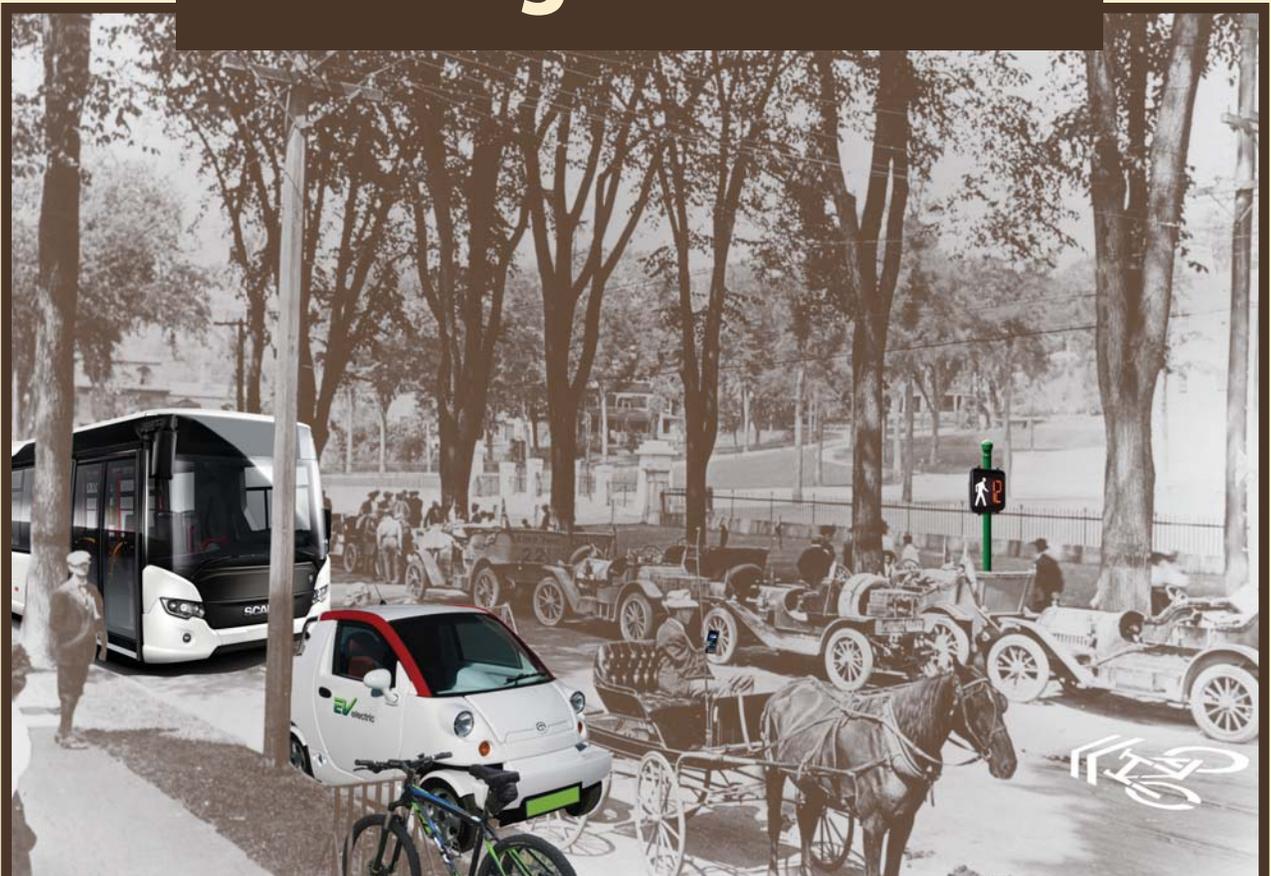


Vermont

Environmental Report

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Vermont
Natural
Resources
Council, Inc.

Building on the Past



to Create Vermont's Transportation Future

Ensuring a Strong VNRC Future

For over 30 years, Dot Hines and Cathleen Miller have supported the Vermont Natural Resources Council by generously giving their time, opinions, support and financial donations. Cathy served on the board twice (totaling 12 years) and together they hosted many parties for VNRC in their beautiful Warren home.

Now, the two of them have helped to ensure that VNRC will be able to work on the important environmental issues facing Vermont in the years ahead. Dot has named VNRC as a recipient in her will, and Cathy has named VNRC in a Charitable Remainder Unit Trust, or CRUT. A CRUT requires that a fixed percentage (minimum 5%) of the annual value of trust assets be paid to the income beneficiary. For example, a CRUT with a value of \$1,000,000 and a 5%

payout would pay \$50,000 to the income beneficiary in that year.

Cathleen said, "VNRC has been doing great work for over 50 years, and I'd like to see it be successful far into the future. My gift will help ensure that VNRC can tackle Vermont's most pressing environmental challenges in the years to come."

VNRC's most sincere thanks go out to Dot and Cathy. If you are interested in hearing more about planned giving options such as putting VNRC in your will, establishing a charitable remainder trust, or leaving real estate to VNRC, please talk to a professional about your wishes, call our Development Director Stephanie Mueller at 802-223-2328 ex 113, or visit join.vnrc.org.



Cathleen Miller, former VNRC board member; Elizabeth Courtney, VNRC board member and former Executive Director; Dot Hines.

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Through research, education, collaboration and advocacy, VNRC protects and enhances Vermont's natural environments, vibrant communities, productive working landscapes, rural character and unique sense of place, and prepares the state for future challenges and opportunities.

VNRC is the Vermont affiliate of the National Wildlife Federation.

VNRC membership includes a subscription to the Vermont Environmental Report magazine. Join VNRC in protecting Vermont with your membership of \$40.

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Charting the Path Ahead

By Brian Shupe



Like many Vermonters, I'm leery of change. In recent decades, change – to Vermont's working lands, the health of our forests, the quality of our rivers and streams, and to the earth's climate – has carried with it a fair share of troubling news.

Change is inevitable, however, and our work at VNRC involves trying to shape those changes in a way that safeguards our natural resources and protects the physical character and vitality of our communities.

We do this in a variety of ways. We work with communities, including energy committees and planning and conservation commissions, to provide the tools needed to shape change at the local level. We research the trends that are driving change and ways to affect those trends. And, we work with diverse partners, lawmakers, and state officials to craft and implement policies and direct investments that will steer the state in a positive direction.

In this issue of the *Vermont Environmental Report* we explore how our transportation system is changing—and how it should change in coming years. And we explore the relationship of transportation to other aspects of life in Vermont, most notably the use of energy and land.

Looking into the past, the interstate highway's arrival in the early 1960s (and its eventual completion 20 years later) transformed the state – positively and negatively – providing easier access to the wider world while ushering in an era of automobile dependency and suburban sprawl.

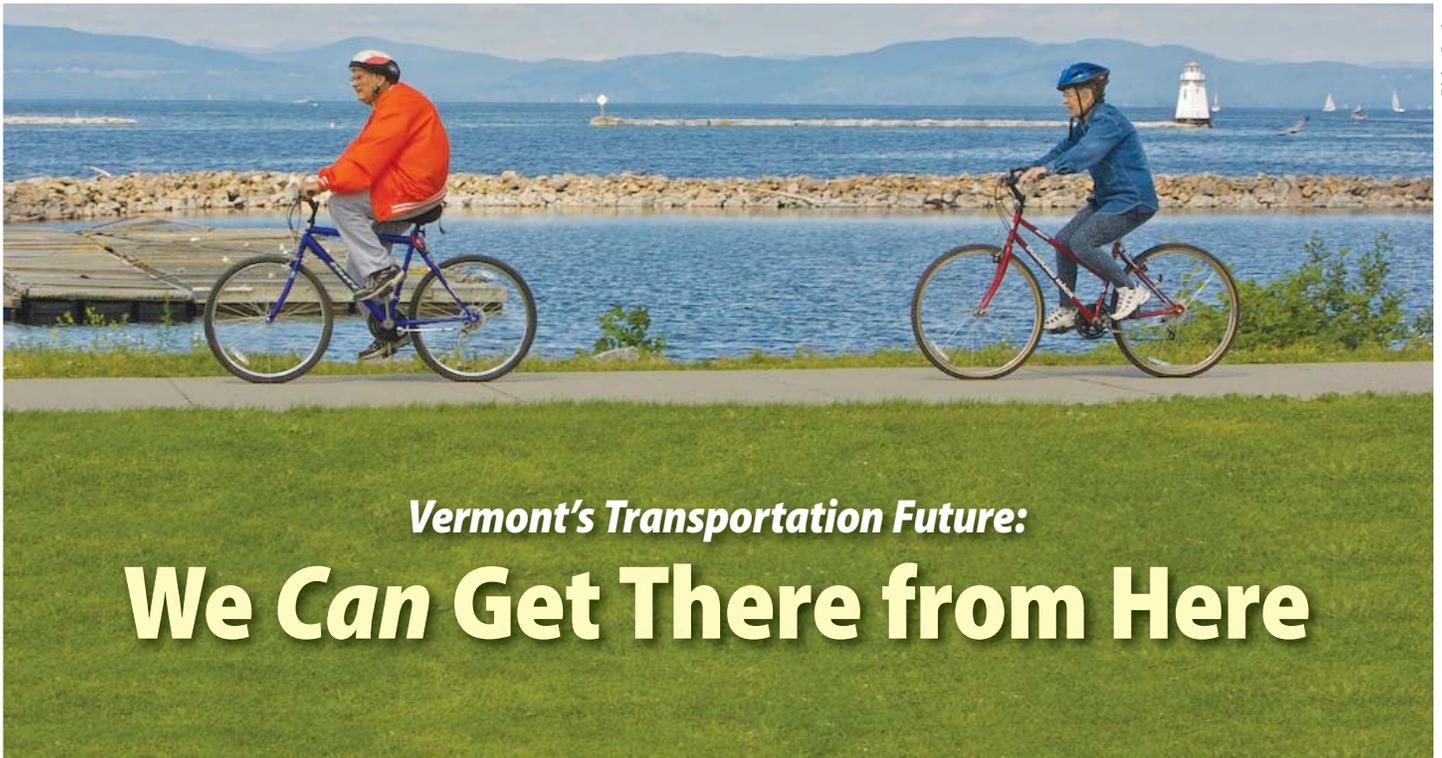
The coming of the interstate was one of several transformative events that prompted a group of Vermonters concerned about the future to found VNRC in 1963. Since that time, VNRC has been at the forefront of efforts to thoughtfully respond to the physical, economic and cultural transformations that have shaped Vermont over the ensuing 50+ years.

The billboard ban, bottle deposit law, Act 250, the use value appraisal (current use) program, the Vermont Housing & Conservation Fund, Act 200, the Heavy Cutting Law, the Downtown and Growth Center programs, several policies to support renewable energy, the Groundwater Protection Act, the Vermont Clean Water Act, and many other policies have been advanced with VNRC's advocacy to address emerging issues confronting our state.

The truth is, we have done a better job than most states in managing change to maintain our natural resources and sense of place. This has required foresight – after all, the benefits we are seeing today stem from over 50 years of vision, leadership, and resolve. Change will continue, and with regard to the transportation system we will need in 2066, now is the time to make the choices and investments that will make it happen.

And speaking of change, this VER announces recent changes on VNRC's staff. While we will miss Jake Brown and Kim Greenwood, I am delighted to welcome Jon Groveman, Hannah Huber and Meredith Naughton. They have joined a great team, and together we remain committed to providing common sense solutions for a changing Vermont.

Finally, I want to thank VNRC supporter and friend Lindy Biggs for researching and writing much of the content in this VER. It is members like her that make the work that we do possible and tremendously rewarding.



Vermont's Transportation Future: We Can Get There from Here

By *Lindy Biggs and Kate McCarthy*

Transportation is how we move people and goods from one place to another, providing the mobility that is essential to our lives. Considering how important transportation is to all of us, it is surprising how much our current transportation system is taken for granted as a constant that will remain unchanged for the foreseeable future.

However, as community settlement patterns, energy supplies, population demographics, and economic circumstances change, so will the way in which we get around Vermont.

Fortunately, we created the transportation system we have through a series of choices and investments, and we have opportunities to make it better in response to a changing world and needs.

Planning Vermont's transportation future requires looking into the past and coming up with new ideas. The automobile transformed daily life in Vermont, but it was only after World War II that automobile ownership became common. Even then, it wasn't until the 1960s that most families owned one or two cars.

Before that time, we relied largely on our legs and animals for most of our mobility needs, and public transportation supplied much of the rest – even train service that allowed a resident in tiny Wells River to take a train to Waterbury, Montpelier, or go on to New Hampshire or Maine.

Might we move back in that direction? “There’s no denying that the car increased connection and opportunity in rural areas in the 20th century, and this was an important innovation,” says Kate McCarthy, VNRC’s sustainable communities program director. “But it’s also true that our transportation system came of age in an era of cheap fuel, and we made choices that created a transportation monoculture of cars and roads.”

Cheap, easy car travel enabled development on land far

from our traditional downtown and village centers, increased suburbanization and rural sprawl, and quietly encroached into the rural areas we so value. The more spread out we became, the more cars and roads we needed – a vicious cycle that is hard to break and expensive to maintain.

Today we also know that fossil fuel supplies are dwindling and the environmental costs of oil use are staggering. With these things in mind, what should Vermont’s 21st century transportation system look like?

Getting Around Vermont

Like other predominately rural states, Vermonters have long commutes to work, with four out of five people traveling in single occupancy vehicles. We also, on average, drive more miles on an annual basis than other states, and four of the five most popular vehicles in Vermont are trucks.

Less typically, Vermont has one of the best rural transit systems in the country with a network that continues to expand. We have increasing numbers of people who walk to work, and a state agency of transportation that is designing Complete Streets for users of all ages and abilities, and for all uses – not only automobiles. And, tying it all together, Vermont retains much of its historic settlement pattern of compact villages and downtowns.

These assets position Vermont well to address global warming and meet its ambitious goals to reduce energy use and greenhouse gases. After all, in Vermont, transportation accounts for nearly 34% of our energy use and over 47% of our greenhouse gas emissions – the state’s largest contributor to global warming.

Are we ready to give up our reliance on fossil fuel based transportation – our beloved cars – and the sense of security and mobility they provide? Can we do so without a loss in quality of life?

Vermont's transportation habits are already changing. From 2008 to 2014, sales of gasoline declined, and purchases of hybrid vehicles and electric cars increased. Vehicle miles traveled (VMT) are decreasing, carpooling is growing, and walking, bicycling, and public transit use are increasing.

The High Costs of Driving

Our driving habit is expensive. The direct costs of operating and maintaining a car – fuel, insurance, and maintenance – aren't cheap. In 2015, on average, it cost just under \$9,000 according to AAA – and that is with unusually cheap gas prices.

Many of the other costs of driving, however, are hidden in what economists call “externalities,” the things for which

someone else pays. For example, oil companies make a lot of money selling their product, but they don't pay for the negative effects of burning oil and gas: Traffic, pollution, impacts to public health, and global warming are being paid for by the general public.

There are also hidden costs that everyone pays. A 2015 report suggests that gas taxes pay for less than half of road costs. A modest estimate is that, on average, every household in the country spends over \$1,000 in taxes to subsidize roads, whether or not they drive. So, out of habit, we subsidize car transportation, while public transit, bike and pedestrian infrastructure often get scrutinized or dismissed as too expensive.

In addition to dollars, our driving habit costs quite a bit

Building Choice in Our Communities

Our transportation system is more than just roads, sidewalks, busses, and bike lanes. It's also our land – the “settlement pattern” of what's built on the land and where. The compactness of that pattern, the proximity of different destinations, and how places are connected all affect our transportation options. Places that are more compact, and have more destinations, can be more easily and efficiently served with options like transit, bike lanes, and sidewalks.

If you ask Vermont's transportation experts the key to our transportation future, they'll answer in a single voice: maintain our compact towns and villages. “We have historic authenticity,” says Secretary of Transportation Chris Cole. “We should invest in our downtowns and maintain them. They create jobs, which allows us to live and work in the same community.”

Because the majority of land use decisions are made locally, we have the opportunity to make smart choices – through local planning, investment, and decision-making – about where and how new development happens. Not planning – or making poor land use decisions that result in sprawling settlement patterns – has the opposite effect of making our communities automobile dependent and less accessible to Vermonters of all ages and income levels.

There are a variety of steps towns can take:

Providing housing in downtowns and villages helps lay the groundwork for multiple transportation options because compactness makes transit service possible: Typically it requires eight dwelling units per acre, and people will generally walk between $\frac{1}{4}$ and $\frac{1}{2}$ a mile to get to a destination, including a transit stop.

Vermont's Neighborhood Development Area designation program, administered by the Department of Housing & Community Development (DHCD), helps communities delineate areas around downtowns and villages as “development ready,” and gives benefits to housing projects built in these areas. Using data from the National Household Transportation Survey, DHCD has found that households in designated compact areas actually drive about half as much as households outside.

Another strategy is to eliminate parking requirements to avoid overbuilding parking. Requiring excessive on-site parking discourages compact settlement patterns. Several Vermont communities – including South Burlington – have eliminated or are considering eliminating this requirement in their downtowns, deciding to treat parking as a shared public resource.

Of course, there are approaches other than planning and zoning, too. As part of a recent road repaving project, the village of Lyndonville added new bike lanes through the downtown with a simple stripe of paint. Steps toward change can be experimental, too: This summer, the city of Burlington is implementing a pilot project on North Avenue to see

whether it works – both for people in cars and on bikes – to provide bike lanes by removing one of four travel lanes.

Local action to improve transportation can also involve simply making the street more welcoming. Montpelier worked with students and an architect to build parklets (a small, constructed park) that, for a part of the year, replaced parking space with a public space.

We will certainly remain a rural state, but still have many opportunities to provide transportation options with the choices we make.



Lyndonville, VT



Fair posters from years past, and you might think that answers involve hoverboards and personal spacecraft (and it's true - autonomous vehicles may very well be on the road in our lifetimes).

But the future isn't always that futuristic. Despite the draw of many exciting technologies on the market and under development, we think that many of our best solutions for our transportation future build on what we already know. It's possible to build a strong transportation future by building on what works and making it better with ongoing technological advances and good policies. These ideas will reduce our personal transportation costs, the cost of maintaining state and municipal infrastructure, our energy use, and our environmental impacts.

The technologies that are perhaps the most exciting part of our transportation future – electric vehicles, Uber, autonomous vehicles – are important. But transportation will always be about connecting places and people, and all new innovations will be affected by the basics: where we live, where we need to go, and how far apart our destinations lie. The key decisions that will shape Vermont's future transportation system include:

- **Planning our communities in ways that help us achieve our overall goals:** Compact settlement, housing in towns, and investing in villages and downtowns must be part of every transportation conversation. Several Vermont communities have made great progress in promoting smart growth – and preventing automobile dependent sprawl – but more work is needed. Technologies like broadband, shared workspaces, and car sharing are important community and economic development strategies for keeping our downtowns and villages strong.
- **Building on what's working:** We've seen success with a range of transportation strategies: park and rides, commuter buses, van pools, employer programs, working from home, workplace based coordination of ride share programs (especially in order to serve shifts outside the usual 8-5 workday), providing incentives to drive less along with disincentives for driving (tax programs, less parking, charging for parking), and state designation programs that promote vital downtowns and villages. We need to build on these successes.

of human capital – particularly time. The Vermont Genuine Progress Indicator, a measure of well-being that offers an alternative to the Gross Domestic Product, calculated the “cost of commuting” – including fuel, lost leisure time, and the cost of public transportation used for commuting – and it's not cheap. It found that commuting “cost” Vermonters \$1.387 billion dollars in 2011 – 95% of which was the value of lost time. (The economic benefits of being able to have a job and income are calculated elsewhere in the indicator.) Additionally, more time spent driving increases the risk of having an accident and results in less physical activity for children and adults.

Our cars and roads also affect our land and water. Car-enabled rural sprawl has contributed to forest fragmentation, and stormwater from roads has been identified as a major source of water pollution.

Vision for the Future

What role will transportation play in creating the Vermont of the future? The transportation choices we make today affect many aspects of our tomorrow: They affect our personal budgets as well as our town and state budgets. They can benefit our health or discourage exercise. They can contribute to our social connections or keep us isolated. Transportation choices can also contribute to a healthy local economy, since pedestrians in downtowns are more likely to enter multiple businesses than in areas with big box sprawl.

A good transportation system can also help us reach our water quality, economic development, and energy reduction goals.

What will transportation in Vermont look like in twenty years? We need the ability to get where we need to go, of course, but as McCarthy adds, “If we do it right, we can create a transportation system that provides benefits to everybody and is equitable across all income levels.” Eliminating all independent motorized transportation is not the endgame, but changing our almost complete dependence on it is.

But how do we get there? Read a science fiction book or look at World's



Stagecoach Transit

- **Building on what's already here:** We're seeing progress throughout the state with restoring rail as an option for moving passengers and freight – building on what we already have and providing yet another layer of choice.
- **Harnessing the sharing economy:** Vermonters already benefit from the transportation “sharing economy” – check out the latest FrontPorch Forum posting and you're likely to see someone offering or asking for a ride, or learn about ZimRide on the Go Vermont webpage. We can continue to provide more options by integrating technologies like apps that will encourage ride sharing in rural areas.
- **Embracing both new and old technology:** Electric vehicles and cargo bikes are technological innovations

that can be part of lower carbon transportation and complement our compact settlements.

- **Managing carbon:** A carbon pollution tax, acknowledging the true costs of roads, and developing policies that address the many externalities of transportation must be part of Vermont's transportation future. This would shift our taxes away from things that can't be avoided (e.g., wages, consumer purchases) to something that – with the right public policies and investments – can reduce our reliance on fossil fuels.

As Agency of Transportation Secretary Chris Cole says, “We must invest strategically in the future. Through unified purpose we can obtain our common objectives.”

Transportation Can Provide More Than Just Mobility

Our transportation system provides us with the mobility we need in our everyday lives, but careful investments can bring many other benefits.

Economic benefits: Noelle MacKay, Commissioner of Vermont's Department of Housing and Community Development, says that our downtowns represent 25% of our economic activity, and that a robust regional transportation network that embraces multiple transportation modes helps maintain access to these vibrant economic centers. “We can further enhance the economic value our downtowns by integrating our regional transportation system with our existing downtown land uses,” says MacKay. In addition, strategic transportation investments in downtowns – including sidewalks, bike racks, benches, and bus stops – can further support businesses by creating attractive places for people to live, shop, and invest.

Energy savings and greenhouse gas reduction: A variety of transportation options – transit, park and rides, roundabouts, commuter incentives, or even wider road shoulders in rural areas – helps reduce miles traveled, and the energy used and pollution created by driving. Just as the cheapest kilowatt of electricity is the one not used, the greenest mile is the mile not traveled.

Household savings: Transportation options can also help households save money – a goal that is particularly important with an aging population that may be on fixed incomes. Spending more than 45% of income on housing and transportation is considered unaffordable, so spending less on transportation is one way to reduce costs. “Because we're so accustomed to driving, it's easy to forget how the location of our home can really impact our transportation options and overall costs,” said Kate McCarthy, VNRC's sustainable communities program director.

In 2015 VNRC worked on a project that helped improve



Downtown Vergennes

transportation affordability and community inclusiveness. With funding from the Vermont Community Foundation, VNRC, AARP, the Champlain Office of Economic Opportunity, the Chittenden County Regional Planning Commission, the Northwest Regional Planning Commission, and the Vermont Energy Investment Corporation conducted research, mapped transportation costs based on location, and advised the Georgia Planning Commission on how they could update their town plan and bylaws to reduce transportation costs for their community members.

And the list goes on: A carefully planned transportation system can also provide health benefits, municipal savings on road infrastructure, and opportunities for people to stay connected.

By making our transportation investments thoughtfully and with an eye toward multiple benefits, we can ensure that our limited dollars bring returns beyond helping us get around.

Changing Demographics, Changing Demand

Major demographic changes underway in both the US and Vermont are suggesting demand for more than just individual vehicles – even in our rural state.

Take, for example, the oft-discussed Baby Boom (born between approximately 1946 and 1964) and Millennial (1982 - 2000) generations. At first blush, the post World War II generation who brought us the 1960s may not seem to have much in common with the diverse, tech-savvy Millennials, but when it comes to transportation, trends are suggesting that these two groups are looking for many of the same things.

A 2015 survey by the National Association of Realtors found that both Boomers and Millennials would take a house

with a small yard in a walkable location over a house with a large yard where driving is a necessity. For Millennials in particular, a 2014 study found that people aged 16 to 34 drove 23% fewer miles between 2001 and 2009 – a trend that was consistent across income levels, and among people with and without jobs.

In Vermont, a 2014 report by the Vermont Transportation Board found that for Millennials, vehicle ownership is more a necessity than a choice, and the majority of Millennials indicated they would prefer not to own a car.

For Boomers, transportation needs change, but for different reasons. Kelly Stoddard Poor of Vermont AARP

describes the importance of livable communities as “safe and secure, affordable, and with transportation options. Once in place those resources enhance personal independence, and foster engagement in the community’s civic, economic, and social life.”

AARP recognized this in 2011 when, along with VNRC, they formed a coalition that led to the passage of Complete Streets legislation, which requires that new road and repaving projects be designed to accommodate all potential users – including bicyclists and pedestrians – not only automobiles.

With the combination of an aging population and a widespread interest in supporting, retaining, and attracting younger Vermonters, we should be investing in transportation choices and the smart growth patterns that support them.



Putting a Price on Carbon Pollution

Our carbon-intensive transportation system has been built upon our collective ability to pollute for free. Putting a price on carbon pollution is a solution under consideration in Vermont and elsewhere to reduce our reliance on fossil fuels.

When it comes to tackling transportation energy use, a carbon pollution tax can serve as powerful price signal to better reflect the true cost of our energy appetites. It can also incentivize alternatives to driving, such as transit, carpooling, walking in compact areas, and teleworking in rural locations.

“A well crafted policy, phased in over 10 years, could cut taxes on things we’d like to see more of – like income. It



could also create jobs, address fuel poverty and help all Vermonters transition to a more efficient, clean energy economy,” explained Johanna Miller, VNRC’s energy and climate action program director.

VNRC is a founding member of Energy Independent Vermont, a growing coalition of environmental organizations, businesses, academic leaders and low-income advocates who are dedicated to a simple goal: ensuring Vermont does its part to tackle climate change.

“Along with investments in housing closer to jobs, schools, and services, a price on pollution must be part of Vermont’s energy and transportation futures,” says Miller.

VNRC Pushes Back on Controversial Developments Proposed at Highway Interchanges

Vermont has seen two massive developments proposed within the last several years at highway interchanges—Exits 1 and 4 off of I-89—and VNRC and project partners weighed in on both.

At Exit 1 in Hartford, B&M Realty, LLP, proposes to build a 130,000 square foot business park with offices, stores, restaurants and residences on 167 acres. Further up I-89, at Exit 4, developer Jesse Sammis proposed a project that could have included up to 1.15 million square feet in housing, office and industrial space, a hotel and conference center, a visitor center and other uses.



The Exit 4 project, however, was recently shelved for the time being by the applicant, after a series of discussions with VNRC and

partners Conservation Law Foundation and Preservation Trust of Vermont. VNRC felt that both developments flew in the face of the sound regional plan policies in place, would harm neighboring downtowns, and would contribute to sprawl.

Unfortunately, the Exit 1 proposal is still winding its way through the court system. The District 3 Environmental Commission, one of the regional entities that reviews Act 250 projects, denied it a permit on the grounds that the project did not comply with the regional plan. Unfortunately, the Vermont Superior Court's Environmental Division overturned this decision and the case is headed to the Supreme Court.

VNRC and Preservation Trust of Vermont, represented by the Environmental & Natural Resources Law Clinic at the Vermont Law School, weighed in with a brief to the Court arguing that the Exit 1 project should be rejected.

Brian Shupe, VNRC executive director said, "If this decision is allowed to stand, there is real risk that the court will have undermined the ability of regional planning commissions across the state—and perhaps even municipalities—to determine the future of their communities."

VNRC is working hard to ensure that planning in Vermont is done well, that adopted plan policies are followed, and that we develop our land and economy thoughtfully.

Large commercial developments can pose real threats to Vermont's historic downtowns and compact settlement patterns. VNRC will continue to work with project partners, such as the Conservation Law Foundation, the Preservation Trust of Vermont, and Exit 4 Open Space to ensure our state's planning processes and policies are upheld.

Welcome to New (and Returning) VNRC Staff

We are thrilled that **Jon Groveman** is again joining VNRC in a new capacity as our **Policy and Water Program Director**. Groveman previously held the positions of Water Program Director and General Counsel at VNRC before being asked in 2011 to serve as General Counsel for the Vermont Agency of Natural Resources. Last year, Groveman was appointed Chair of the Natural Resources Board (NRB), which administers Act 250, Vermont's development review law. Groveman will also work closely with VNRC's four program directors to coordinate policy for the organization.

Meredith Naughton is also joining VNRC, to serve as

Database and Membership Coordinator. Naughton comes to VNRC after stints at Bonnyvale Environmental Education Center and the Green Mountain Club. Before moving to Vermont, she worked in biology research, first as a lab technician and later as a research assistant in the mountains of Trinidad.



Jon Groveman



Meredith Naughton

VNRC is excited to add a new position to our team.

Hannah Huber joins the Energy Program as the **Energy & Climate Community Organizer**. Last year, Hannah biked across Vermont as a canvasser with the VPIRG, talking with Vermonters about pricing carbon pollution. She has also held positions educating citizens about solar energy and invasive species management, and has been active in the fossil fuel divestment movement.



Kaitlin Hayes



Hannah Huber

Also a big thank you to VNRC's 2016 **Legislative Intern Kaitlin Hayes**. If you've spend any time at the State House, it's likely that you've met Kaitlin as she traverses the hallways and acts as VNRC's eyes and ears in the committee rooms.

And finally, **Keil Corey**, who managed VNRC's membership database and outreach for the past year and a half after having served as our AmeriCorps member for the prior two years, has shifted into the role of **Outreach and Communications Coordinator**. Keil will continue handling social media and related communications, and will work more closely with program staff.

"We are extremely pleased to welcome such talented individuals to our staff," said Brian Shupe, VNRC's executive director. "They add valuable capacity and energy to our efforts in the Legislature and communities across the state."

Program Updates

Below is a brief rundown of VNRC's programs, a few recent highlights of our work, and program director contact information.

WATER PROGRAM

Aims to protect and enhance the quality of Vermont's streams, rivers, lakes and ponds, wetlands, and groundwater.

Recent Program Highlights:

- Together with other organizations, engaged in several rulemaking processes associated with the implementation of Act 64, Vermont's surface water protection act passed last year.
- Ramped up our campaign to facilitate the removal of obsolete and hazardous dams that do not serve a useful purpose. In addition, we are involved in the re-licensing of several hydroelectric dams in Vermont.
- Worked to develop legislative and policy responses to the contamination of water supplies in Bennington and Pownal and are hopeful that changes to strengthen relevant laws will be made this year.

PROGRAM DIRECTOR:
Jon Groveman
jgroveman@vnrc.org



FOREST AND WILDLIFE PROGRAM

Works to maintain and enhance the ecological and economic vitality of Vermont's forests with the overarching goal of keeping forests as forests to maintain their overall integrity.

Recent Program Highlights:

- Worked toward enacting several pieces of legislation related to maintaining forests and wildlife habitat and strengthening municipal and regional planning for forests.
- With support from the U.S. Forest Service, convened a regional meeting of planning and conservation commissioners to address landscape-scale habitat connectivity in Orange and Windsor Counties.
- Began a comprehensive update to a statewide subdivision trends report VNRC created several years ago, with the goal of creating a user-friendly website for the public and planning and natural resource professionals.

PROGRAM DIRECTOR:
Jamey Fidel
jfidel@vnrc.org



ENERGY AND CLIMATE ACTION

Works at the local and state level to advocate for conservation, efficiency, renewable energy and transportation solutions to help all Vermonters realize energy independence.

Recent Program Highlights:

- The Vermont Energy and Climate Action Network, which is coordinated by VNRC, held the 9th annual Energy & Climate Action Conference, attracting and inspiring nearly 300 community energy leaders to implement clean energy solutions.
- In partnership with the Energy Independent Vermont coalition, we are convening dozens of small house parties and community conversations to build grassroots support for a fair, strong, phased-in carbon pollution tax.
- Championed energy siting legislation that provides a greater voice for communities planning to meet Vermont's energy and climate goals and protect natural resources.

PROGRAM DIRECTOR:
Johanna Miller
jmiller@vnrc.org



SUSTAINABLE COMMUNITIES PROGRAM

Focuses on protecting and promoting Vermont's traditional settlement patterns of compact settlements — with options for transportation, housing and employment — surrounded by farms, forests and unique natural areas.

Recent Program Highlights:

- Celebrated the decision of Randolph developer Jesse Sammis to withdraw his proposal for a massive development project at Exit 4 after VNRC and the Conservation Law Foundation intervened in the Act 250 proceeding.
- Continued work on a training course that is designed to help local officials take action to protect forests, wildlife, and water resources.
- Concluded a project on how housing location affects transportation costs. This included creating a menu of techniques to help towns create compact housing, and providing technical assistance to the town of Georgia.

PROGRAM DIRECTOR:
Kate McCarthy
kmccarthy@vnrc.org



Member Profile

VNRC Member Profile: Emily Boedecker

England's rolling hills weren't enough for Emily Boedecker, who set her sights on a life with mountains. She tried out the French Alps, then California's Sierra Nevadas, but it was Vermont's Green Mountains that won her over. Emily moved to Vermont in 2004 to work with The Nature Conservancy, Vermont Chapter, where she held different positions in communications, philanthropy and leadership.

In 2014 she became Executive Director of Local Motion, a non-profit organization working to bring walking and biking within reach for all Vermonters, and to help communities across Vermont become great places to walk and bike.

"Sustainable transportation is not the unsolvable problem it is often portrayed as," says Boedecker. "We need a catalyst to change our thinking. Just as the call to change a light bulb inspired people to address the larger energy efficiency challenge, re-envisioning our communities for walking and biking, a little at a time, can be the catalyst we need to address our transportation challenge."

A VNRC member since 2009, Emily's positions have brought her in touch with most of VNRC's programs. Solutions to bring walking and biking within everyone's reach, for example, overlap with the Sustainable Communities program's work promoting Vermont's traditional compact villages and vibrant towns.

Based in Burlington, Local Motion started out running a bike ferry across the Winooski River between Burlington and Colchester to prove the need for a bike and pedestrian bridge to

connect two isolated segments of the Island Line Rail Trail.

After the bridge was built in 2004, the organization set its sights on an even bigger challenge: bridging the gap to the Lake Champlain Islands. Following the disastrous spring floods of 2011, the 110-year old Colchester Causeway was destroyed. Thanks to Local Motion's work the Island Line Bike Ferry now runs from Memorial Day to Columbus Day every year serving nearly 15,000 riders.

In addition, Local Motion's signature education programs, Bike Smart for children and Everyday Biking for Adults, reach more than 7,500 Vermonters each year.

But education can only go so far if our roads are not safe and inviting for novice and experienced cyclists alike. Local Motion provides technical assistance to municipalities for walk and bike projects — such as providing input on road designs and supporting local walk/bike advisory groups. In addition, alongside VNRC, Local Motion helped ensure that the transportation alternatives to the Circumferential Highway — or Circ — a sprawling highway bypass in Chittenden County that was cancelled, would ultimately serve more users than just cars.

Local Motion's merger last year with the Vermont Bicycle and Pedestrian Coalition made the final connection between their work on the street (literally) to advocating in the State House. Local Motion and VNRC expect to work side by side to improve road safety for all users, and to ensure that the conversation about transportation is an inclusive one.

Some of the best news for Boedecker and other transportation advocates is that more and more young people in Vermont are interested in living without cars, or at least designing their life around driving less. Coupled with an aging population that wants to age in place, demand for housing in walkable, bikeable communities is on the rise.

In sum, with rising demand for transportation choices, and a growing understanding of what we can accomplish with a comprehensive system, Boedecker is unlikely to run (or walk, or bike) out of things to do. (Did we mention that Emily is also a board member of Vermont Parks Forever, recently stepped down as Chair of Montpelier Parks Commission, and is the treasurer of a small dance non-profit, Cradle to Grave Arts?)

"Our roads are our largest shared public space, and the key to community and economic vitality, personal health and well-being, and a carbon light lifestyle. The answer is literally right in front of us. The question is, can we work collaboratively across our organizations and our agencies to unlock the answers to this thorny problem?" asked Boedecker.

VNRC is pleased to count Emily among our many members who are working toward positive transportation solutions — and the many other issues our members' support helps us tackle!

Emily Boedecker hits the trail.

Photo: Courtesy Emily Boedecker





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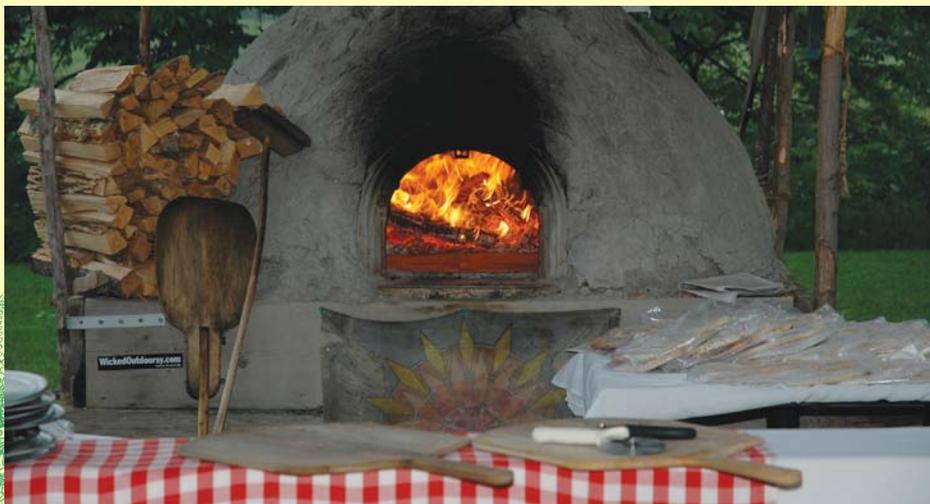
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Join VNRC for a Benefit Bake at American Flatbread

What's a better way to end the week than getting together with friends and family for delicious flatbread, some drinks, and a worthy cause? You have that opportunity on **Friday, May 13th**, when **American Flatbread** in **Waitsfield** is holding a benefit bake for VNRC. American Flatbread has generously offered to donate a portion of the cost of each flatbread sold to support our efforts to protect and restore Vermont's natural resources and communities. Please plan to join several VNRC staff and board members for an evening of good food and fun.



Remember:
VNRC is a membership organization and we count on members for support!
Please join us!

vnrc.org