economy: Community Handbook**” prepared by the Creative Economy Steering Committee. The handbook was designed for communities interested in creative economy opportunities. [http://www.econdevmaine.com/resources/default.asp](http://www.econdevmaine.com/resources/default.asp)

2006—“**Maine’s Creative Economy**” this report was prepared by the Creative Economy Council in partnership with the Margaret Chase Smith Policy Center at the University of Maine. [http://www.econdevmaine.com/resources/default.asp](http://www.econdevmaine.com/resources/default.asp)

Strategies:
- Cultivate a creative mindset
- Invest in R&D of new technologies
- Support Industries’ efforts to develop and/or exploit higher-value business and marketing strategies
- Attract and retain creative workers

Strengthen the creative abilities of all Maine workers – present and future.

2006 - **The Maine Attraction Plan** (LD 1968): passed in the spring of 2006 as part of Governor Baldacci’s supplemental budget, it provides tax incentives to bring all forms of media production to Maine and to develop in-state production agencies.

2006 – **Final Report of the Joint Select Committee on Research, Economic Development & the Innovation Economy.** **Key Findings:**
- Innovation drives economic growth
- A long-term commitment and vision for state investment in research and development are necessary ingredients for success.
- Sustained investment is essential to success
- When possible, state resources should be provided through a competitive process
- Collaboration among academia, non-profits and industry should be encouraged
- Use of Maine’s limited resources should be focused


2.5.4 Gap Analysis

Connections at community level for R&D. Even outside of the University, high tech R&D efforts can take place in a bubble within local communities. Connections to local communities are important to help create an environment which is mutually supportive. The importance of marketing and outreach to the local community, particularly for extremely complex or abstract R&D, cannot be overstated.

2.5.5 Tier 1 Opportunities

Broadband Access. Both states have recognized the need for getting broadband access to rural areas and increasing the use of the Internet by businesses. Many people can now live where they choose and conduct their work over the Internet as long as they have access to broadband and perhaps an airport. The SEI could unify the efforts of Maine and NH to address unmet needs. The Vermont Council on Rural Development has had success with assisting in market assessment and identifying a provider; perhaps the SEI could assist with bringing that methodology to NH and Maine or working with providers to establish coverage across the region.

Comprehensive community building. Cultivating healthy creative and knowledge economies will require identifying and enhancing the ‘quality of place’ elements which will make Northern Forest communities attractive to entrepreneurial investment. This is likely to include a highly integrated education, arts and culture, recreation and infrastructure at the local level.

Entrepreneurial Education in secondary schools. Attracting outside investment is only a partial strategy – many of the most creative and successful entrepreneurial efforts will be locally generated. It’s crucial to create an environment which nurtures the creative and entrepreneurial spirit, particularly among young people.
Section 3. Appendix

Summary of Major Initiatives related to:

1. Best Practices in Sustainable Development
2. Farm and Forest Products
3. Knowledge and Creative Economy
4. Infrastructure
5. Heritage and Nature-Based Tourism
6. Energy

3.1. Topic #1

Best Practices in Sustainable Development

3.1.1. Introduction

This is the most ambiguous of the six categories, and initially served as “other” for the purposes of this inventory, including reports and studies about general economic development, education, land use, and so forth. This ultimately proved overwhelming and unproductive in terms of synthesis. Instead, we choose to use Best Practices in Sustainable Development to categorize a series of comprehensive and multi-faceted initiatives which preceded the Sustainable Economy Initiative. While in general this inventory seeks only to document progress since 1998, we felt it was important to recognize in the overarching category of Best Practices a lineage of effort which dates back to the 1990 Governors’ Task Force on Northern Forest Lands, a four-state initiative which resulted in the creation of the Northern Forest Land Council.

The initiatives we have included here have much in common, tending to utilize approaches which are:
- proactive rather than a reactive
- asset-based
- systems-based
- regional in scope
- integrated
- ‘holistic’ or multi-faceted
- supportive of a balance between conservation and industry
- striving for sustainability

3.1.2. Summary of Major Initiatives

3.1.2.1. Maine and New Hampshire:

1990 – Governor’s Task Force on Northern Forest Lands (4 state)
- Action Plan
  1. Funding for Northern Forest Lands Council
  2. Funding for Conservation Easements
  3. Explore other incentives (current use, economic development grants, etc)

1994 – Northern Forests Land Council
- Makes initial recommendations

1998 - North Country Overall Economic Development Plan
1998 - **OneMaine: A Rural Development Strategy for Maine**

1999 – **New Hampshire’s Smart Growth Law.** In 1999 the Legislature recognized the impact of state agency decisions on local land use patterns and enacted RSA 9-B. This statute requires each state agency to consider “smart growth” principles when providing advice, expending funds, or distributing grant monies, for public works, transportation, or major capital improvement projects, and for the construction, rental, or lease of facilities. RSA 9-B also calls for a coordinated and comprehensive effort by state agencies.

2000 – **The Implementation of the Northern Forest Lands Council’s Recommendations: An Analysis 6 Years Later.** (for NEFA)

   State-by-state ratings of the degree to which 37 recommendations were implemented in 4 states.

2000 – **Managing Growth in New Hampshire – Changes and Challenges**

   Smart Growth principles – regionalism, capacity building, etc.

2000 – **Smart growth : the competitive advantage / recommendations of Governor Angus S. King’s Cabinet Committee on Smart Growth**

2002 – **Community Preservation Advisory Committee.** Established in statute to advise the Legislature and Governor on issues related to community preservation, including but not limited to difficult issues such as building codes and affordable housing.

2002 – **Shaping the Northern Forest Economy** - Northern Forest Alliance –

   3 strategic priorities:
   1. Amenity-based development
   2. Value-added forest products
   3. Heritage and Nature-based Recreation and Tourism

2003 — **Land and Community – Making History in the Northern Forest** - Northern Forest Center, Northeast State Foresters Association (NEFA)

   Three strategic priorities:
   1. Emergence and Identity
   2. Large Land Deals
   3. Capacity Building for Environmental Advocacy Groups and Funders

2003 — **Center for Integrated Regional Problem Solving (CIRPS),** Carsey Institute, UNH. Mission is to facilitate ecologically based, innovative approaches for securing quality of life and addressing land use challenges in New England through integrated research, outreach, education, and multi-disciplinary partnerships. Strategy involves building capacity for current initiatives to stem the loss of biodiversity and developing new collaborative projects that utilize a whole-systems approach to get at the root of the problems, and bringing these concepts to the public through demonstration, seminars for professionals, and through outreach backed by solid science.


   Smart growth principles
   Need telecommunications infrastructure
   Open space preservation
   Technology
   Experiential tourism

2004 – *Rural Matters NH Summit – focus groups*
Four focus groups conducted by NHRDC prior to 2004 NH Rural Summit. To identify threats and opportunities, and create policy recommendations in 3 areas: 1) Governance and civic engagement/ non-profits. 2) Heritage/ Rural Character and Natural Resource Utilization, 3) Small Business and workforce development.

A series of essays on trends in a variety of Maine sectors.

2005 – *Northern Forest Lands Council – Final Report*

2005 – *“Achieving Smart Growth”* web site jointly developed by the Office of Energy and Planning, the Department of Transportation, and the Department of Environmental Services seeks to make smart growth tool and resources more available to communities.

2005 – *Clearinghouse for Growing Communities.* Collaborative effort for NH & ME based at UNH Carsey Institute. Searchable on line resource clearinghouse for Smart Growth efforts.
http://cirps.sr.unh.edu/Clearinghouse/

2005 -- "*Managing Growth: The Impact of Conservation and Development on Property Taxes in New Hampshire,*" (http://www.tpl.org/tier3_cd.cfm?content_item_id=19458&folder_id=258) gives New Hampshire citizens information to help them evaluate land conservation proposals in their town. This study investigates the relationship between property taxes and permanent land conservation, using four scenarios representing commonly used municipal funding and ownership structures. This research is designed to provide voters, planners and decision-makers with a methodology and framework that will allow each community to make informed choices about allocating municipal resources.

2006 – *Northern Forest Sustainable Economy Initiative*

Five Strategies:
1) Strengthen, re-build and connect the region’s core communities (population centers, service centers) as a foundation for new economic growth and as an antidote to sprawl
2) Develop the region as a leader in sustainable, renewable energy development and use.
3) Establish the region as a top-notch destination for adventure and heritage tourism, while honoring tourism sub-brands of each state and sub-region.
4) Retain, expand and diversify our farm and forest industries with a focus on sustainability and new emerging markets.
5) Create innovation and economic opportunity based on our natural and cultural assets through R&D and incubators. Link educational institutions with the natural resource opportunities and private sector applied research needs.


2006 - *2006 Report on Growth Management.* Council on Resources and Development 4 year progress report to Governor on state agency compliance with Smart Growth Statute. Calls for
CORD (state agency council) to provide more state leadership on resource allocation and coordination. Proposes that CORD develop a state Smart Growth Mission Statement and establish a process for reviewing state and federal investments to ensure that they are in line with Smart Growth principles. Focus is on sprawl prevention and smart investment rather than rural community economic development. SEI must coordinate with CORD; state policies should support SEI strategies and could impact how any future Northeast Regional Development Commission’s resource allocations are made in NH if recommendations are implemented.
3.2. Topic #2  

Farm and Forest Products

3.2.1. Summary of Major Initiatives

3.2.1.1. Farm Products - Maine

2003 – Saving Maine’s Farmland – A Collaborative Action Plan – Maine Department of Agriculture, Food and Resources. Includes a series of recommendations focusing mostly on tools to help keep land in agricultural use (easements, current use tax, etc).


2004 - Charting the Course Progress First Annual Report and Scorecard

2005 - Charting the Course Progress Second Annual Report and Scorecard

2005 – Food Policy Council Legislation Enacted. Strengthens existing Council statute and requires strategic plan to be developed to promote distribution and consumption of local foods in connection with health and nutrition interests.


3.2.1.2. Forest Products – Maine

Task Force created by LD 2077 of the 118th Maine state legislature

2002 – Assessing Maine’s Technology Clusters – Maine Science and Technology Foundation. Concludes: “The forest products industry demonstrates the strongest cluster characteristics of any sector in Maine”


Summary: If Maine is to maintain the forest products industry as the strong and diverse cluster we see today, Maine needs to encourage new investments in the latest technologies and encourage innovation. To accomplish this objective, Maine should address challenges to its business climate and encourage diversification of forest products.

Recommendations:
1. Encourage Capital Investment (repeal personal property tax on business equipment)
2. Work collaboratively to create predictability and policy stability
3. Invest in Technology
4. Develop Entrepreneurial Talent in the Industry
5. Distinguish Maine Products in the marketplace
6. Improve the ability of Maine forest product manufacturers to compete (capital investment loans, transportation issues, etc.)

2005 – Governor’s Council on the Sustainability of the Forest Products Industry (ME) – Final Report – Recommendations:
1. Repeal personal property tax on biz equipment
2. Improve regulatory stability by enhancing communication between industry and regulators
3. Continually evaluate existing regulatory programs to assure that they meet the public health and safety need in the least burdensome manner practical
4. DEP will continue to work with industries on regulatory compliance
5. Improve connections of existing state business assistance and business development programs to forest product manufacturers
6. Continue efforts to provide timely forest inventory and analysis info.
7. Increase truck weight limits on Maine Highways
8. Inventory issues related to rail service and work collaboratively to address these issues
9. Continue efforts aimed at insect and disease management through staff transition
10. Identify the major vulnerabilities facing the industry, together with obstacles to continued growth.
11. Enhance communication on cross-cutting issues
12. Examine opportunities to brand ME forest products as “green” through certification, etc.
13. Identify strategies to increase the use of research and technology, focusing on the competitive advantages of ME tree species to expand the development of products.
15. Promote research, development, and commercialization of bio-based products, part those compatible with existing forest products infrastructure
16. Focus on research and development expenditures in the natural resources sector on efforts to bring new products to commercialization
17. Establish a logger loan program especially targeted to encourage long-term contracts for wood.
18. Establish a transition plan to reduce, and potentially eliminate the need for foreign H2B workers.
19. Develop an apprenticeship program for loggers, encouraging on-the-job training of new entrants to the field.
20. Support Northern Maine Community College’s training program for “Mechanical Tree Forestry Operations”
21. Grow Maine’s electricity market and diversify fuel sources available to Maine
22. Adopt electricity and conservation delivery policies which promote manufacturing in Maine.

By Innovative Natural Resource Solutions, LLC for ME DECD – Office of Innovation
Summary: ME has a chance to be a global leader in emerging field of converting wood to bio-fuels and bio-products.
This analysis provides:
- A preliminary review of major technologies that are emerging in the marketplace for conversion of wood to fuels and chemicals, including fermentation, gasification, pyrolysis, and fractionation
- A brief description of the challenges each technology group faces in achieving commercial maturity and acceptance.
- A listing of some of the companies active in each technology area
- A set of recommendations for the state of Maine to consider as it pursues recruitment of these firms.
Recommendations:
1. Take a ‘technology neutral’ approach to the development of bio-fuels and bio-products in Maine
2. Develop a state role for the financial support of capital investment in new projects.
3. Provide funding for feasibility analysis
4. Support research, development and deployment of new technologies
5. Place bio-fuel and bio-product development on par with existing industries
6. Develop production-based tax incentives to support facility operations
7. Provide a better understanding of the resource base available
8. Serve as a matchmaker between developers, opportunities, feedstock’s, infrastructure and financing
9. Help develop a forward market for bio-mass
10. Develop permitting rules for bio-product facilities that are clear and reasonable,
11. Address the cost of electricity
12. Develop regional support for cellulosic fuels.

3.2.1.3. Farm Products- New Hampshire

2003- Cooperative Extension County Gap focus groups.

State-wide agriculture needs and issues: 1) Agriculture is not valued enough (need to enhance understanding of agrarian roots, and market comprehensively) 2) People don’t see connection between what is purchased and what is grown locally. 3) More support needed for agricultural producers and related industries.

Priorities identified for Cooperative Extension w/in Agriculture:
23. Increase support to dairy industry (business skills, BMP’s, marketing)
24. Consumer education (farm to table)
25. Networking for farmers
26. Educating farmers about services and resources available to them
27. Support Agro-forestry
28. Research solutions for small-farm issues
29. Coordinate farmer group displays at farm and garden shows
30. Consumer nutrition education
31. Education and research about water quality issues
32. Better utilize farms as educational resources

2003 – UNH Cooperative Extension - Buying Products Directly From Farmers and Valuing Agriculture: Behavior and Attitudes of NH Food Shoppers.
Study assesses opportunities for ag. direct marketing in NH, makes recommendations.

2003 – New Hampshire Department of Agriculture – Marketing Research and Recommendations “Encounters with Agriculture” links to experiential tourism, direct encounters, etc.

2005 – The Impact of Agriculture on NH’s economy in Fiscal Year 2005. L. Goss, Institute for NH Studies, PSU. For NH Dept of Ag. Total impact of agriculture, horticulture and ag-related tourism was $2,326.7 million.
10 Recommendations:

1) Fund agricultural extension, education, and research of direct benefit to ag. In NH.
2) Increase direct marketing opportunities for producers.
3) Establish a Farm Viability Program.
4) Make conservation of farmland a high priority and dedicate a minimum of $3 million/year to buy permanent easements keeping land in agricultural use.
5) Establish a Lease of Development Rights Program.
6) NH Dept of Ag, Markets and Food and University of NH Cooperative Extension should collaborate with other NE states to enhance the dairy industry in NH and the NE region.
7) Strengthen school curriculum concerning agriculture.
8) Authorize Agricultural Commissions that local gov may choose to adopt as an advisory committee.
9) Remove burdensome rules and regs, and identify ways the State of NH can help agriculture.
10) Continue the task force process of looking at the current status and future needs of ag. in NH.

3.2.1.4. Forest Products – New Hampshire

2001 – The Economic Importance of New Hampshire’s Forests – NEFA
Total contribution - $2 billion: $1.5 Billion = manufacturing, .5 billion = recreation and tourism

2002 – Northern Forest Alliance – Shaping the Northern Forest Economy
3 strategies:
- Amenity-based development
- Value-added forest products
- Heritage and Nature-based Recreation and Tourism

2002 – Markets for Low-Grade and Underutilized Wood in NH
- Phase 1: Looks for markets to replace wood-fired power plants.
- Phase 2: Finds that attracting an MDF developer in near future is unlikely. Concludes that in the foreseeable future no other market exists to replace wood-fired electricity as an outlet to consume significant volumes of low-grade wood in NH.
- Phase 3: Seeks to fully document the environmental and economic costs and benefits associated with wood-fired electricity in NH, and to develop and analyze policy options that the state can employ to sustain this industry and its associated low-grade wood market. 10 federal and state policy recommendations are made in two categories, 1) policies which tend to assure that prices paid for wood-fired power are sufficient to allow for continued operation, and 2) Policies that reduce the cost of fuel for their plants.

2004 – Rural Matters NH Summit – focus groups
4 Focus groups conducted by NHRDC prior to 2004 NH Rural Summit. To identify threats and opportunities, and create policy recommendations in 3 areas: 1) Governance and civic engagement/ non-profits. 2) Heritage/ Rural Character and Natural Resource Utilization, 3) Small Business and workforce development.

2004 – The Economic Importance of New Hampshire’s Forests – NEFA
Total = $2.6 billion: $1.7 billion= manufacturing, $940 million = recreation and tourism.

Bio-oil represents a feasible opportunity for a sustainable low-grade wood market under certain conditions.

Intended to develop a specific strategy for bio-oil production in NH, identifying partners, markets, locations, etc. Study concludes that it is unlikely that any progress will be made without subsidies or tax incentives by state and local gov.

**2005 – NEFA Report – Branding Forest Products from the Northern Forest** – A Northeastern States Research Cooperative funded-project, this survey and report concludes that wood products industry is more interested in the coordination of state brands than establishing a new NF brand.
3.3. Topic #3

Knowledge and Creative Economy

3.3.1 Summary of Major Initiatives

3.3.1.1 Maine


2004 - Realize!Maine: In an effort to attract and retain young adults to Maine, this initiative has become a public-private partnership housed at the Maine Development Foundation lead by and for Mainer's under 35. The initiative grew out of the Governor's Youth Migration Summit in June 2004. There are also several, independent regional groups which are contributing members of Realize.
http://www.mdf.org/realize/home.html

2004—Blaine House Conference on the Creative Economy that convened close to 700 people at the Bates Mill Complex in Lewiston.

2004—“The Creative Economy in Maine: Measurement and Analysis” prepared by a research team from the Maine Center for Business and Economic Research; the New England Environmental Finance Center; and the University of Southern Maine.
http://mainearts.maine.gov/mainescreativeeconomy/conference/ce_research.shtml

Recommendations:

1) Enhance the Role of the Arts and Culture in Tourism.
2) Strengthen the Creative Cluster.
3) Prepare the Workforce
4) Encourage Asset Mapping
5) Develop Regional Approaches
6) Identify and Cultivate Leadership
7) Build and Extend Networks Across Sectors
8) Develop and Implement Strategies

2004 – Maine Innovation Index
http://www.maineinnovation.com/studies_reports/default.asp

2005—Executive Order establishing a 24 member Creative Economy Council appointed by the Governor, and a Steering Committee made of state government agency representatives (for a complete list of membership see the report produced by the Council).

An Act to Extend Civil Rights Protections to All People Regardless of Sexual Orientation (LD 1196): passed in March 2005, this law prohibits the denial of rights of employment, housing, public accommodations, credit and educational opportunity to individuals based on their sexual orientation.

2006 -- “Maine’s Creative Economy: Community Handbook” prepared by the Creative Economy Steering Committee. The handbook was designed for communities interested in creative economy opportunities.
http://www.econdevmaine.com/resources/default.asp
2006 – “Maine’s Creative Economy” this report was prepared by the Creative Economy Council in partnership with the Margaret Chase Smith Policy Center at the University of Maine. 
http://www.econdevmaine.com/resources/default.asp  
Strategies:  
Cultivate a creative mindset  
Invest in R&D of new technologies  
Support Industries’ efforts to develop and /or exploit higher-value business and marketing strategies  
Attract and retain creative workers  
Strengthen the creative abilities of all Maine workers – present and future.

2006 – The Maine Attraction Plan (LD 1968): passed in the spring of 2006 as part of Governor Baldacci’s supplemental budget, it provides tax incentives to bring all forms of media production to Maine and to develop in-state production agencies.

Key Findings:  
• Innovation drives economic growth  
• A long-term commitment and vision for state investment in research and development are necessary ingredients for success.  
• Sustained investment is essential to success  
• When possible, state resources should be provided through a competitive process  
• Collaboration among academia, non-profits and industry should be encouraged  
• Use of Maine’s limited resources should be focused

Recommendations:  
1) The Governor’s Maine Science and Technology Advisory Council should be continued as a permanent board and established in statute. The board should be expanded.
2) The Maine Economic Growth Council should be empowered to develop specific annual budgetary recommendations.
3) The Office of Innovation should submit comprehensive R&D evaluation reports annually (currently every 5 years)
4) The Taxation Committee should study the issue of tax reform as it relates to R&D entrepreneurs and businesses and should be encouraged to create new tax policies that will boldly support the growth of R&D and the innovation economy in Maine.
5) General fund support of R&D should be steadily increased over the next ten years.
6) The committee recommends a bond issue of up to $50 million for each of the next five years for competitive grants administered by the Maine Technology Institute.

2007 – Maine Innovation Index 
http://www.maineinnovation.com/studies_reports/default.asp

3.3.1.2. New Hampshire

2001—April 9th Governor Shaheen releases economic plan “New Hampshire in the New Economy.”
http://www.ndol.org/ndol_ci.cfm?kaid=106&subid=122&contentid=3265  
2001—Hosted by the New Hampshire Business Committee for the Arts and the New Hampshire State Council on the Arts, a presentation is held for artists and art organizations. The New
Hampshire Business Committee for the Arts also gathered business leaders for several events and focus groups for the New England Creative Economy Initiative.

2003—Knowledge New Hampshire emerged with the gathering of its first forum "Finding Gold: Recognizing Opportunities in the Knowledge Economy." The event convened about 40 executives from high tech, banking, legal and government institutions. The organization, Knowledge New Hampshire, is a consortium of businesses and organizations that provide regular forums on productivity and innovation in a knowledge economy. www.KnowledgeNH.org

2003—October 28th Knowledge New Hampshire holds forum, “Understanding the Knowledge Economy.”

2003—November 18th Knowledge New Hampshire holds forum, “It’s not your father’s ROI: new returns in an emerging economy.”


2004—the New Hampshire Creative Economy Network is launched. A mix of 90 business, arts, and government leaders came together to launch New Hampshire’s Creative Economy Network, a state sized variation of New England’s Creative Economy Council. An ongoing partnership between the New Hampshire Business Committee for the Arts and the New Hampshire State Arts Council (with the aid of sponsors Ocean National Bank, PSNH and Business NH Magazine), launched the New Hampshire Creative Economy Network steering committee to design a way of moving research forward into action for the state. The steering committee aims to help spark new conversations about ways the creative sector can keep New Hampshire competitive in a changing economy and address the urgency of supporting and investing in that sector. http://www.nhbca.com/news_040610_nhcenetwork.php


3.4. Topic #4  
Infrastructure

3.4.1. Introduction
Closely behind telecommunications is transportation, with a major relevant regional border corridor deficiency study currently underway - CanAm Connections: Integrating the Economy and Transportation. The core focus of this study is the relationship between transportation links and the economic performance of communities within the study area. The states and provinces are already coordinating on this massive regional initiative which is a notable strength and achievement. It is critical that the Sustainable Economy Initiative coordinate with this major related study underway simultaneously.

Efficient means of delivering energy, education, workforce development and health care services are also critical infrastructure concerns needed to sustain the region’s economic and social well-being, as is green infrastructure – the basic premise of sustaining a well-managed Northern Forest and means for the public to responsibly access it. Energy is covered separately. Education and health care services, challenges at the statewide levels and exacerbated in rural regions, are likewise major subtopics worthy of separate treatment but are considered outside the scope of this project.

3.4.2. Summary of Major Initiatives

3.4.2.1 Maine

3.4.2.1.1 Telecommunications
A Broadband Access Infrastructure Report was prepared in 2005 and its major recommendations were enacted in 2006. Key was establishment of a Broadband Development Authority that is empowered to take action to establish service in underserved areas. The Connect ME Authority now exists and is establishing itself.

Timeline:
- Governor’s Executive Order for Universal Service by 2010
- Broadband Access Infrastructure Report, November 2005
- Governor Baldacci’s Connect ME Initiative. Connect ME Authority and Advisory Committee established in statute in 2006 with duty to identify needs and facilitate broadband and wireless service in underserved areas. The Authority may provide the service itself or contract it out. It is technology neutral. Currently undertaking rulemaking to assess telecom providers for staffing costs. Housed at Maine PUC.

3.4.2.1.2 Transportation
East-west transportation across the Northern Forest region as well as improved north-south highway access to northern Maine have long been policy objectives of Maine DOT. Issues of financing limited access highways are exacerbated by environmental trade-offs and community impacts. It is difficult to reach consensus on the desirability and location of bypasses around service centers and villages.

Numerous prior studies in east-west connectivity over the years have culminated in a major study project very germane to the Sustainable Community Initiative. Maine DOT is the lead agency for CanAm Connections: Integrating the Economy and Transportation, a cooperative effort involving transportation and economic development departments of the designated states and provinces. This study will examine the relationship between sufficiency of transportation and economic conditions across the region of central Maine and the northern tier of New Hampshire, Vermont and New York State, as well as along the adjacent Canadian provinces of
Numerous prior studies on east-west highway
Corridor studies
- US Public Law 108-7 of the Transportation and Related Agencies' Appropriations provided approximately $1 million under the FHWA Borders and Corridors Program for a comprehensive study of the transportation deficiencies of the "Northeast Border Corridor," which is comprised of the states of New York, Vermont, New Hampshire and Maine, and their connections in neighboring provinces of Canada.
- Proposed $10 million trails bond before Maine Legislature
- Trail and hut systems (under Nature Based tourism)
- Sunrise County Trail
- East Coast Greenway
- Maine Highlands Outdoor Recreation Map
- Brookings study – sense of place (context sensitive design & good community processes needed)
- Gateway 1 – collaborative corridor planning pilot on mid-coast (could be model for Route 2 process)

3.4.2.2 New Hampshire

3.4.2.2.1 Telecommunications
Since a 1998 roundtable organized by the New Hampshire Public Utilities Commission, the State has recognized the need to be active in the promotion of high speed Internet access. New Hampshire has made major strides over the last several years in this area but still lags behind in the use of federal Universal Service funds to get all libraries and high schools on line. The State has directed the Department of Resources and Economic Development (DRED) to facilitate deployment of broadband throughout the state and is pledged to a technology-neutral approach. The department maintains a web site to help educate consumers and track broadband availability. (check re affirmative action toward north country). The 2004 Broadband Strategic Plan organized by the NH Rural Development Council identified the need for 7 broadband hubs within the North Country. Private competitive initiatives and discussions are ongoing. Proprietary data regarding existing infrastructure investment has retarded progress but the purchase of Verizon by Fairpoint may make a difference.

Major Initiatives:
- 2002 Moving NH into The Digital Economy Report
- 2004 Broadband Strategic Plan (NH Rural Development Council)
- Funding for 2002 report and directive to DRED to promote broadband.

3.4.2.2.2 Transportation
New Hampshire is participating in the CanAm Study referenced above. Route 16 has been a best practice corridor preservation effort and bypass effort, especially through the North Conway region. A North Conway Village Streetscape Project initiative demonstrates commitment to the quality of place while transportation improvements are being made. The North Conway experience should be shared with the rest of the region as Route 2 improvements are deployed.

Transportation is expensive and difficult for rural residents, especially for essential services such as health care. As the population ages and fuel prices escalate, the need for transit programs grows. An excellent transit planning process took place in the North County Council region in 2006. Efforts to coordinate transit services among multiple providers were explored and barriers identified. Tangible issues such as insurance and the use of private vehicles and volunteer drivers complicate opportunities for seamless coordination among otherwise willing
providers. A centralized service request line and provider directory emerged as initial steps toward a shared provider network. The participation of health providers is an important innovation to coordinate trip scheduling and financing. Continued collaboration among partners is highly desired to serve the needs of area residents and to a lesser extent businesses benefiting from workforce transit opportunities. The plan urges the State DOT to fund the first critical steps to further this important work and address insurance and vehicle use barriers at the state level. Vehicle use barriers also exist at the federal level. A full public transportation system for the North Country is a shared desired outcome by participating organizations.

- Route 16 Corridor Study was done in 1997.
- Route 2 Corridor Study was done in 2000-01.
- 2006 -- North Conway Village Streetscape Project
- 2006 – Regional Coordinate Transit Plan for North County Council Region
- Current CanAm study
- 2004 – Federal Funding for North Conway Village Streetscape Project
- US Public Law 108-7 of the Transportation and Related Agencies’ Appropriations provided approximately $1 million under the FHWA Borders and Corridors Program for a comprehensive study of the transportation deficiencies of the "Northeast Border Corridor," which is comprised of the states of New York, Vermont, New Hampshire and Maine, and their connections in neighboring provinces of Canada.
3.5. Topic #5

Heritage and Nature-Based Tourism

3.5.1. Summary of Major Initiatives

3.5.1.1. Maine

2000 – Planning for Ecotourism on the Coast of Maine
• Partnerships between government and private/nonprofit organizations
• How much tourism is too much?
• Establish volunteer guidelines for tourism operators and their customers
• Promote local entrepreneurship

2003 – Charting a New Course Conference Report
David Vail, Sustaining Nature-based Tourism in Vacationland.

Issues:
• convene a development committee to develop degree, research, and extension programs in hospitality and recreation
• broaden the Department of Economic and Community Development’s tourism capabilities
• improve tourism and recreation land-use management
• establish processes to bring sustainable development criteria into tourism planning
• increase the state’s to provide certain technical assistance to municipalities seeking tourism industry growth
• explore a comprehensive Maine branding campaign

Strengths:
Location, Tradition, and Image
Resource and Products
Organization and policy momentum

Weaknesses and Challenges:
• Coastal Congestion Costs: the cumulative effects of minimally managed growth
• interior Maine and Washington County: lacking “destination drivers” and a potent brand image
• Changing land ownership: patterns and vulnerable recreational access
• anemic growth and stagnant market share: business cycle, inadequate product offerings, or insufficient promotional effort
• high expenditure leakages and reduced in state value added
• low median earnings and skimpy benefits
• shaky knowledge base for public policy and business decisions

Opportunities:
• Branding the northern forest and Downeast regions: building and promoting destinations
• certifying ecotourism
• shaping destinations: nature and culture – plus high quality food and lodging
• major summer events to expand the first-time visitor base
• a recreation master plan for public and trust lands and easements
• a multi-modal transportation network for long term sustainability
• spreading best management practices: a tourism extension center
• stronger linkages to agriculture, fisheries, and forest products and to Maine input suppliers
2004 – Natural Resource-based Industries: Charting a New Course, 1st Annual Progress Report and Scorecard
- Pressures of rising land values
- deliver a range of services and incentives for tourism planning, development, and management
- increase coordination, cooperation, and branding
- investments in higher education training for hospitality and tourism are needed
- improve understanding of sustainable tourism in developed and underdeveloped regions

- Capacity Building
- Business Assistance
- Product Development
- Marketing Linkages

2005 – Maine’s Natural Resource-based Industry, 2nd Annual Report and Scorecard
Accomplishments:
- increase investments in education, training, research, and small business extensions
  1. launching of CENTRO, 2005
  2. Tourism training initiative in the Maine Community College System
- implement sustainable tourism economic development planning
  1. Maine’s nature tourism initiative, 2004: department of economic and community development retained FERMATA to assess Maine’s opportunities in nature-based tourism

2005 – Strategic Plan for Implementing The Maine Nature Tourism Initiative
This plan, developed by FERMATA, Inc., was a direct outcome of Charting a New Course. It establishes strategic plans sustainable natural-resource based tourism in three Maine regions: The Western Mountains, the Highlands, and Downeast.

Findings:
- culture and history should be used for enrichment to the natural resource based experiences
- opportunity for developing highway-based thematic itineraries exists and is well supported by the state’s transportation agency
- visitor centers should function as gateways and portals to the regions’ visitor experiences
- ample lodging, but does not meet quality requirements of many tourist
- tap into marketability of the uniqueness of the cache of Maine Guides
- authentic locally manufactured products and foods exist but are often poorly branded and marketed

Plan of Action Focus:
1. Administration and Coordination
2. Additional Inventory and assessment
3. Develop Itineraries
4. Highway signage to support itineraries
5. Interpretation and infrastructure development
6. Integrated marketing communications
7. Visitor support services assistance
8. Local economic development assistance
9. Additional studies
2005 – CenTRO (Center for Tourism Research and Outreach) established at UMaine and Maine Tourism Advisory Committee Appointed by Governor. As an interdisciplinary initiative of the University of Maine System, CenTRO involves and coordinates the efforts of faculty across numerous disciplines on all campuses in the state. It has grown out of the increased recognition of the economic, social and environmental impact of tourism in Maine and the importance of recreation to the quality of life in Maine. The value of tourism to Maine has resulted in the need for addressing tourism's complicated issues such as market analysis and promotion, land-use planning, geographic distribution, public-private cooperation, coastal and inland resource development as well as the integration of tourism with other community development strategies.

CenTRO's goals are:

1. Increase the competitiveness of Maine’s tourism industry through research on new and existing products, services and markets.
2. Conduct outreach to facilitate the integration of arts and cultural amenities with natural amenities as high quality tourist attractions in Maine.
3. Enhance academic programs to improve the management and service skills of tourism employers and employees, and enhance the wages and job opportunities for those employed in the tourism industry.
4. Train a new generation of entrepreneurs, managers and skilled employees to develop businesses that focus on quality service and take advantage of underutilized tourism assets in Maine.
5. Increase the market share captured by Maine’s tourism businesses in the northeast region.
6. Encourage the development of new tourist destinations, products and services.
7. Help communities improve the economic contribution of tourism in all regions of the state.
8. Develop new and improved information sources and reports for the industry and the state to better inform and guide planning and business development.
9. Develop a consensus within government and industry on key programmatic and strategic steps to enhance the role of tourism in Maine’s economy.

3.5.1.2. New Hampshire


2002 – Agricultural Tourism in New Hampshire – Institute for New Hampshire Studies/ Plymouth State University

2002 – Shaping the Northern Forest Economy: Strategies for a sustainable future This report published by the Northern Forest Alliance identifies “recreation and tourism based on the region’s cultural, heritage and ecological values” as one of three primary strategies for a healthy sustainable economy in the Northern Forest.


3.6. Topic #6

Energy

3.6.1. Summary of Major Initiatives

3.6.1.2. Maine

3.6.1.2.1. Hydro
- General trend to upgrade fish passage or remove dams during FERC relicensing; can be very divisive between dam owner, fish restorationists and river/lakefront property owners
- 2001 – Edwards Dam Removal at head of tide in Augusta, restored 15 miles of sea run access.
- 2002 – present: Penobscot River Restoration Project. Best practice collaborative effort with dam owners and all interested parties to remove some dams and upgrade others.

3.6.1.2.2. Wind
- The Western Mountains has great wind potential but without agreed upon zoning for wind farm development any developer takes a great risk; the need for zoning mountains for wind development has been noted in several reports.
- 2007 -- Redington Township wind proposal rejected by Land Use Regulation Commission
- 2006 – Mars Hill wind farm constructed, coming on line, some neighbor concerns regarding blade noise
- 2006 – 07: Coastal Enterprises Inc. coordinating wind feasibility study for new Mt. View School Complex in Thorndike, funded by Jessie B Cox Charitable Trust

3.6.1.2.3. Wood
- 2006 -- DECD Commissioner working with paper mill owners to consider transition to biofuel development
- 2006 – present: University of Maine – Forest based biofuels research & development – national leader, supports business incubators
- 2005 – present: Fractionation Development Center – establishing commercial ability to separate bio-oil into graded products including pharmaceuticals
- Biomass & Biofuels Steering Committee – working group (state agencies, U Maine, MACD, Maine Tree Foundation) following up on conference momentum, focusing on schools
- 2006 -- Old Town paper mill purchased by Red Shield energy products to experiment with biofuel refinement
- Air quality issues related to wood furnaces need to be addressed both at the back yard and community facility (e.g. school) scales.

3.6.1.2.4. Agricultural Energy Products
- Kingfield Elementary School heated with corn stove using pellets grown in Farmington
- Culled potato research
- Numerous waste oil biodiesel projects including:
  - Laughingstock Farm greenhouse heating from restaurant waste
  - French Fry Express kids ski bus from Kingfield to Sugarloaf
- Governor instituted biodiesel excise tax credit to stimulate purchases
- 2006 – present: Jeff Bragg dairy farm working with Farm Energy Partners Network, Farms for the Future Program and Maine Technology Institute to explore design of small scale manure and food waste methane digester
2007 – Natural Resource Conservation Service leading technical assistance provider training for agricultural methane digesters

3.6.1.2.5. Greenhouse Gas Concerns
- 2003 - “An Act to Provide Leadership in Addressing Climate Change”, which law sets a goal for the State of Maine to reduce greenhouse gas emissions to 1990 levels by 2010, to 10% below 1990 levels by 2020 and, in the long term, to levels sufficient to eliminate any dangerous threat to the climate
- 2006 - Landfills are considering methane digesters
- 2007 – Governor proposes to Legislature that Maine join Regional Greenhouse Gas Initiative and set carbon credit trading policy

3.6.1.2.6. Electric Grid
- 2007 – Bangor Hydro rate design case addressing allocation of costs when large user leaves system (eg Eastern Maine Medical Center with gas-fired generator)
- 2006 – Legislature voted to urge PUC and Governor to explore alternatives to ISO New England – net exporting states like Maine will be charged for addressing consumption needs of southern New England
- 2007 – Governor signs agreement with New Brunswick to share power
- 2007 – PUC encouraging siting of transmission line to give Aroostook County access to competitive energy sourcing

3.6.1.2.7. Energy Independence
- 2003 -- Governor Baldacci established an Office of Energy Independence
- 2004 – Solar Panel Tax Credit
- 2006 -- “An Act To Enhance Maine’s Energy Independence and Security” adopts a goal of increasing renewable energy resources in Maine by 10 percent by 2017 and adopts a policy that favors new renewable power resources within this state and new capacity resources that emit no greenhouse gases on net.
- 2006 – Governor Baldacci issues Executive Order creating Maine Hydrogen Partnership to speed up development of hydrogen technology created from renewable sources for fuel storage
- Maine State Energy Program offers basic energy audits to small businesses.
- Efficiency Maine offers cost-share assistance to small businesses for installing more efficient electrical equipment. Paid for by electric consumer surcharge; could be charging a higher rate (recommended in NRCM Leadership Report)

3.6.1.2.8. Assessment of Advancements, Opportunities, and Gaps / Barriers
1. The Governor should provide a full-time director and adequate resources for the Energy Resources Council and the Legislature should hold the Council accountable to meeting its statutory responsibilities (Energy for Maine’s Future, 2002).
2. Leading edge biofuel and fractionation research and development sets Maine up as a leader in this industry. Building this opportunity into a full industrial system requires investment and planning.
3. Renewable energy is clearly a growth sector but there is not a coordinated means of preparing the state to take full advantage of this opportunity. Purposeful workforce training in wind, biomass, biofuel, tidal and hydro applications, as well as public financing support for renewable projects will
4. Maine needs to develop statewide siting guidelines and improved regulations to help direct wind projects toward suitable sites, with legal protection for areas with high ecological, scenic or recreation values. (Energy for Maine’s Future, 2002).
5. Distributed generation policy needs further attention to promote small-scale renewable energy generation while protecting other users on the electric grid from bearing disproportionate system costs.
6. Overall system plans for alternative transportation fuels, including storage and delivery systems, do not appear to be being addressed.
7. Manufacturing opportunities for energy conservation materials such as natural insulation and storm windows might be explored.
8. Air quality issues related to wood furnaces need to be addressed both at the back yard and community facility (e.g. school) scales. This is a technology development opportunity to produce clean burning appliances.
9. Small and community scale wind generation could be enhanced with bulk purchase of anemometers to reduce the cost of feasibility testing on a site by site basis.
10. The Regional Greenhouse Gas Initiative and federal incentives to capture carbon offer forest and agriculture landowners opportunities to reap economic rewards for land stewardship. The potential to draw funds from consuming states to natural resource producing states within the regional system provides a boost to forest landowners.

3.6.2.2. New Hampshire

3.6.2.2.1. Energy Policy

1996 -- **Electric Restructuring Statute** (RSA 474-F:3 Get date) – establishes broad public policy principles of full and fair competition, benefits for all consumers, protection of low-income consumers, environmental improvement, increased commitment to renewable resources, and investments and incentives for energy efficiency.

2001 – Legislature charged Governor’s Office of Energy and Community Services (ECS) with developing 10 year State Energy Plan

2001 – **Clean Power Act** signed into law, linking public and ecosystem health interests to power generation and making NH first state in the nation to require fossil-fuel power plants to reduce emissions of sulfur dioxide, nitrogen oxides, carbon dioxide and mercury. This legislation has been considered a model for other states and the federal government.

2002 -- **State Energy Plan** – 10 year plan provides an excellent analysis of forecasts and choices and many recommendations for action:

**Short Term:**
- Establish Energy Planning Advisory Board to carry on continuous dialogue and strategic planning; staffing resource limitations at ECS were noted
- Encourage Energy Efficiency in New Construction of State Buildings
- Support Cost-effective statewide energy efficiency programs
- Purchase Energy Star equipment for state offices
- Convert to LED Traffic Lights

**Near Term (2-3 years):**
- Establish Renewable Portfolio Standard
- Monitor and develop infrastructure for natural gas
- Enhance the process for siting state energy facilities
- Strengthen state energy codes and assist with compliance
- Purchase green cars for the state fleet
- Partner with colleges and universities for energy efficiency

**Longer Term:**
- Purchase renewable power for use by the State
- Use biodiesel fuel in the state fleet
- Use school building aid to encourage energy efficiency
2002 – State Energy Plan evaluates the effectiveness of the State’s Energy Facility Siting Evaluation Committee (SEC) process for 1-stop regulatory review of large energy projects of over 30 MW and transmission lines (used since 1990) and finds that it is working well.

3.6.2.2. Wood Energy

2005 – New Hampshire Bio-Oil Assessment Analysis finds that there are no existing wood products plants large enough to support a bio-refinery in NH and that government subsidies would be needed to compete with other locations.

2006 – PSNH Northern Wood Power Project goes on line at Schiller Station in Portsmouth replacing 50 MW coal boiler with state of the art wood fired boiler, reducing air emissions by over 380,000 tons annually and providing a market for 400,000 tons of wood annually mostly supplied from within NH. The NH Timberland Owners Association, the Audubon Society of NH, Society for Protection of NH Forests, City of Portsmouth and Town of Newington were project collaborators.

3.6.2.3. Renewable Energy Incentives

State incentives: The State of New Hampshire does not offer grants, loans or rebates for the purchase or installation of renewable energy systems. However other incentives exist:

- **Net metering**: NH Public Utilities Commission Code 900 provides for net metering, which permits homeowners to receive credit for on-site electricity generation, such as from a solar photovoltaic (PV) or wind turbine installation when the generation exceeds household consumption. This is accomplished by use of an electric meter that can run both forward and backward, so that the homeowner is billed only for the net reading on the meter.

- **Solar skyspace easements**: NH RSA 477:49-51 permit landowners to guarantee access to sunlight for an abutter’s solar installation by restricting building height or vegetation that would cast a shadow on that solar installation.

- **Streamlined facility siting approval process** for commercial-scale electricity generating projects and other large energy-related installations such as refineries. Required for all generation projects of 30 MW or greater, and optional for smaller projects. This "one-stop" process, detailed in Chapter 4 of the New Hampshire Energy Plan, may reduce project costs by shortening project timeline; and by simplifying the process of identifying and complying with all relevant permitting and regulatory requirements. For more information the New Hampshire Site Evaluation Committee, its history and operations, see [http://nhsec.state.nh.us/](http://nhsec.state.nh.us/).

Local incentives:

- **Renewable energy property tax exemption**: NH RSAs 72:61-72 permit cities and towns to offer exemptions from local property taxes for certain renewable energy installations. These include solar thermal (for example, to heat water), solar photovoltaic (to generate electricity), wind (to generate electricity) and central wood-fired heating systems (not stoves or fireplaces). Sixty-two cities and towns have adopted one or more renewable energy property tax exemptions as of 2006.

NH has 2 state programs to promote alternative fuel use, primarily for vehicles:

- The [Granite State Clean Cities Coalition](http://www.granitestatecleancities.org), which is operated by the NH Department of Environmental Services and funded by the US Department of Energy. GSCCC is a partnership of local private and public fleets throughout the state. The project seeks to
expand the use of alternative, cleaner burning fuels by private and public fleets and individuals. GSCCC offers training, equipment and vehicle demonstrations, and strategic planning services.

- The Alternative Fuel Vehicle Project, which is operated by the NH Department of Environmental Services and funded by Congestion Mitigation Air Quality funding from the NH Department of Transportation and the US Department of Transportation. The project provides funding to help state and municipal fleets purchase alternative fuel vehicles and infrastructure.