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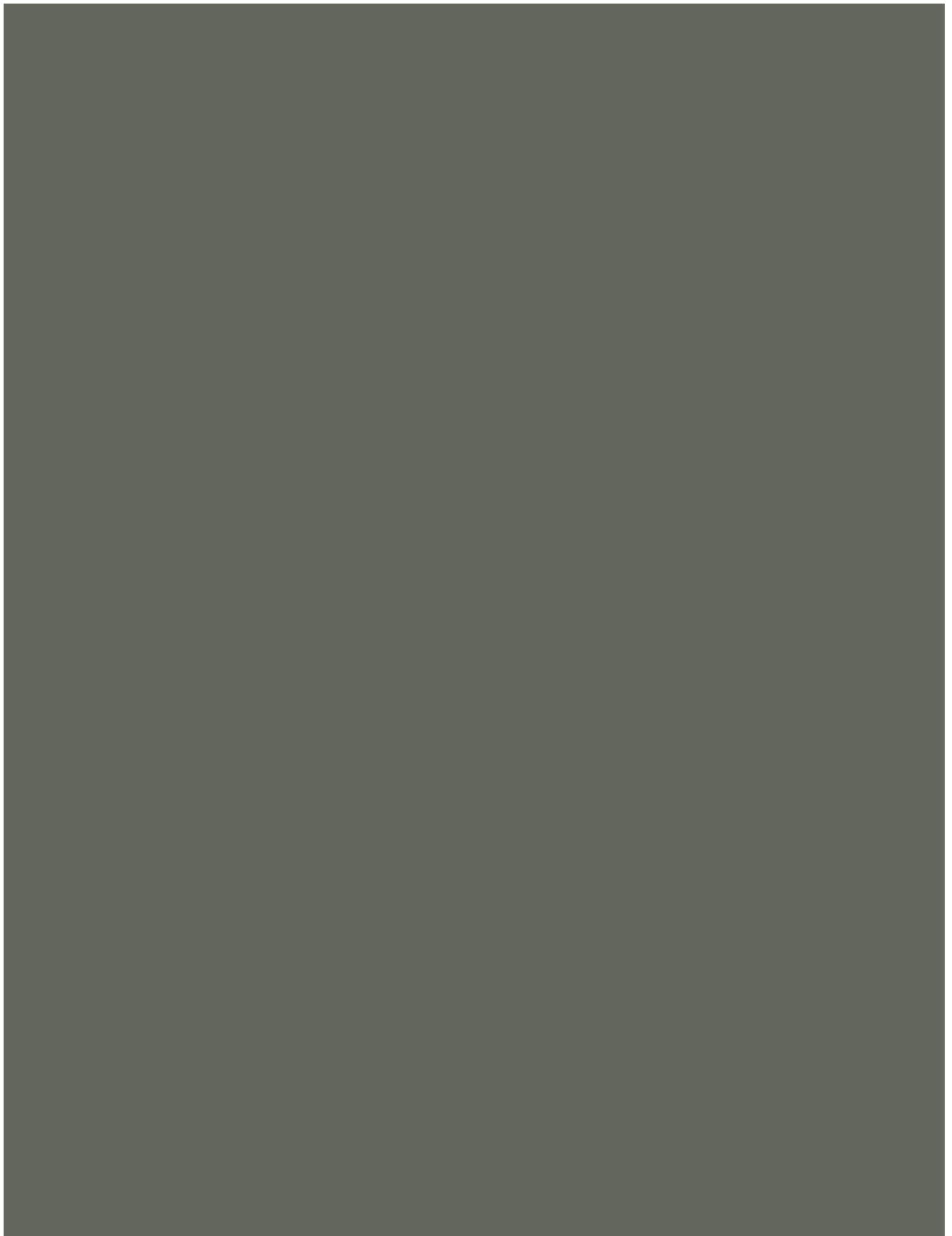
WITH



RAIL

**Vermonters speak out on
the impacts of trains, trackside
development and trucks**

**Vermont Transportation Board 2016 Report to the Legislature's
House and Senate Transportation Committees
Submitted Pursuant to 19 V.S.A. § 5 (D) (8)**



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INTRODUCTION

The Vermont Transportation Board is established according to Title 19 V.S.A. § 3, and is attached to the Agency of Transportation. The Board consists of seven members who are appointed by the Governor with the advice and consent of the Senate. The Governor appoints Board members, so far as possible, whose interests and expertise lie in various areas of the transportation field. The Governor appoints the Board's chair, and members are appointed to three-year terms. Board members may be reappointed for two additional three-year terms, but are not eligible for further appointment. No more than four Board members can belong to the same political party.

The Board's authority affects all modes of transportation, including air, rail and roadway travel. The Board primarily performs regulatory and quasi-judicial functions. Its cases are varied and involve appeals of both Agency decisions and select-board rulings, as well as initial adjudication of contract disputes, small claims, land-compensation challenges, scenic-roadway and byway designation, and requests for a host of things including railroad bridge variances, public and private aviation landing areas, and utility installation. The Board also adjudicates disputes between towns regarding roadway discontinuance, as well as disputes between local auto dealerships and their national auto manufacturers.

Challenges to quasi-judicial Board decisions are filed in Superior Court.

Oversight and administrative responsibility for the New Motor Vehicle Arbitration Board also sits with the Transportation Board. The Arbitration Board adjudicates the state's "Lemon Law," and employs one, full-time employee, Pauline Liese of Morrisville.

The Board experienced two retirements in 2016, including the departure of its chair, Nicola Marro of Montpelier. To lead the Board, the Governor appointed ranking member Vanessa Kittell of Fairfield as its new chair after reappointed here to a second, three-year term. To replace Mr. Marro, the Governor appointed Wendy Harrison of Brattleboro. Tom Dailley of Shaftsbury also retired. To replace him, the Governor appointed Faith Terry of Middlebury.

Other members of the Board include Richard Bailey of Hyde Park, Lawrence H. Bruce of St. Al-

bans, William Tracy Carris of Poultney, and David Coen of Shelburne. Mr. Coen served as Acting Chair for several months prior to the Governor appointing Ms. Kittell. The Board is administered by its Executive Secretary, John Zicconi of Shelburne.

While most of the Board's duties involve regulatory and quasi-judicial functions, Title 19 V.S.A. § 5(d)(8) charges the Board to work together with the Agency of Transportation to annually hold public hearings "for the purpose of obtaining public comment on the development of state transportation policy, the mission of the Agency, and state transportation planning, capital programming and program implementation."

Prior to 2012, the Board scheduled public hearings with little agenda other than seeking public comment on whatever transportation-related topics or projects attendees wished to broach. In 2012, the Board altered this approach and began structuring its public hearings to seek comment regarding specific topics, while still providing time for public comment on whatever topic or projects attendees wished. In 2014, the Board further refined its process and began seeking detailed public comment on singular transportation topics. Public hearings now are run more akin to focus groups, from whom the Board seeks input on various subtopics associated with one main topic rather than a host of different issues.

The Board also accepts written comment via its website from Vermonters unable to attend the public hearings or forums.

In 2016, the Board held public forums on the singular topic of rail. This decision was made for several

reasons. In 2015, the Agency of Transportation updated the state's rail plan. The new plan calls for expansion within the next five years of several passenger services, as well as encourages growth in the rail shipping industry. Given that railroad services, whether related to passenger or freight, can have significant impacts not only on individual homeowners but also entire communities, the Board wanted to seek public opinion regarding the state's expansion plans prior to their implementation so that the thoughts and concerns of Vermonters could be taken into account before anything new takes place.

To achieve this, seven public forums were conducted around the state in communities located along railroad lines.

To prepare for the forums, the Board reviewed the 2015 State Rail Plan, collected information related to Amtrak, and consulted with both VTrans staff and representatives of the state's 11 Regional Planning Commissions. The forums focused on the general topic of rail, and included the following subtopics:

- Passenger Rail Expansion
- Living with Railroads as Neighbors
- Downtown Truck Traffic
- Railside Economic Development
- Railroad Safety

These subtopics were chosen after meeting with VTrans officials. At the forums, the Board discussed these issues with participants to gain insight into how future transportation rail policy can be shaped to best position Vermont both socially as well as in the economic marketplace. By focusing the public's attention on these specific rail-related topics, public comment included in this report can be considered before transportation policy decisions are finalized,

thus providing decision makers with a tool to help them better understand public opinion.

To help the Board choose forum locations, it worked with the Agency of Transportation as well as various Regional Planning Commissions to select seven communities that were not only geographically spread across Vermont but also either contained railroad infrastructure that was likely to be impacted by planned passenger-rail expansion or had a long history with trains and were considered so-called "rail towns." This consultation resulted in public forums being held in Brattleboro, Burlington, Newport, Rutland, St. Albans, Vergennes, and White River Junction.

Attendance at this year's forums, which were held in October and November, was strong. The Board worked with local chambers of commerce, economic development corporations, social service organizations, municipal governments, front porch forums, regional planning commissions and the news media to spread the word. The effort resulted in an average attendance of 33 participants with a high of 50 in Burlington and a low of 23 in Brattleboro.

Forum participants included a mix of business owners, town officials, journalists, members of the general public, and, in several locations, members of the Vermont General Assembly. The Board also accepted comment via its website, and received 39 written submittals and phone calls.

At the forums, discussion on each subject was preceded by a short PowerPoint presentation to both provide background and set the stage for comment. This report is broken down into similar sections so the reader can easily understand not only the issues at hand, but also what the public had to say.

EXECUTIVE SUMMARY

The Vermont Agency of Transportation's latest rail plan, published in 2015, outlines the state's future goals when it comes to both freight and passenger rail. If all goes well, Vermont expects to increase passenger-service destinations as well as encourage greater use of its nearly 600 miles of active track as an economic engine that will both attract new businesses and support existing, local industry.

The rail plan details statistics associated with rail both past and present — some of which are repeated in this report — as well as states the Agency's future plans. But what the document does not do is discuss the possible impacts that future rail growth may have on Vermont communities, detail how Vermonters perceive the current conditions of the state's rail services, or outline what Vermonters think of the state's future plans.

Given that the rail plan is still fresh, and that increased rail activity will inevitably trigger local as well as regional impacts, the Board in 2016 set out to understand and document these missing pieces.

Working together with VTrans, the Board chose seven distinct Vermont locations that were likely to be impacted by the Agency's future plans, and prepared a series of questions designed to prompt local discussion about both passenger and freight rail, as well as the associated truck traffic that inevitably comes with increased freight rail activity.

To no one's surprise, the Board's forums — which were held in the so-called "rail towns" of Brattleboro, Burlington, Newport, Rutland, St. Albans, Vergennes, and White River Junction — drew crowds of as many as 50 participants who spoke passionately about all things involving trains.

These sessions, which covered six basic subjects, lasted nearly two hours in many locations. In some instances, the sessions could have gone on much longer if time had allowed as the topics held much interest.

At the forums, people often spoke passionately when expressing both their support as well as their concerns. No two forums were the same. Although participants addressed every subject in all locations, the number-one issue of interest varied depending on the location.

In Burlington, the subject that drew the longest discussion was passenger rail. In Rutland, the most discussed issue was rail-side economic development. In Vergennes, the galvanizing subject was downtown truck traffic. And in White River Junction, the issue that drew the most attention was living with railroads as neighbors.

Discussions in Brattleboro, Newport, and St. Albans focused evenly on all subject matters with no clear emphasis on one over another.

This regional diversity shows the wisdom of holding numerous forums spread over various geographic locations. While the Board annually finds great value in spanning the state so that it can look for trends that transcend specific regions, there is just as much importance in understanding specific local concerns.

To attract people to the forums, the Board in each community worked with a variety of local organizations — chambers of commerce, economic development corporations, social service agencies, arts councils, regional planning commissions, and front porch forums — to spread the word.

Forum participants included a mix of citizens, business professionals, town officials, social service providers, first responders, and, in several locations, members of the Vermont General Assembly. The effort resulted in an average attendance of 33 participants per forum. The Board also accepted comment via its website, and received 39 written submittals and phone calls.

At each forum, the Board provided a PowerPoint presentation as a way to provide participants with background information on each topic, as well as prompt them to provide feedback.

After engaging participants at each of the seven forums, the Board was able to identify common

concerns, reoccurring themes and nearly universal suggestions, all of which are identified in this executive summary and detailed in the various chapters of this report.

While the information presented in this executive summary is meant to synthesize participant's most common thoughts, it by no means is meant to represent a complete offering of what was on the minds of those who answered the Board's call to provide insight into how they view the State of Vermont's rail network and services.

To gain a deeper perspective of what was on the minds of participant with regard to specific issues, the Board recommends that the reader digest, in full, each of the report's chapters.

≡ Passenger Rail Expansion ≡

Vermont currently offers two intercity passenger train routes via Amtrak. Each route offers just one round-trip service per day. The Vermonter — which stops in the Vermont towns of St. Albans, Essex Junction, Waterbury, Randolph, White River Junction, Windsor, Bellows Falls and Brattleboro — also makes numerous connections in New Hampshire, Massachusetts, Connecticut, New York, Pennsylvania, Delaware, Maryland and the District of Columbia.

Amtrak's Ethan Allen Express offers train service from the Vermont towns of Rutland and Castleton to several New York destinations, including transit hubs in Albany and New York City.

During the decade between 2005 and 2014, train boarding and disembarkation at Vermont stations along these two Amtrak lines increased 89 percent from 57,121 to 107,688. In 2015, however, ridership dipped to 103,129, a 4.4 percent decrease.

The year 2016 saw even further decline as Vermont ridership fell to just 92,422, a 10.3 percent dip from the previous year, and a 14.1 percent drop from its peak in 2014.

A short-term statistical drop in ridership is not unusual, and does not necessarily signify that Vermont train use has peaked and will continue to decline. Growth spurts, especially long-term ones, are not always linear. An Amtrak spokesperson said the combination of falling gas prices, which lowers the cost of traveling by car, and Vermont's lack of snow

during the winter of 2015-16 likely played a role in Vermont's ridership decline.

As already stated, 92,422 riders during 2016 boarded and disembarked trains at Vermont stations. Vermont's Energy Plan sets a goal of increasing this ridership to 400,000 annual passengers by 2030. To achieve this goal, the Vermont Agency of Transportation is working to establish several new passenger train services during the next five years. These potential new services are:

- Extend the Ethan Allen Express, which now terminates in Rutland, to Burlington with stops in both Middlebury and Vergennes.
- Extend the Vermonter, which now terminates in St. Albans, to Montreal.
- Include a stop in Brattleboro as part of a possible Massachusetts initiative to establish commuter rail service between Greenfield and Springfield, MA.

Participants at the Board's forums widely supported these initiatives for a number of reasons, not the least of which was that train travel provides both a convenient and safe means of travel. Many also expressed a desire to expand Vermont's transportation options that are both energy efficient and environmentally friendly.

Forum participants also encouraged policymakers to make these priorities happen as soon as possible. Some hoped the time tables, especially those related to extending the Ethan Allen Express further north than Rutland, could be accelerated and occur sooner than 2020, the earliest year projected by VTrans.

Support for extending Amtrak's Vermonter service to Montreal also was strong. Forum participants all around the state encouraged VTrans to work diligently to solve whatever customs and labor-union issues remain so that this extension could begin as soon as possible.

While the vast majority of forum participants spoke in favor of passenger trains and the state's plans to extend their destinations, the sentiment was not universal. The state spends about \$8 million annually to subsidize its two intercity services, a price tag some considered very steep.

Forum participants said the best way to lower the subsidy was to increase ridership. To accomplish this,

they suggested adjusting the timing of local trains so they achieve better connections at transportation hubs in Springfield, MA and Albany, NY. Participants also suggested supplementing headways as the current schedule provides just one run per day in each direction, which is inadequate and depresses ridership.

Running trains on time more often also would help, participants said. During the five-year period from 2004 to 2008, the Vermonter arrived on time only about 60 percent of the time, while the Ethan Allen averaged just 40 percent. Track improvements conducted in 2008 allowed the Vermonter to increase its on-time performance to greater than 80 percent in all but three years from 2009 to 2016.

The Ethan Allen Express also experienced performance improvements in recent years, but reached an 80-percent, on-time annual average just once, in 2016 when 80.7 percent of all trains were deemed to be on time. Prior to 2016, the Ethan Allen Express' on-time rate reached 75 percent only twice — during 2010 and 2013.

To prepare for the expansion of passenger service from Rutland to Burlington, VTrans plans to upgrade the stations that will comprise the line's three new stops: Middlebury, Vergennes and Burlington. At present, the Agency has no plan to renovate other stations.

This decision did not sit well with train users in both Brattleboro and Essex, two of the state's busiest train communities.

In Brattleboro, forum participants complained that the station — which sees about 20,000 riders annually — has virtually no place that protects riders from the elements while they wait for the train. This lack of shelter becomes a significant problem when the train is running late, they said.

The station in Essex Junction faces similar issues.

Essex Junction is the state's busiest train station — about 22,000 annual passengers — as well as a busy bus station. It has a tiny waiting room and just one restroom. Similar to the Brattleboro station, most people wait for the train while exposed to the elements.

Many forum participants also stressed that to be both efficient and user friendly, train travel needs to seamlessly connect to other forms of public trans-

portation like buses, as well as have capacity for more than a maximum of four riders traveling with their bicycles.

≡ Establishing Commuter Rail ≡

Throughout the United States, commuter rail — which is designed to transport passengers to and from destinations within either a single state or within a single metropolitan area — has only been established in locations that experience high levels of both congestion and expensive parking.

VTrans, at the direction of the Legislature, published a study in January of 2017 that assessed the feasibility of establishing commuter rail between Burlington and Montpelier, as well as between Burlington and St. Albans. The study considered two potential schedules.

Schedule One included six roundtrips to Burlington — two from St. Albans and four from Montpelier — while Schedule Two included 11 roundtrips to Burlington — four from St. Albans and seven from Montpelier.

The Agency projected that 930 daily riders would use a Schedule One service, while about twice as many (1,835) would use the Schedule Two service.

Capital cost for Schedule One was estimated at \$301 million, while Schedule Two was expected to cost \$363 million. The bulk of this money would be used to purchase train sets and install track signaling.

Early criticism of the feasibility study focused on four primary areas: cost of the train sets, the number of stops, personnel costs, and the fact that the study did not include service that connected St. Albans directly to Montpelier. Instead of creating such a connection, the study assessed separate lines that began in both Montpelier and St. Albans, but terminated in Burlington.

Unfortunately, VTrans' commuter rail study was not available when the Board held its public forums. The Board did, however, mention that the study was underway and asked participants for their thoughts even though cost and other details were unknown.

The vast majority of forum participants were not only supportive of establishing commuter trains linking Montpelier to the state's northwest quadrant, but many said anything other than studying how to

operate commuter rail all around the state was short-sighted.

Vermont employers for years have lamented how difficult it is for them not only to find qualified Vermont-based employees, but also how difficult it is to recruit young professionals from outside the state. Social-service providers for just as long have stressed that one of the largest impediments for those trying to get off public assistance and return to work is a lack of transportation.

A robust commuter rail system would help solve all of these problems, forum participants said.

Even without seeing the results of VTrans' study, forum participants assumed creating such a service would be expensive. But instead of simply looking at the cost in isolation, they encouraged policy makers to conduct a broader cost-benefit analysis that also takes into account the hundreds of millions of dollars the state annually spends supporting transportation infrastructure designed for cars and trucks.

While support for commuter rail ran high at the Board's forums, it was not universal.

The current cost of operating 10.5 weekday roundtrips by bus between Burlington and Montpelier — a service known as the Montpelier Link — costs \$615,000 annually, while the annual price of providing four roundtrip buses between St. Albans and Burlington is \$190,000.

Some forum participants pointed to these bus services as a much more cost effective way to provide mass transit than establishing train service.

Although VTrans' study focused exclusively on bringing commuter rail to the busy St. Albans-to-Montpelier corridor, the Agency also has been working with the State of Massachusetts to assess the feasibility of linking Brattleboro to several towns in western Massachusetts.

Establishing such a link is largely in the hands of the Massachusetts Transit Authority, which has a desire to connect by commuter train the Massachusetts towns of Greenfield, Northampton, Holyoke and Springfield. Vermont jumped into the discussion largely because this conversation was already ongoing. Brattleboro is only 20 miles north of Greenfield.

VTrans hopes to know more about the proposal's feasibility during the latter half of 2017.

≡ Railroads As Neighbors ≡

The State of Vermont owns the majority of Vermont's 578 miles of active rail lines, but does not own or operate a railroad company. Instead, it leases all 305 miles of state-owned track to Vermont Rail Systems (VRS), a locally-based, short-line railroad company that operates several subsidiary railroads.

Headquartered in Burlington, VRS operates three subsidiary short-line railroads: Vermont Railway (140 track miles), the Green Mountain Railroad (50 track miles), and the Washington County Railroad (105 track miles). In addition to operating the state-owned lines, VRS owns and operates the Clarendon & Pittsford Railroad.

Most of the rest of Vermont's active rail line is owned by Genesee & Wyoming, Inc. (G&W), which is the nation's largest short-line holding company. G&W operates 113 subsidiary railroads, and owns more than 13,000 miles of track within North America. In Vermont, G&W operates the New England Central Railroad (191 track miles) and the St. Lawrence and Atlantic Railroad (31 track miles).

With nearly 600 miles of active track, trains in Vermont consistently pass by thousands of homes, train cars are stored along dozens of rail sidings, and several communities — most notably Bellows Falls, Burlington, Newport, Rutland, St. Albans, St. Johnsbury and White River Junction — play host to busy rail yards and switching stations.

Of the seven communities visited by the Board, White River Junction expressed the most concern regarding the behavior of the railroad. Participants who attended the White River forum believe the numerous federal exemptions bestowed upon the industry allow the local railroad to turn a blind eye to the negative impacts of its operation, and likewise turn a deaf ear to local complaints.

Railyard impacts, participants said, tend to fall into three categories: noise, traffic impacts created by trucks using the train facility, and right-of-way concerns that either prevent or limit public access to parts of town that could be better utilized.

Forum participants said they understood that finding solutions to these issues can be difficult. But finding such solutions is impossible when the railroad won't engage in a dialogue, and instead chooses

to hide behind its federal exemption.

No one who attended the Board's forums broached the dispute between the Town of Shelburne and Vermont Rail Systems. The Board, however, is aware of the lawsuit and the town's accusation that the railroad clear cut property without a permit and began developing a commercial salt operation along the banks of the LaPlatte River without first discussing details with the town.

Just south of Shelburne, the Town of Charlotte has similar concerns.

During the past year, Vermont Rail Systems began using a siding located in a farm field within the town's west village to store dozens of train cars that can contain more than a million gallons of propane and butane. These cars, which sometimes sit for weeks before being moved, are positioned within a short distance of public infrastructure such as power substations, municipal buildings and local roads, as well as a childcare facility, a senior center and numerous private residences.

While the town has significant health and safety concerns regarding this storage practice, it has no way to regulate this bootleg storage facility because federal law allows the practice and exempts the railroads from local scrutiny.

The frequency of this kind of behavior by the railroads prompted some forum participants to call for the state to establish a rail ombudsman, while others called for the Legislature to take regulatory action, claiming other states have addressed similar problems in ways that work within the confines of federal law.

While some communities complained about the railroad's unwillingness to work with them to solve potential safety issues, nothing seemed to get under people's skin more than train whistles blowing during times people are trying to sleep. Forum participants were aware that the law requires trains to toot their horns when approaching highway crossings. However, they said some train operators do this with more gusto than others.

To achieve greater piece of mind — and a better night's rest — participants encouraged the state to work with the railroads to identify, and find ways to fund, quiet zones.

Other “neighborly” issues raised by forum participants include the railroad's propensity to allow standing trains to sometimes idle for hours in the railyard or along a siding — they are very noisy — and the spraying of herbicide to tame vegetation. Several people also complained that railroads tend to discard rail ties alongside the tracks and leave them there for months on end in unsightly piles.

≡ Downtown Truck Traffic ≡

Getting an accurate handle on the current movement of freight within Vermont is difficult.

The last comprehensive freight study conducted by the state is nearly a decade old and uses 2007 data, while Vermont's most recent rail plan contains data from 2011. Trusting these figures to represent current conditions is tricky as 2007 represents the last full year prior to the nation's 2008 economic collapse, while 2011 was very early in the recession's recovery.

Given that 2011 represents a point in time at the very beginning of an economic recovery, the Board chose to use 2007 statistics given that the U.S. economy is currently deemed to be mostly recovered.

In 2007, trucks carried 83.4 percent of the 52 million tons of freight that passed through Vermont, was unloaded in Vermont, or was transported from Vermont. Most of the remainder, 16.5 percent, moved via rail. The remaining 0.1 percent was transported by air.

Worth approximately \$58 billion, 38 percent of this freight by weight simply passed through the Green Mountain State, while the destination of 36 percent was inbound, 16 percent was outbound, and 10 percent was shipped from one location within the state to another.

According to the state's most recent freight plan, the movement of 80 percent of this tonnage representing 88 percent of its value involved a truck for at least part of its journey.

Shipping by train accounted for about 17 percent of all Vermont's freight movement, or 9.3 million tons valued at \$8.6 billion.

In 2007, VTrans projected Vermont's overall freight flows would increase from 52 million tons to 70 million tons by 2035, for a total growth rate of 43 percent over a 27-year span. This projection breaks

down to an annualized growth rate of 1.28 percent.

Overall shipping shares by mode, however, were predicted to remain mostly stable, with a slight overall shift from truck to rail of just under 1 percent. As a result, the average annual growth rate along Vermont's rail lines is predicted to be 1.38 percent, which is only slightly higher than the state's overall projected annual freight growth rate of 1.28 percent.

This is marginally good news for those who want to see more freight moved by rail as a slightly greater percentage of future freight movement is projected to take place by train. The overriding bad news, however, is that Vermont communities struggling with truck traffic through their historic villages or downtowns will still experience a sizable future uptick in 18-wheelers.

According to the state's freight plan, most Vermont roads are projected by 2035 to see increases of between 20 percent and 40 percent in overall truck traffic. Communities located along the state's major truck corridors of Route 7, Route 9, Route 11, and Route 22A through the City of Vergennes are projected to see even larger increases, likely between 40 percent and 60 percent.

Many Vermont communities already struggle with the noise, pollution and physical shaking created by large trucks as they rumble through their villages. Such disturbances shatter people's quality of life and is at great odds with the historic rural setting of many towns.

Forum participants all over the state expressed concern regarding trucks. But no community the Board visited expressed more frustration than the City of Vergennes, whose historic downtown sits smack in the middle of the major north-south truck route along Route 22A.

Tractor-trailer trucks pass through Vergennes at a rate of about one every minute during peak hours, which are the same time local shops, businesses and restaurants experience their spike in clientele and the town is full of pedestrians, including school children walking to and from the in-town elementary and high schools.

Many residents and business owners spoke about their fears of crossing the street safely, while others, including the Vergennes Mayor and its Chief of Po-

lice, shuddered at the thought of how catastrophic it would be if a truck carrying toxic material overturned while in the middle of their city center.

Downtown Vergennes, which is listed on the National Register of Historic Places, is also what Vermont considers a "designated downtown." To obtain this distinction, the community must achieve certain pedestrian-friendly qualities and maintain various quality-of-life characteristics. Success is rewarded with various state and federal grants that help the community improve upon these goals.

Despite this investment, the state allows the city to remain a dangerous and busy truck route. This irony is not lost on the locals, who are not only puzzled but frustrated that the state on one hand recognizes and rewards their community for its quality-of-life improvement efforts, but then does nothing to help alleviate the biggest threat to the community's continued health and welfare.

Vergennes forum participants believe the best way to improve safety and protect the community is to divert as much of the truck traffic around the city's core as possible.

Many in attendance pointed to Route 17 as a natural truck bypass. VTrans has never supported this idea. The eight-mile segment of Route 17 that lies between Route 7 and Route 22A has some narrow stretches with challenging sight distances. In short, it was not designed to safely carry heavy truck traffic. The Vergennes community said they understand this. However, local residents and business owners believe that Route 22A through downtown Vergennes also was not designed to safely carry heavy truck traffic.

Many in the community believe that Route 17, with a little planning and money, could be improved.

In the Town of Brattleboro, Routes 5, 119 and 142 collide at the base of the downtown's Main Street at a multi-pronged intersection known locally as "Malfunction Junction." Complicating the local traffic pattern are the railroad tracks, which cross Route 119.

While several forum participants highlight this intersection — some said it worked better before the state signalized it — they also mentioned that the planned closing of the Hinsdale Bridge along Route 119 should help ease the crunch as it will remove Route 119 from the equation.

≡ **Railside Economic Development** ≡

Moving freight is big business, one that Vermont's railroad industry in recent years has struggled to capitalize on.

About 17 percent of the estimated \$58 billion in goods that moved into, through, or out of Vermont in 2017 traveled by rail. After the recession, the picture worsened. VTrans estimates that in 2011, the last year for which we have statistics, only 5 percent of all Vermont's inbound, outbound, and intrastate freight tonnage moved by rail.

Given that the nation's economy has improved since 2011, rail likely has at least partially recovered. While we don't yet have statistics to support this, we do have anecdotal evidence in places like the tiny Vermont towns of Lyndon and Barton.

In 2010, Vermont-based Couture Trucking, Inc. opened a rail-side transload facility in Lyndon with the goal of serving the burgeoning micro-brew industry. By 2014, the company was shipping to breweries all over the northeast and maxed out the Lyndon property after erecting 27 silos that can store 5.5 million pounds of malted barley.

Looking to expand, Couture in 2014 purchased rail-side property in Barton. Today, the Barton transload facility contains 4 silos that store 800,000 pounds of malted barley. If business continues to improve, the Barton property contains plenty of space for Couture to grow.

While Barton represents a success for the local railroad industry, finding similar rail-friendly property in other parts of the state is not easy as land is often developed without possible rail use in mind. Even in places where land is available, the industry's impacts — which at minimum include noise and associated truck traffic — are not always welcome.

A prime example of this resistance is playing out in the Town of Shelburne where Vermont Rail Systems recently purchased land along the track that was zoned industrial. This past summer the railroad, having decided against first seeking local permission, began constructing a new facility designed to handle the storage and trucking of road salt.

The development, which is located on the banks of the LaPlatte River within Shelburne Village, instantly sparked backlash and spawned lawsuits.

Even though the town has made it clear that it is not a willing host, the railroad, with few if any other options, is moving forward with the project gambling that federal law, which preempts the railroad industry from much of the local permit process, will trump the community's dissent.

Similar resistance to a rail project is also taking place in Middlebury where the state wants to spend an estimated \$40 million to build a train tunnel under the heart of downtown, in part, so that it can lower the tracks to allow trains carrying taller, so-called "modified double stack" cars to pass through town.

Critics of this plan favor simple bridge replacement instead of building a tunnel. This approach would cost considerably less, but also would maintain the lower train clearance and, according to railroad advocates, cost the railroad money in the long run because the line would not be able accommodate taller train cars.

The ability to haul taller train cars is important to the rail industry because it creates an economy of scale where it can move more goods or people on fewer cars, which saves money. Some shippers, if they cannot use these taller cars, will bypass these rail lines altogether.

Middlebury residents and business owner don't necessarily object to the taller train cars running through town — although some do question the need — but they are afraid that the 360-foot tunnel's construction, which is expected to span three years, will cause pollution and disrupt downtown traffic patterns.

Local merchants who have just weathered one of the worst economic recessions in generations believe such a lengthy disruption, which would include a complete street closure for an estimated 10 weeks, could kill their businesses.

Recognizing that the kind of adversarial relationship that is occurring in both Middlebury and Shelburne is neither healthy nor ideal, the Transportation Board asked forum participants for their thoughts regarding rail-side economics and how the state and its railroads can best work with local communities to help foster ways in which the industry cannot only thrive, but do so in a way that

host communities can support.

Forum participants said it would behoove the state to attract rail-friendly industry to locate in Vermont, as well as to find ways to incentivize both track-side land owners and their surrounding community to be willing to accept rail and the impacts with which it is associated.

To do this, forum participants suggested that the Legislature develop some kind of financial incentive that would help motivate landowners and their host community to support rail-side development. They suggested tools such as tax breaks akin to the state's Current Use Program for willing landowners as well as tax incentives for potential businesses that would use rail.

The Vermont Rail Action Network, a Vermont-based nonprofit, is working to identify land around the state suitable for rail. Forum participants applauded VRAN, but some questioned why the state has not taken a more active role not only in identifying property but also in developing educational information that illustrates the potential financial positives of rail-side development.

Money and education, however, will not be enough to spawn additional rail-side economic development, forum participants said. Proper long-term planning and better communication from the railroads also are key components.

Railroads, which are famously secretive, need to be both open and upfront about their current needs as well as their future plans, forum participants said. They need to approach communities that have potential land well in advance of trying to develop so that once they start construction the host town accepts them rather than fights them, participants said.

Towns can aid these discussions, forum participants said, by taking it upon themselves to identify the proper places within their borders that are suitable for rail-side development and zone them appropriately.

Forum participants also said that if the railroads want to be successful and work constructively with communities, they will need to compromise. Railroads could help themselves tremendously by avoiding two types of property: waterfront and anything close to a village's core, they said.

While battles between communities and railroads can stifle rail-side economic development, so can a lack of cooperation between competing railroad companies.

RSD Warehouse Services, Inc. is located just west of White River Junction along the New England Central rail line and is accessed by a spur well removed from the community's downtown. The company believes its ideal location — one that does not clog downtown streets with truck traffic — is being short changed because the Washington County Railroad and the New England Central Railroad will not cooperate with each other and allow trains that use the WACR to switch tracks in White River Junction to access their facility.

Company officials said they don't know why the railroads won't share business. But they believe that they have lost potential clients — and therefore Vermont has lost rail business — solely because they are located on the wrong rail line and therefore cannot service them.

≡ Railroad Safety ≡

In the decade between 2004 and 2013, Vermont experienced 33 accidents at rail crossings along public highways. Ten of these incidents involved passenger trains, while 23 involved freight trains. Two people died as a result of these mishaps, while 13 others were injured.

Recent history is even gloomier. In the 12 months prior to the Board holding its first rail forum in mid-October of 2016, seven train accidents were recorded resulting in five deaths.

To combat risk, the Vermont Agency of Transportation in the past year took over the outreach mission of Operation Lifesaver, a grade-crossing safety program once operated by a nonprofit that recently closed its doors.

VTrans also inspects every one of the state's nearly 400 public railroad crossings on an annual basis, and prioritizes how they should be maintained and improved.

Given that VTrans hopes to soon establish passenger service between Burlington and Rutland, the Agency has prioritized this rail corridor for improvement and plans to establish lights at every one of its

crossings before the new service begins in either 2020 or 2021.

According to the Department of Public Safety, Vermont's railroad companies also have recently stepped up their efforts regarding public safety.

In the past, it was rare for railroads, which operate with a significant level of federal preemption, to inform state officials of what was running along its track. But over the past decade, both communication and local involvement have improved.

Railroads now regularly report to Vermont Emergency Management what is being shipped through the state so that they can inform local first responders should that be necessary.

The Vermont Legislature in 2016 also took measures to improve rail safety.

Until this past summer, fines for trespassing along railroad tracks in Vermont carried a \$25 fine and could only be issued by the railroad police, officers who were employed directly by the railroad.

Believing that rail safety could be improved if state and municipal police forces were empowered with jurisdiction over the tracks, the Legislature in 2016 changed the law and increased the fine. Now any state or local police officer can issue a trespassing ticket, which carries a \$200 fine.

The new law, however, received mixed reviews from those who attended the Board's forums.

Given that the railroad is usually unwilling to grant communities either permission to create new public crossings or to construct multi-use paths within the railroad right-of-way, some forum participants said the new trespassing law does nothing more than provide the railroad with a way to punish locals, who are often of modest or low economic means, when they use what to them is nothing more than an historic and convenient transportation corridor.

In Brattleboro, forum participants said the railroad tracks separate the heart of downtown from the riverfront, which is a community asset. But instead of working with locals to provide safe access to the river, the railroad works to keep people away.

Increasing the fine amount and allowing the rail-

road to call the police works to encourage this non-cooperative attitude, and has the potential to make things worse, forum participants said.

In Essex Junction, the village recently worked out an agreement with the New England Central Railroad that allowed the municipality to build a multi-use path within parts of the railroad right-of-way. The path helps connect the local high school with the heart of downtown.

Forum participants in Burlington cited this as an example of how railroads, if they want to be cooperative, can work with local communities to create safe bike and pedestrian travel lanes. They then called on the state, which owns more than half the track in Vermont, to engage Vermont Rail Systems, which leases all of the state-owned track, to take similar measures in other locations.

No safety topic concerned forum participants more than proper track maintenance.

Given that train cars carrying oil, propane and other potentially flammable material regularly travel along Vermont's tracks, forum participants stressed that regular track inspection and constant maintenance must be a matter of routine.

Proper maintenance was one concern. Knowledge or, to be precise, the lack of public knowledge about what the railroads are hauling, was another. Participants at several forums expressed contempt for a public system that keeps from them knowledge of when flammable cargo like oil and propane is moving past their homes.

While fuel oil does move along Vermont's rail lines, Bakken crude oil currently does not. Bakken crude is the highly flammable oil that in 2013 was being transported through Lac-Magantic, Quebec when a train derailed, causing a massive explosion that killed at least 42 people and destroyed half the downtown.

Several forum participants encouraged the state to do all it could to prevent Bakken crude oil from ever being transported through Vermont, especially on our publicly-owned rail lines.

PASSENGER RAIL EXPANSION

For much of the past decade, passenger-rail ridership across Vermont has been on the rise. This upward trend, however, reversed itself during the past two years. Train ridership since 2014 has been declining.

Vermont offers two intercity passenger train routes via Amtrak. Each route offers just one round-trip service per day.

The Vermonter — which stops in the Vermont towns of St. Albans, Essex Junction, Waterbury, Randolph, White River Junction, Windsor, Bellows Falls and Brattleboro — makes numerous connections in New Hampshire, Massachusetts, Connecticut, New York, Pennsylvania, Delaware, Maryland and the District of Columbia.

Amtrak's Ethan Allen Express offers train service from the Vermont towns of Rutland and Castleton to several New York destinations, including transit hubs in Albany and New York City.

During the 10 years between 2005 and 2014, train boarding and debarkation at Vermont stations along these two Amtrak lines increased 89 percent from 57,121 to 107,688. In 2015, however, ridership dipped to 103,129, a 4.4 percent decrease. The year 2016 saw even further decline as Vermont ridership fell to just 92,422, a 10.3 percent decline from the previous year, and a 14.1 percent drop from its peak in 2014.

Asked about the decline, an Amtrak spokesperson said that while its overall ridership is growing, “the continued trend of lowering gasoline prices has caused some individual markets to soften or remain flat.” Amtrak also believes the lack of snow during the winter of 2015-16 played a role in Vermont's ridership decline.

A short-term statistical dip in ridership is not unusual, and does not necessarily signify that Vermont train use has peaked and will continue to decline. Growth spurts, especially long-term ones, are not always linear.

Vermont's significant ridership growth between 2005 and 2014 also experienced two slowdowns: almost zero growth from 2008 to 2009, as well as a ridership drop from 2010 to 2011.

What the future holds is unknown. But 2017 will show whether this most recent, two-year drop represents an anomaly like the one experienced in 2011, or if the dip is part of a troubling downward trend.

≡ Train Ridership ≡

While boarding and debarkation at Vermont stations declined in 2015, overall ridership of Vermont's two Amtrak services actually rose that year when station use outside the Green Mountain State is included in the ridership figures. When the out-of-state stations are included, overall Amtrak ridership from 2014 to 2015 on the Vermonter and the Ethan Allen Express increased from 284,790 to 290,504, which is a 2 percent jump.

The overall services in 2016, however, were not spared the downward trend that took place locally. During 2016, ridership on the overall combined Ethan Allen Express and Vermonter services fell to 280,070, a 3.5 percent drop from 2015.

This downward movement is surprising given that nationwide use of public transportation — both trains and buses — had been steadily growing.

In 2013, the Frontier Group, a national research and policy organization, reviewed data provided by the U.S. Department of Transportation's Federal Transit Administration and concluded that Americans in 2011 took nearly 10 percent — or 900 million — more trips by public transportation than they did in 2005.

Similarly, the American Public Transportation Association (APTA) reported in 2014, the last year that statistics are available, that Americans took a record 10.8 billion trips on public transportation, which is the highest annual transportation ridership number in 58 years. APTA, which also relies on data provided by the federal government, reported that from 1995 to 2014 public transit ridership across the United States increased by 39 percent.

Focusing exclusively on rail, APTA reported that nationally in 2014, the last year statistics are available, ridership on light rail (including streetcars and trolleys) increased 3.6 percent from the previous year, ridership on heavy rail (subways and elevated trains) increased 3.3 percent, and commuter rail ridership increased by 2.9 percent.

As previously mentioned, Vermont offers two intercity passenger train routes via Amtrak. While these routes are designed to primarily provide interstate service between Vermont and points south like New York, Connecticut, and Washington D.C., the Vermonter in recent years has experienced a significant increase in passengers traveling from one Vermont location to another.

In 2004, only 3 percent of those who boarded the train at a Vermont station disembarked elsewhere within the Green Mountain State. By 2015, such intrastate travel had grown to 9 percent, for a total of 9,327 riders. Not surprisingly, this number also fell in 2016 to 7,058 riders, or 7.6 percent of the total passengers who got on or off a train in Vermont.

As already stated, 92,422 riders during 2016 boarded and disembarked trains at Vermont stations. Vermont's Energy Plan sets a goal of increasing this ridership to 400,000 annual passengers by 2030. To achieve this goal, the Vermont Agency of Transportation is working to establish several new passenger train services during the next five years. These potential new services are:

- Extend the Ethan Allen Express, which now terminates in Rutland, to Burlington with stops in both Middlebury and Vergennes.
- Extend the Vermonter, which now terminates in St. Albans, to Montreal.
- Include a stop in Brattleboro as part of a possible Massachusetts initiative to establish commuter rail service between Greenfield and Springfield, MA.

Forum participants widely supported these initiatives for a number of reasons, not the least of which was that train travel provides both a convenient and safe means of travel. But many also expressed a desire to expand Vermont's transportation options that are both energy efficient and environmentally friendly.

“With half of Vermont's carbon emissions com-

ing from the transportation sector, it is essential for our town and our state to encourage convenient, affordable mass transit options to address climate change,” wrote the Brattleboro Energy Committee in a letter sent to the Board. “Increased service also aligns well with the 2016 Vermont Comprehensive Energy Plan's goal of encouraging mass transit.”

The United States and Canada signed a treaty in 2015 that cleared the way for the Vermonter to be extended to Montreal.

Extending service from Rutland to Burlington is the state's number one rail priority. To make this happen, Vermont plans to invest more than \$100 million in station and track improvements to allow trains to travel at a minimum speed of 59 mph and a maximum speed of 79 mph. Most of the track work is already complete — only 11 miles remain — while stations in Middlebury, Vergennes and Burlington still require upgrades. The state plans to begin service as soon as it finishes constructing a tunnel beneath downtown Middlebury, which it hopes is in either 2020 or 2021.

The United States and Canada signed a treaty in 2015 that cleared the way for the Vermonter to be extended to Montreal. The State of Vermont and the Provincial Government of Quebec are now working out details that will allow all passengers to clear customs at a new checkpoint in Montreal's central station.

Other remaining tasks include the need for Canada to upgrade some track, procuring a time slot over the busy Victoria rail bridge, and negotiating who pays how much for the train service. The current payment formula has states pay according to how many train miles are located within its borders. If a similar formula is used to pay for the Montreal extension, it would require that aside from Quebec and Vermont, the states of Massachusetts, Connecticut and possibly New York be part of the agreement as well.

Labor unions in both the U.S. and Canada also must agree on whose crew will staff the train. The last time a Vermont passenger train extended into Canada was 1995. At that time, a crew shift change

as well as customs clearance took place at the border. The hope now with custom clearance being planned to take place in Montreal is that one crew, likely a U.S. based Amtrak crew, will be allowed to work in the U.S. as well as Quebec.

VTrans hopes to begin service to Montreal sometime in 2019.

“There are 8 million people living in New York City, and they want to leave on the weekend... Having the service terminate in Rutland is inconvenient, so expansion to Burlington is necessary.”

The possibility of establishing commuter rail service from Brattleboro south to Springfield, MA is largely in the hands of the Commonwealth of Massachusetts, which is studying the feasibility of operating commuter service between Greenfield, MA and Springfield, MA, with stops in Northampton and Holyoke. Should Massachusetts establish such a service, VTrans hopes to negotiate a connection to Brattleboro.

The cost of such a service, and how often trains would run, is unknown. No track upgrades are necessary as the Vermonter already runs along the line, but the New England Central Railroad, which owns the track, not only must agree to allow such a service but also must be paid for the use of its infrastructure. VTrans hopes to know more about the proposal’s feasibility during the latter half of 2017.

While establishing these three new services are VTrans’ short-term rail goals, the Agency also is looking further down the line and has set these additional long-term targets:

- Establish Amtrak service between Albany, NY and Burlington through Bennington and Manchester.
- Add a second roundtrip to Amtrak’s Vermonter service.

≡ **Extending Passenger Service** ≡

At its public forums, the Board in 2016 focused solely on the state’s short-term goals. Forum participants widely supported VTrans’ priorities, and encouraged

policymakers to make them happen as soon as possible. Some hoped the time tables, especially those related to extending the Ethan Allen Express north of Rutland, could be accelerated and happen before 2020.

“Try to work on getting from Rutland to Burlington sooner,” said a Burlington forum participant, echoing the statements of others.

Participants said they understood that completing the Middlebury Tunnel was the determining factor in the train reaching both Vergennes and Burlington, but they encouraged the state to consider extending the line to Middlebury, just south of the tunnel, prior to the project’s completion.

“I believe we are sacrificing the possible for the perfect,” a Burlington forum participant said. Another participant added: “If we could open the station in Middlebury earlier it would empower people in New York” to begin using the service.

Regardless of when the new service begins, residents of communities along the line extension expressed support.

“The potential impact of this is significant,” a Vergennes forum participant said. “There are 8 million people living in New York City, and they want to leave on the weekend... Having the service terminate in Rutland is inconvenient, so expansion to Burlington is necessary.”

While Burlington forum participants supported extending the Ethan Allen Express, they were puzzled that the state’s rail plan does not include figuring out some way to further extend the train north to St. Albans and on to Montreal.

These participants said they were aware that the track connecting the Vermont Railway line to Burlington with the New England Central line in Essex required improvements to both track and a tunnel. But given the value of making such a connection, the future expense would be worth the effort, they said.

“It’s eight miles from downtown Burlington to Essex Junction,” a Burlington forum participant said. “We should have as a high priority to upgrade the track so that the trains can run at a decent speed and the Ethan Allen does not have to terminate in Burlington. It could go on to St. Albans, or maybe even Montpelier.”

In the interim, forum participants said the state should consider bus service as a way to link the new Burlington station to the existing station in Essex Junction.

“It’s important to link the two rail systems together,” a Vergennes participant said. “Have bus service between Essex Junction and Burlington, as well as between White River Junction and Rutland.”

Support for extending the Vermonter to Montreal also was strong. Participants all around the state encouraged VTrans to work diligently to solve whatever customs and labor-union issues remain so that the extension could begin as soon as possible.

“We look forward to rail travel once again to Montreal,” an East Calais resident said via email. Also via email, a Franklin County resident added: “Having a train to Montreal would be a big boost to our area — both as a convenience to those of us who go to Montreal on a regular basis and for the economic boost it will give our area to have Montrealers come to us.”

Recognizing that train service to Montreal is still several years away, a St. Albans resident in a phone call to the Board encouraged the state to establish bus service connecting St. Albans to Montreal. Bus service currently exists between Burlington and Montreal, but the bus does not stop in St. Albans.

“There used to be a bus going twice a day at least to Montreal and back, stopping amongst other places in St. Albans,” the caller said. “For some reason, Greyhound eliminated that service. I find it egregious we cannot get on a bus to Montreal or to Burlington as we formerly did.”

While the vast majority of forum participants spoke in favor of passenger trains and the state’s plans to extend where they travel, the sentiment was not universal. The state spends about \$8 million annually to subsidize its two intercity services, a price tag some considered very steep.

“We have fewer than 110,000 riders and we spend \$8 million? This is a very expensive way to truck people around,” a Woodbury resident said during a phone call to the Board’s office. “If train service can pay for itself, fine. But if it can’t, stop wasting our money.”

A St. Albans forum participant agreed: “Trains are money pits. Vermont does not have the popula-

tion that will ride rail to make it not need a subsidy... Vermont does not have the population or the destinations for people to go to on these trains... It is not cost effective. This is just not the right time or the right place for this.”

≡ Frequency & Reliability ≡

Forum participants said service along the Vermonter would be enhanced, and ridership would grow, if the state adjusted the train’s schedule so that it arrived in Springfield, MA, which is a rail hub, at an earlier time so that passengers could make better connections to other rail lines and reach other destinations without having to first spend the night in a hotel.

“Right now, the Vermonter connects to nothing,” a White River Junction participant said. “I have to drive to Albany, NY to get to Chicago. A change in schedule would offer more options. As the schedule is now, a Vermont passenger cannot get to Florida on a train — I mean wow!”

While some sought better connections to faraway places like Chicago and Florida, others sought faster connections to closer destinations like Boston.

“I wish you would examine ways to improve that service,” a Brookline resident said via email. “Currently, I have to go from Brattleboro to Springfield, where there is a significant wait (two hours or more) for the connecting train to Boston. A more efficient connection would encourage more of us to use this service regularly.”

The best way to forge better connections, as well as increase ridership, is to add more trains to each service, forum participants said. The state spends about \$8 million to subsidize the two services, yet the current schedule provides just one run per day in each direction. This frequency not only is inadequate, but depresses ridership, they said.

“Frequency = Patronage,” said a Burlington forum participant. “With all the money we spend on these services, once a day is not a satisfactory scenario.”

Said a Rutland forum participant: “Speed and timing is very important. Boarding in Rutland to get to New York City is basically useless. It’s an hour faster if I drive to Rensselaer and get on the train there, where there are many more frequent services... The number of trains is important.”

“I hope you will put in as a priority more frequency,” a Burlington forum participant said. Another added: “I would use rail a lot more than I do now if the service was expanded, and it would make it much easier for people trying to get here.”

Adjusting schedules and adding runs to help forge connections would do little good, however, if trains did not run on time. And operating trains on time is an area where Amtrak needs improvement, forum participants said.

“There is a problem with reliability...When you get on an Amtrak train to New York City, you never know when you are going to get there.”

Amtrak deems a train to be on time if it arrives at its final destination within a timeframe based on route length. To be considered on time, the Ethan Allen Express must arrive within ten minutes of its scheduled arrival, while the Vermonter must arrive within 30 minutes.

During the five-year period from 2004 to 2008, the Vermonter arrived on time about 60 percent of the time, while the Ethan Allen Express averaged just 40 percent. According to the latest Vermont State Rail Plan, delays along the Vermonter were caused primarily by poor track conditions, while the Ethan Allen Express experienced significant congestion-related delays in New York.

Track improvements conducted in 2008 allowed the Vermonter to increase its on-time performance to greater than 80 percent in all but three years from 2009 to 2016. During this span, on-time performance fell below 80 percent in 2011, 2014 and 2016, but never dipped lower than 78 percent. During 2016, the Vermonter was on time during 78.5 percent of its runs.

The Ethan Allen Express also has experienced performance improvements in recent years, but has reached an 80-percent, on-time annual average just once — in 2016 when 80.7 percent of all trains were deemed to be on time. Prior to 2016, the Ethan Allen Express’ on-time rate reached 75 percent only twice — during 2010 and 2013.

Forum participants expressed considerable frustration that such a large percentage of trains — about 20 percent for the Vermonter while closer to 30 percent for the Ethan Allen Express — arrive late.

“There is a problem with reliability,” a Brattleboro forum participant said, echoing the comments of many. “When you get on an Amtrak train to New York City, you never know when you are going to get there.”

Scheduling bus services to pick up train riders and transport them to other destinations becomes complicated when the train is frequently late, a Brattleboro forum participant said.

If you want to design a service so that skiers can take “public transit up to the ski area, the issue of reliability is key,” the participant said. “If the train is late consistently, it’s a problem.”

As for both increasing train frequency and forging better connections to other train lines, several forum participants encouraged the state to look for additional service providers to either complement or replace Amtrak.

“There is more than just Amtrak,” a Burlington forum participant said. “Vermont Rail Systems could be asked to work with us as well.”

Participants in various locations raised the idea of contracting with a rail company that would run lower-cost, lower-service (no food car or other amenities) diesel-multiple-unit trains (DMUs). These trains have control cabs at both ends so they do not have to be turned around when they reach the end of a line, and typically are staffed by only a driver.

“DMUs would cost less to operate than a fleet of Amtrak locomotives and coaches,” a Cornwall resident wrote via email. “DMUs are currently in operation on the Union Pearson Express, which links Union Station in downtown Toronto with Pearson International Airport, and DMU equipment also will be used by SMART (Sonoma-Marín Area Rail Transit) on a line north of San Francisco that will open” in the near future.

≡ Better Train Stations ≡

To prepare for the expansion of passenger service from Rutland to Burlington, VTrans plans to upgrade the stations that will comprise the line’s three new stops: Middlebury, Vergennes and Burlington.

At present, the Agency has no plan to renovate other stations. This decision did not sit well with train users in both Brattleboro and Essex, two of the state's busiest train communities.

In Brattleboro, forum participants complained that the station — which sees about 20,000 riders annually — has virtually no place that protects riders from the elements while they wait for the train. This lack of shelter is an issue anytime it is cold or rains, but becomes a significant problem when the train is running late, they said.

"The waiting room only holds 10-12 people, and sometimes 40 people are waiting for the train," a Brattleboro forum participant said.

"We need a safe and comfortable place for people to wait for the train," wrote a Wardsboro resident via email. What Brattleboro has now "is an embarrassment to the State of Vermont as this is the gateway station to our state and the first thing visitors on the Vermonter see. The Massachusetts stations in Greenfield, Northampton, and Holyoke now all at least have covered platforms. We have nothing... I have spent many cold hours standing outside waiting for an oft delayed train and felt like I was a third-class train rider waiting to be picked up."

The station in Essex Junction faces similar issues.

Essex Junction is the state's busiest train station — about 22,000 annual passengers — as well as a busy bus station. It has a vintage 1950s design with a tiny waiting room and just one restroom. Similar to the Brattleboro station, most people wait for the train while exposed to the elements.

Essex Junction officials attended the Burlington forum armed with a brief PowerPoint and some architectural boards depicting a modern station they believe would greatly enhance not only the train experience, but the village's downtown landscape. The vision is to produce a modern train/bus building with a large, overhanging roof that would keep riders sheltered from the rain, ice and snow.

"We would like to (work with the state) to come up with a plan to upgrade and improve the area," an Essex Junction official said. "We have a shovel-ready project ready to go... We need a whopping total of \$1.2 million."

Such a restoration would benefit more than just

train and bus riders. It also would help transform the downtown area into a more modern and attractive place that would result in other economic benefits, village officials said.

"We believe these economic benefits help to justify the increased expenditures," a village official said.

While Essex Junction officials stressed the need for a modern building, they also raised the thorny issue of parking. The downtown station is surrounded by busy streets and has just six overnight spaces. Given that nearly 22,000 train riders a year use the station, and just about all their trips include an overnight stay, the amount of parking is inadequate.

Essex Junction is not alone. Concern regarding a lack of parking at Vermont train stations was echoed all across the state.

"If you want people to use the trains, you have to make it easy for them," a Brattleboro forum participant said. "Right now, it is difficult for people to get to the train."

In Vergennes, the very first question the Board received was about parking.

"When you expand the Ethan Allen, how will parking work?" a Vergennes participant asked. "Parking at the current station in Middlebury is already at capacity," and they don't even have a train stop yet.

≡ Bus Connections & Bicycles ≡

Connecting to the train via automobile was just one concern. Many forum participants stressed that to be both efficient and user friendly, train travel needs to seamlessly connect to other forms of public transportation like buses, as well as have capacity for riders to travel with their bicycles.

"If I take the train to Middlebury, where am I going to get left off?" asked a Rutland forum participant. "Will I have to take a cab to get to anywhere? People are going to want to get to the middle of the village. That link is important."

Said a White River Junction forum participant: "The state needs to increase its destination convenience with things like ride sharing, bus service and others... We need to have services at the station so you can just hop in a vehicle that is waiting for you and get to your destination."

For years now, Amtrak has been promising to allow bicycles on board its trains. In 2016, that promise finally became reality but in a limited fashion: only four bicycles per train. Forum participants considered this too few, and encouraged the state to lean on the carrier to increase the capacity.

“I hope we can negotiate a realistic policy on how to get your bike on a train,” a White River Junction forum participant said.

A four-bike cap is “a deterrent to using the train,” a Brattleboro forum participant said. “If two couples want to come to Vermont, they max out the capacity. That is not reasonable.”

Another deterrent is that in Vermont, trains are not easily boarded by those with impaired mobility.

“We have nine stations along the Vermonter, and not a one of them is handicapped accessible,” said a St. Albans forum participant. Even on the seasonal “Christmas train, you cannot get on the train if you are disabled. A lot of kids would like to ride that train, but they can’t get on it.”

Places people cannot get to on a train — whether able-bodied or disabled — is the Northeast Kingdom and Bennington. The Board in 2016 did not hold a forum in Bennington, but at its forum in Newport, people spoke about the void.

“We always feel left behind on a lot of things,” a Newport forum participant said, echoing the sentiment of others. “The state needs to look at this quarter also. It seems everything is focused on the other side of the state.”

A White River Junction forum participant agreed: “We have written into our town plan that bringing the train to the northeast is an important piece of our future. If you are a visitor coming into the state, you cannot get to St. Johnsbury except by car.”

Had the Board held a forum in Bennington County, it has no doubt it would have heard similar comments.

ESTABLISHING COMMUTER RAIL

While making improvements to Amtrak's interstate passenger service has been discussed within the Vermont Legislature for years, the Transportation Bill passed in 2015 for the first time called for VTrans to assess the feasibility of establishing commuter rail service between St. Albans and Burlington, as well as between Montpelier and Burlington.

The assessment came with a due date of January 2017. As a result, no information was available when the Board conducted its forums during October and early November of 2016. Shortly after the final forum, VTrans released preliminary findings that revealed establishing such commuter-rail services would come with a price tag of more than \$300 million.

Given that Vermont's entire rail budget annually hovers around \$35 million, the prospect of finding the money to establish such services is daunting. Regardless, the Board believes it useful to include in this report information on what Vermonters at its forums had to say about commuter rail because the subject not only played a large part, but in some cases dominated the conversation regarding passenger rail.

By the time this report is published, the full VTrans feasibility study on commuter rail will have been released. For complete details, the Board encourages reading that report. But for the sake of setting the stage prior to providing comment the Board received at its forums, here are a few highlights.

≡ Vermont's Study ≡

In the United States, commuter rail — which is designed to transport passengers to and from destinations within either a single state or within a single metropolitan area — has only been established in locations that experience high levels of both congestion and expensive parking. Stops are usually spaced about two miles apart, and target travel times are between 6 a.m. and 10 a.m., as well as between 3:30 p.m. and 7 p.m.

The City of Nashville, population about 1.8 million in the metro area, operates the country's smallest commuter rail service which contains 6 stations, covers 32 miles, and sees an average daily ridership of about 1,225 people. The service provides five

roundtrips per day Monday through Thursday, with a sixth train added on Friday. The service costs the government about \$13 million annually to subsidize.

The VTrans study considered two potential schedules. Schedule One included six roundtrips to Burlington — two from St. Albans and four from Montpelier — while Schedule Two included 11 roundtrips to Burlington — four from St. Albans and seven from Montpelier. The Agency projected that 930 daily riders would use a Schedule One service, while nearly twice as many (1,835) would use the Schedule Two service.

Capital costs, which include \$48 million for station renovations and construction, for Schedule One were estimated at \$301 million. Schedule Two capital expenses were estimated to cost \$363 million. The bulk of the money in either case would be used to purchase train sets and install track signaling.

Annual operating costs were predicted to be \$4.9 million for Schedule One and \$8.9 million for Schedule Two. Ticket revenue would offset some of these costs, but operating Schedule One was predicted to require a \$3.7 million annual subsidy, while operating Schedule Two would need a \$6.5 million annual subsidy.

Early criticism of the feasibility study focused on four primary areas: cost of the train sets, the number of stops, personnel costs, and the fact that the study did not include service that connected St. Albans directly to Montpelier. Instead, the study considered separate lines that begin in both Montpelier and St. Albans with each terminating in Burlington.

The feasibility study "is descriptive of... a system that is not a realistic system for Vermont," said a person who attended one of three public hearings VTrans held when it rolled out its preliminary findings. "It strikes me as a maximum proposal for a

maximum system when many things could have been done for a considerably lower price.”

Critics said the train sets were excessively beefy and therefore too costly. They were more in line with what is needed to operate a big-city, heavy rail system as opposed to a “Vermont-scaled,” light rail system.

“There is clearly a desire and a need... Commuter service will help people get to work and travel from one end of the state to another.”

The two proposed schedules, critics said, included too few stops and excluded logical destinations such as Georgia, Colchester, Barre and the Global-Foundries campus in Essex Junction. Including such stops would increase ridership and therefore lower needed subsidies.

Critics also said ridership could be increased by connecting the two lines so they do not terminate in Burlington, thus allowing riders to travel directly from central Vermont stations in Montpelier, Waterbury and Richmond to locations north of Burlington such as St. Albans.

Money also could be saved by staffing the trains with nothing more than a single driver, thus eliminating the cost of a combination platform-and-car conductor on each train, critics said.

“I was hoping to have a really good quality study, but this is misleading,” said a person who attended a VTrans public hearing. “This may be fine for the MBTA in Boston. But it has no place in rural Vermont.”

VTrans officials acknowledged the criticisms, but noted that even halving the proposal’s cost still suggests a startup capital price tag between \$150 million and \$180 million, with needed annual subsidies likely ranging between \$3 million and \$5.5 million. Even these lesser amounts would be a lot for Vermont to undertake, they said.

≡ **Early Support** ≡

As previously mentioned, results of VTrans’ commuter rail study were not available when the Board held its public forums. The Board did, however, mention that the study was underway and asked par-

ticipants for their thoughts even though costs and other details were unknown.

The vast majority of forum participants not only were supportive of establishing commuter trains linking Montpelier to the state’s northwest quadrant, but many said that anything other than studying how to operate commuter rail throughout the entire state was shortsighted.

“The need is obvious,” said a Burlington forum participant. “There is clearly a desire and a need for it. Commuter service will help people get to work and travel from one end of the state to another.”

Said a White River forum participant: “I live in Windsor and have no way to get to White River (by public transportation) in a reasonable amount of time. “We have the rail lines, and we are looking into the future. We have to figure out what we can do to provide some commuter rail... I know there are issues, but if we don’t make this happen it seems like a lost opportunity.”

The sentiment was the same in Rutland, where people said linking towns in Rutland County to Chittenden County by rail would be one way to help alleviate Chittenden County’s affordable housing crisis.

“We have talked down here about commuter rail to connect Rutland to Burlington... to create employment opportunities,” a Rutland forum participant said. “It would make logical sense to look at this... and the time to do that study would be now.”

Those who live in the Northeast Kingdom echoed these thoughts.

“There is a train gap in the Northeast Kingdom, where it would be great to have commuter rail as well as (intercity) distance travel,” said a White River Junction forum participant. “Another phase of this study should be looking at how we put commuter rail back up (all over the state), including making a connection between Newport and Burlington because right now we don’t even have a bus.”

Added another White River forum participant: “people like living in the Northeast Kingdom, but their jobs are elsewhere. These people would love to have mass transit or commuter rail. Providing it would really enhance economic development.”

Employers for years have lamented how difficult it is not only to find qualified Vermont-based

employees, but also how difficult it is to recruit young professionals from outside the state. Social-service providers, for just as long, have stressed that one of the largest impediments for those trying to get off public assistance and return to work is a lack of transportation.

A robust commuter rail system would help solve all of these problems, forum participants said.

“Commuter rail would be a major attraction for drawing employees to all areas, so whatever can be done to restore more frequent train service should be done,” a Burlington forum participant said.

“As a young professional who lives and works in the Rutland community... the thing I constantly hear is we are losing young folks. I also hear it is hard to attract young professionals to Vermont, as well as it’s hard to attract tourists,” a Rutland forum participant said.

“Rail links job opportunities with those who want to live in Vermont,” the Rutland participant added. “Having ease of transportation is critical for job growth as well as the advancement of tourism. If you want to grow the economy, rail is an easy way. And it is a way that young professionals are asking for.”

Even without seeing the results of the VTrans’ study on commuter rail, forum participants assumed creating such a service would be expensive. But instead of simply looking at the cost in isolation, they encouraged policymakers to conduct a broader cost-benefit analysis.

“Look at the true cost-benefit of passenger and freight rail, which means comparing them to the cost of supporting cars and trucks,” a Burlington forum participant said. “If we did a comprehensive study it likely would show there truly is a great cost-benefit to moving goods and providing services by rail.”

Two Burlington-based email writers agreed.

“Vermont, like (the rest of) America, showers homeownership and car transportation — the twins of sprawl and excessive house investment — with money at the expense of public transportation and sensible residential urban design,” wrote a Burlington area resident.

Added another via email: “We need commuter rail from Burlington outward — north, south and

east... All of this means more jobs — to build it, maintain it, and run it.”

Establishing commuter rail, even if powered by diesel engines, also would benefit the environment because it would remove hundreds if not thousands of greenhouse-gas spewing cars from local roads, forum participants said.

“Having ease of transportation is critical for job growth as well as the advancement of tourism. If you want to grow the economy, rail is an easy way. And it is a way that young professionals are asking for.”

And once such a service is established, finding a way to electrify the trains would be yet another way the state could divest itself of fossil-fuel use and further reduce its carbon footprint, forum participants in both Burlington and White River said.

In an email, a Vermonter who works in Waterbury said that establishing commuter rail by 2018 would improve the lives of many local commuters because VTrans, starting that year, is planning to reconstruct downtown Waterbury.

“Main Street will be torn up for three years while utilities are placed underground,” the writer said. “Rail runs adjacent to routes 2 and 100 (Main Street). This would present an ideal opportunity to provide alternate commuter transportation solutions for the 1,100+ state office workers who commute daily to the Waterbury State Office Complex that is located across Main Street from the Waterbury Rail Station.”

While support for commuter rail ran high at the Board’s forums, it was not universal.

The current cost of operating 10.5 weekday roundtrips by bus between Burlington and Montpelier — a service known as the Montpelier Link — costs \$615,000 annually, while the annual price of providing four roundtrips by bus between St. Albans and Burlington is \$190,000.

Some forum participants pointed to these bus services as a much more cost effective way to provide mass transit than establishing train service.

“A bus can handle this at far less expense,” a St. Albans forum participant said.

“Be clear on what the cost of these projects is going to be for the taxpayer,” a White River Junction forum participant said. “We have the third highest tax burden in the nation... These rail projects sound wonderful, but we also need a realistic assessment as to the cost so we can make an educated decision.”

≡ **Brattleboro Commuter** ≡

Although VTrans’ study focused exclusively on bringing commuter rail to the busy St. Albans-to-Montpelier corridor, the Agency also has been working with the State of Massachusetts to assess the feasibility of linking Brattleboro by train to several towns in western Massachusetts.

Establishing such a link is largely in the hands of the Massachusetts Transit Authority, which has a desire to connect by commuter train the Massachusetts towns of Greenfield, Northampton, Holyoke and Springfield. Vermont jumped into the discussion largely because this conversation was already ongoing. Brattleboro is only 20 miles north of Greenfield.

The cost of such a service, and how often trains would run, is unknown. But the advantages to linking Brattleboro to Springfield, MA transcends just getting people to and from work as the Springfield station is a rail hub that supports connecting service both east to Boston and as far west as Chicago.

No track upgrades are necessary to establish this commuter service as Amtrak’s Vermonter already runs along the line. VTrans hopes to know more about the proposal’s feasibility during the latter half of 2017.

At its public forums, the Board asked Vermonters their thoughts regarding such a service. Aside from their general thoughts about establishing commuter rail across the entire state, which are documented earlier in this chapter, most participants did not

address the Brattleboro proposal directly except, of course, those who participated in the forum held in Brattleboro.

Everyone at the Brattleboro forum supported the idea.

“It would be really convenient if we had at least two more runs,” said a Brattleboro forum participant. “Right now we have one a day: Amtrak’s Vermonter which leaves Brattleboro midday. If we had a total of three, it would provide a lot more options.”

The Brattleboro Energy Committee, in a letter to the Board, greatly supported establishing commuter service.

“There is a strong draw looking south to the Pioneer Valley of Massachusetts,” the letter said. “Additional trains with more frequent stops would bolster our local economy... and would help to attract and retain young professionals who are seeking to locate in communities with convenient mass transit.”

A Brattleboro forum participant said that establishing a successful Brattleboro commuter service could open the door for an extension to Bellows Falls, which would be a further economic boon for southeast Vermont.

A Putney resident via email said establishing morning and evening commuter runs linking western Massachusetts to Brattleboro also would benefit the Vermont ski industry.

“I know many college students in the Northampton/Amherst area who would love to be able to get on a train and come to Vermont for a day of skiing and still be able to return home that evening” the Putney resident wrote. All it would take is “to coordinate a ski-area bus from the Brattleboro station to Mt. Snow or Stratton to coincide with the train arrivals and departures.”

RAILROADS AS NEIGHBORS

Vermont contains 578 miles of active railroad track, of which the state owns more than half, or about 305 miles. Although trains have run through Vermont for more than 150 years, public track ownership is relatively new and can be attributed to the decline of the railroad industry since the end of World War II.

In all cases, the state acquired its railroad assets either following corporate insolvency or after the track's former owner announced discontinuance of service over the lines.

According to Vermont's most recent rail plan, the first track segment the state purchased was in 1962 after the Rutland Railroad Company filed for bankruptcy and abandonment. The state's most recent acquisition took place in 2003, when VTrans took ownership of what is now the Washington County Railroad's Connecticut River Line that runs from White River Junction to Newport.

While the state owns the majority of Vermont's active rail lines, it does not own or operate a railroad company. Instead, it leases all state-owned track to Vermont Rail Systems (VRS), a locally-based, short-line railroad company that operates several subsidiary railroads. The arrangement calls for VTrans to be responsible for all capital improvements along the lines — including maintenance and upkeep of most rail bridges — while VRS conducts basic, day-to-day track maintenance and runs all freight operations.

About 94 percent of all the track in Vermont is operated by two companies: VRS and Genesee & Wyoming, Inc. (G&W), which is the nation's largest short-line holding company. G&W operates 113 subsidiary railroads, and owns more than 13,000 miles of track within North America. In Vermont, it operates the New England Central Railroad (191 track miles) and the St. Lawrence and Atlantic Railroad (31 track miles).

As mentioned, Vermont Rail Systems leases all state-owned track. Headquartered in Burlington, VRS operates three subsidiary short-line railroads: Vermont Railway (140 track miles), the Green Mountain Railroad (50 track miles), and the Washington County Railroad (105 track miles). In addition to operating the state-owned lines, VRS owns

and operates the Clarendon & Pittsford Railroad.

Two other railroad companies also do business in Vermont.

The Central Maine & Quebec Railway has a small presence along the Canadian border with track that links to the Washington County Railroad in Newport, while the Pan Am Railway passes from New York into Massachusetts through the extreme southwest corner of Vermont.

The Twin State Railroad, which is inactive, connects northern New Hampshire to the Washington County Railroad in St. Johnsbury. In the past, the state has looked into purchasing this line, but no deal was struck.

A Bethlehem, NH resident wrote the Board and said that New Hampshire recently purchased the section of the Twin State Railroad that stretches between Gilman and Whitefield. Given this, he encouraged the State of Vermont to also “exercise its powers of first refusal” and purchase the Twin State Railroad segment that crosses into Vermont.

“It is not unreasonable to believe that if this line were reactivated it could become a major source of east-west commerce between both Vermont and New Hampshire with millions of dollars of economic development and job creation as a result,” he wrote.

Along Vermont's nearly 600 miles of active track, trains rumble past thousands of homes, train cars are stored along dozens of rail sidings, and several communities — most notably Bellows Falls, Burlington, Newport, Rutland, St. Albans, St. Johnsbury and White River Junction — play host to busy railyards and switching stations.

Given the railroad's constant interaction with the public, the Board asked forum participants what it was like to live, work and play near the tracks.

Comments were mixed. Some participants found the railroad to be a good neighbor, while others

expressed frustration and concern. Some, while having occasional issues, said living near the tracks was a choice. And when making that choice, you had to accept the good along with the bad.

“I’m annoyed a lot more by truck traffic,” said a Brattleboro participant, echoing the sentiments of others. “I’d much rather see a lot more freight go by on rail.”

≡ White River Concerns ≡

Of the seven communities visited by the Board, White River Junction expressed the most concern regarding the behavior of the railroad.

Participants who attended the White River forum believe the numerous federal exemptions bestowed upon the industry allow the local railroad to turn a blind eye to the negative impacts of its operation, and likewise turn a deaf ear to local complaints.

“The industry is not going to survive if it maintains this we-are-not-going-to-talk-to-you-because-we-don’t-have-to attitude,” said a White River participant.

Many of our issues can be solved “with a little understanding and having a creative attitude,” said another White River participant. “And it is a lot about attitude.”

White River Junction is arguably Vermont’s most historic and most important rail community. Beginning in the 1840s, five different railroad lines were laid through the village so that by 1863 the community hosted eight-track crossings. Aside from the tons of freight that constantly moved along these rails, White River, during its heyday, saw as many as 50 passenger trains daily.

Today, the New England Central Railroad runs the local train yard, which despite the industry’s decline over the decades still sees considerable traffic, especially in late fall and early winter when it’s peak season to move road salt, timber for woodstoves, and heating fuel.

Railyard impacts, forum participants said, tend to fall into three categories: noise, traffic impacts created by trucks connecting with the train facilities, and right-of-way concerns that either prevent or limit public access to parts of town that, if not for the railroad, could be better utilized.

Forum participants said they understood that

finding solutions to these issues can be difficult. But finding such solutions is impossible when the railroad won’t even engage in a dialogue, and instead chooses to hide behind its federal exemption.

“All we’re asking for is communication with the local community,” a White River Junction forum participant said.

“We understand that federal law provides them a lot of leeway on what they can do. That said, railroad sidings have impacts in terms of noise and truck traffic,” the participant said. “We would like to have a good working relationship so that they reach out to us so that we can ask what kind of impacts their plans will have, and is the plan a *fait accompli* or can we have some say in how things will work?”

White River forum participants said they appreciate their community’s historic tie to the railroad industry. This history provides the community with both its identity as well as economic opportunity. The village, however, also needs “the opportunity to create a healthy living environment,” a forum participant said. “When we try to have these conversations with the railroad, the door slams shut.”

Located along the Connecticut River, White River Junction could prosper greatly by developing its riverfront, forum participants said. But some key land parcels are inaccessible without either access to, or the crossing of, the railroad’s right-of-way.

The railroad, however, does not want to engage in this conversation, participants said.

“Access to the river is a necessity for allowing this town to reach its potential,” a White River forum participant said. There are attractive locations to which the railroad controls access. Should the town “be able to access that part of the river, it would have economic implications... But the avenues of communication in this area have become somewhat stuck.”

The Town of St. Johnsbury has a similar issue with the railroad. Whenever the topic is finding a way to cross the railroad right-of-way to access property for economic development, the railroad has no interest in talking, a participant said.

“St. Johnsbury has a barrier to get to some of its economic resources,” the participant said. “And it is all about the conversation that cannot happen. We want to look at this in a more creative way.”

A Rutland forum participant said the railroad plans to establish a siding in Proctor near the Marble Museum, but to date has shown no sign it intends to work with the community as part of the development process.

“The railroad has a lot of power,” the participant said. “They tell you what they are doing, and that is the way it is.”

≡ Shelburne & Charlotte ≡

No one who attended the Board’s forums broached the legal dispute between the Town of Shelburne and Vermont Rail Systems. The Board, however, is aware of the lawsuit and the town’s accusation that the railroad clear cut property without local permits and began developing a commercial salt operation along the banks of the LaPlatte River without first discussing details with the town.

Just south of Shelburne, the Town of Charlotte has similar concerns.

During the past year, Vermont Rail Systems began using a siding located in a farm field within the town’s west village to store dozens of train cars that can contain more than a million gallons of propane and butane. These cars, which can sit for weeks before being moved, are positioned within a short distance of public infrastructure such as a power substation, municipal buildings and local roads, as well as a childcare facility, a senior center and numerous private residences.

While the town has significant health and safety concerns regarding this storage practice, it has no way to regulate how the railroad uses the siding because federal law allows the practice and largely exempts the railroad from local scrutiny.

“Trains that once traveled just a few times per day and carried people, milk, stone, lumber and other freight now carry large volumes of oil, gasoline, propane, and other hazardous materials,” wrote the Charlotte Selectboard. “The rail sidings in our town and other towns throughout the state have been repurposed as facilities for storing large quantities of hazardous materials.”

The selectboard believes such hazardous cargo should be stored in secure locations designed to handle whatever risks are associated with the material

and its potential to spill, catch fire or explode. But “to date, town zoning regulations and town plans have been ignored by rail operators who cite federal preemption over local or state regulations and permit reviews,” the board wrote.

A Rutland forum participant said the railroad likes to store empty fuel cars in the local yard, which also can be dangerous.

“Sometimes when dealing with flammable products, cars are more dangerous when they’re empty,” the participant said. “Deal with them and move them. Don’t just leave them there.”

The frequency of this kind of behavior prompted some forum participants to call for the state to establish an ombudsman that communities can turn to when they believe a railroad is either misbehaving or abusing its authority.

“It is important that we find some way to listen to the folks who live along the tracks... We need some sort of accountability to the heavy hand.”

“The people who work on the trains are lovely and friendly, but... their corporate headquarters are not very caring of the people who live along the tracks,” a Brattleboro forum participant said. “It is important that we find some way to listen to the folks who live along the tracks... We need some sort of accountability to the heavy hand.”

The Charlotte Selectboard called for the Legislature to take action, claiming other states have addressed similar problems in ways that work within the confines of federal law.

“New York and Minnesota mandate routine inspections of rail lines and hazardous-material tank cars,” the selectboard wrote. “Lawmakers in California are considering fees on hazardous materials being stored on their rails.”

These kinds of actions “enable the early detection of deficiencies in the rail lines, trains and equipment, and have led to responsive correction of problems before a derailment or other disaster occurred,” the selectboard wrote. “Vermont should be looking at what other states are doing to make their rail operations

safer for the public and for host communities.”

On a different topic, a Shelburne resident in an email encouraged the state to find a more equitable way to distribute the liability costs associated with private railroad crossings.

“The railroad and state require private crossing agreements that say the maintenance and liability insurance must be paid by the private citizens, and require a yearly fee be paid to the state,” the Shelburne resident wrote. “The current yearly cost for these items is significant with no guarantee they won’t rise in the future.”

≡ Train Whistles & Quiet Zones ≡

Whether in Rutland, White River Junction, St. Albans or Vergennes, nothing seemed to get under people’s skin more than train whistles blowing during times they are trying to sleep.

“Train operators toot horns with different levels of enthusiasm,” a Vergennes forum participant said. “The ones who do it early in the morning are the ones who are very enthusiastic.”

Federal law requires that trains blow their whistle when approaching roadway crossings. Communities can establish so-called quiet zones that exempt the train from blowing its whistle, but to do that several expensive things must take place.

To establish a quiet zone, a municipality must forge an agreement with the Federal Railroad Administration and someone, usually the town, not only must pay to have the proper signal equipment installed at each crossing within the quiet zone, but also must agree to pay for the equipment’s maintenance and assume liability for the crossing’s safety.

Few towns establish quiet zones as they do not want to assume either the liability or the cost.

Forum participants were aware that trains are required to blow their whistle, even during the middle of the night. However, they said some train operators do this with more gusto than others.

“There are heavy-handed engineers, and light-handed engineers — they are very inconsistent with their tooting,” said a Vergennes forum participant.

Another Vergennes participant added: “It would be nice to have how they blow the whistle standardized” so that we could have some consistency.

Participants called for the state and local governments to forge a relationship with the railroads to establish strategic quiet zones, especially in densely populated areas like villages.

“For economic development, it is extremely beneficial to have quiet zones,” a White River Junction forum participant said. Another White River participant agreed: “Do an analysis of whether it is cost effective to build quiet zones. You can use GPS technology to figure this out.”

≡ Lack of Tidiness ≡

Other issues raised by forum participants include the the railroad’s propensity to allow standing trains to sometimes idle for hours in the railyard or along a siding — they are noisy — and the spraying of herbicide along the tracks to tame vegetation.

“No details are given about what they are spraying,” said a Newport forum participant who lives along the tracks. “I encourage the state to look into alternatives,” added a Burlington participant.

“There is a siding between Brattleboro and Bel lows Falls... where they park the train, sometimes for 24 hours at a time, and sometimes with the engine running,” a Brattleboro forum participant said. “Allowing a train to idle for days at a time cuts into its energy savings.”

In Newport, a large stone wall runs alongside the tracks by the community’s waterfront. The wall lies within the railroad right-of-way, and is often covered with sticks and invasive vines. The railroad, a forum participant said, should clean this up and make the area more attractive.

Several people also complained that railroads tend to discard old rail ties alongside the tracks and leave them there for months in unsightly piles.

“When issues like this get brought to their attention they get a little prickly,” a Newport forum participant said. “And it takes them a long time... to get things done.”

DOWNTOWN TRUCK TRAFFIC

The volume of truck traffic that passes through Vermont's villages and downtowns is linked to the movement of freight along the state's railroad lines. In short, the more freight that is moved by rail, the fewer trucks have to use the state's road network.

Getting an accurate handle on the current movement of freight within Vermont is difficult.

The last comprehensive freight study conducted by the state is nearly a decade old and uses 2007 data, while the most recent rail plan contains data from 2011. Trusting these figures to represent current conditions is tricky as 2007 represents the last full year prior to the nation's 2008 economic collapse, while 2011 was very early in the recession's recovery.

As a result, it's likely that data from neither of these years accurately represents current conditions. Since this data is all we have, the Board had to choose one or the other for use in this report as attempting to mix data from the two years would only cause confusion.

Given that 2011 represents a point in time at the very beginning of an economic recovery following what is widely considered to be an historically deep recession, the Board chose to use 2007 statistics given that the U.S. economy is currently deemed to be mostly recovered, which would indicate that freight movement during 2007 would be somewhat representative of current conditions.

Still, the Board presents this data with the caveat that although it accurately represents historical information, the reader when trying to understand current conditions should consider this information with the proper level of caution.

≡ Freight Movement ≡

In 2007, more than 83 percent of the 52 million tons of freight that either passed through Vermont, was unloaded in Vermont, or was transported from Vermont was carried by truck and rumbled over the state's highway network. Most of the remainder, 16.5 percent, moved via rail. The remaining 0.1 percent was transported by air.

Worth approximately \$58 billion, 38 percent of this freight by weight simply passed through the

Green Mountain State, while the destination of 36 percent was inbound, 16 percent was outbound, and 10 percent was shipped from one location within the state to another.

Freight passing through Vermont during 2007 travelled 70 percent by truck and 30 percent by rail. These goods — mostly nonmetallic minerals, paper products, food, chemicals and petroleum products — primarily were passing to and from New Hampshire, New York, Massachusetts, Maine and the northeast-central region.

Calculating the truck vs. rail split for freight originating from or arriving into Vermont is tricky because oftentimes trucks are also needed to ship goods from either their point of origin to railyards or from railyards to their final destination.

According to the state's most recent freight plan, 80 percent of the tonnage and 88 percent of the value of freight going into, out of, through and within Vermont during 2007 involved a truck for at least part of its journey. These percentages were considered typical for the New England states.

As for rail in 2007, the combination of non-metallic minerals, hazardous materials and food were the top commodities transported into, out of, through and within Vermont.

Shipping by train accounted for about 17 percent of all freight movement, or 9.3 million tons valued at \$8.6 billion.

Products that move by rail in Vermont are varied. In 2007, the breakdown was as follows:

- 17 percent pulp, paper & allied products.
- 16 percent clay, concrete, glass and stone.
- 12 percent lumber, wood & furniture.
- 12 percent chemicals & allied products.
- 9 percent coal.
- 8 percent petroleum.
- 7 percent food or kindred products.
- 5 percent non-metallic minerals.

The state's most recent freight plan includes predictions for future freight flows using 2035 as its end point. It is here that the recent economic recession wreaks the most havoc on accuracy as we already know that the plan's projected growth between 2007 and today did not occur.

Still, given that the nation is now economically on the mend, the Board finds value in presenting the plan's growth figures as they remain the best possible look that we have into what the future holds.

The bad news is... Vermont communities struggling with truck traffic through their historic villages or downtowns will still experience a sizable future uptick in 18-wheelers.

In 2007, VTrans projected Vermont's overall freight flows would increase from 52 million tons to 70 million tons by 2035, for a total growth rate of 43 percent over a 27-year span. This projection breaks down to an annualized growth rate of 1.28 percent.

While most of this growth by volume was predicted to take place in the counties with the largest traffic amounts — Chittenden, Rutland, Bennington, Windham and Windsor — the highest growth by percentage were projected to be in the more rural counties of Lamoille (68 percent), Bennington (62 percent), Addison (48 percent) and Orleans (48 percent).

With financial forecasts at the time projecting that the manufacturing industry within Vermont would continue its steady decline, the freight plan predicted that Vermont in the future would become more reliant on imports as the state's economy shifted towards the service industry.

As a result, the largest growth by shipping direction was deemed to be imports, with an anticipated annual growth rate of 1.52 percent, followed by through moves at 1.3 percent annually. Outbound freight flows were projected to rise just 0.96 percent annually, while internal flows were predicted to grow just 0.81 percent annually.

Overall shipping shares by mode, however, were predicted to remain mostly stable, with a slight overall shift from truck to rail of just under 1 percent.

The freight plan predicted this relative stability could change should Vermont undergo either substantial economic changes, or if the nation as a whole saw a significant shift in the cost difference between moving freight on rail vs running it by truck along the highways.

Rail freight primarily consists of commodities moving distances greater than 500 miles on schedules that are not particularly time sensitive. As a result, the state's most recent freight plan projects an average annual growth rate along Vermont's rail lines of 1.38 percent, which is only slightly higher than the state's overall projected annual freight growth rate of 1.28 percent.

What this means is that for those who assume that increasing the state's rail traffic would naturally lead to a decrease in truck traffic, the growth projections do not support this.

The good news for those wanting more freight moved by rail is that a slightly greater percentage of freight movement in the future is projected to take place by rail.

The bad news is that despite this, Vermont communities struggling with truck traffic through their historic villages or downtowns will still experience a sizable future uptick in 18-wheelers.

According to the state's freight plan, most Vermont roads are projected by 2035 to see increases of between 20 percent and 40 percent in overall truck traffic. Communities located along the state's major truck corridors of Route 7, Route 9 and Route 11, and Route 22A through downtown Vergennes are projected to see even larger increases, likely between 40 percent and 60 percent.

We know that the recent recession dampened the overall movement of freight, so it's safe to assume that it will take much longer than by 2035 to reach these projected growth rates. But even without having updated projections, it is also safe to assume that, should the nation's economy continue to improve, local communities at some point in the near future will eventually experience these significant increased levels of truck traffic.

It is with this likely reality in mind that the Board, as part of its forums, sought comment regarding downtown truck traffic.

≡ Truck Impacts ≡

Many Vermont communities struggle with the noise, pollution, and physical shaking created by large trucks as they rumble through their villages. Such disturbances, which can take place at a rate of more than once per minute in some cases, shatters people's quality of life and is at great odds with the historic rural setting of many towns.

"Swanton has issues with trucks in the downtown area," a St. Albans participant said. "They create a ton of problems... Traffic slows down, backs up and it creates a lot of noise."

In White River Junction, a forum participant said: "we are trying to redevelop around the rail lines... The associated truck traffic creates a whole other level of noise, fumes and impacts."

Said a Newport forum participant: "Truck traffic is bothersome downtown. I live on Main Street. When trucks use their brakes, it's loud. I find it bothersome to my quality of life. We have restaurants downtown. The trucks are so loud and stinky it makes eating there not enjoyable."

Large trucks passing through village centers also create safety issues, forum participants said.

"We have a library on one side of the road, and a school on the other — that is dangerous," said a St. Albans participant. "We need to remove some of these trucks from our roads."

Forum participants all over the state repeated these concerns. But no community the Board visited expressed more frustration than the City of Vergennes, whose historic downtown sits smack in the middle of a major north-south truck route along Route 22A.

≡ Vergennes, a Case Study ≡

Downtown Vergennes bustles on a busy day. The city's hub stretches several blocks with a healthy combination of walk-in-style businesses, residences, walk-up apartments, and various public services located along both sides of Route 22A.

As one letter writer noted: City Hall, the Post Office, the public library, a village green that hosts a busy farmers market, and both medical and dental services lay along the road's north side; while dozens of restaurants, retail stores, a pharmacy, and a hair salon make

their home on the south side of the busy road.

All of "Main Street" includes a combination of parallel and diagonal parking in front of the businesses, restaurants and retail shops. Pedestrians, including school children walking to and from the in-town elementary and high schools, constantly make their way from one side of the street to the other as both walking and bicycle riding make up a vital part of living and working downtown.

"When you have 80,000-pound vehicles at your crosswalks it is just a matter of time before you have an accident ... It's not a matter of if, but when."

And then there are the trucks. Lots of them, including nearly 400, 53-foot-long, 18-wheeled tractor-trailers per day. Combined with smaller, box-type vehicles, more than 600 total trucks per day pass through Vergennes along Route 22A. Almost none of which actually stop downtown.

"They don't stop for lunch, and they don't stop for gas. They just rumble through town," a forum participant said. "We don't benefit from them at all. The money these trucks generate actually goes to places like Williston" which have large shopping centers, including big box stores that require these trucks to make deliveries.

Trucks pass through Vergennes at a rate of about one every minute during peak hours, which also happens to be the exact same time the local shops, businesses, and restaurants experience their spike in clientele.

"When I cross the street here I am petrified. I feel like I take my life in my hands," said a Vergennes participant echoing the sentiment of many.

"I knew there would be truck traffic right outside my front door, but after living here six months I now see that it is a big, big problem for the health of my business," wrote an attorney who works with elderly clients to write wills and conduct estate planning. "If people don't feel comfortable coming to my office, growing my business will be extremely difficult."

The local police chief believes such concerns are not overblown.

“I have great concern about pedestrian safety,” said Vergennes Police Chief George Merkel. “When you have 80,000-pound vehicles at your crosswalks it is just a matter of time before you have an accident... It’s not a matter of if, but when.”

The threat, said Chief Merkel, transcends just pedestrian safety. Many of the trucks passing through town carry hazardous materials.

“The concern I have is petroleum or gas,” the chief said. “If one were to overturn in town, it would be catastrophic.”

“The City of Vergennes is the poster child for why trucks should not be traveling in downtowns.”

As an example, on numerous occasions during the winter months, 18-wheelers carrying hazardous materials have lost traction approaching the city center from the south while passing over the Otter Creek Bridge and skidded backwards. Blockage of the transportation corridor or worse, an explosion, would endanger the community.

The bridge, which sits at the base of a hill that contains a greater than a 10-percent grade — a steepness that violates the Vermont Agency of Transportation’s own standards — provides the city’s sole access over the Otter Creek and to the city’s fire department and rescue squad.

Recognized for its architectural significance, the entire downtown of Vergennes is on the National Register of Historic Places. Additionally, Vergennes is what Vermont considers a “designated downtown.”

To obtain this distinction, the community must achieve certain pedestrian-friendly qualities and maintain various quality-of-life characteristics. Hard work and proper planning are required. Success is rewarded with access to various state and federal grants that help the community not only achieve but improve upon these goals.

Despite this investment, the state allows the city to remain a dangerous and busy truck route.

This irony is not lost on the locals, who are not only puzzled but frustrated that the state on one hand recognizes and rewards their community for

its quality-of-life improvement efforts, but then does nothing to help alleviate the biggest threat to the community’s continued health and welfare.

“The state makes a huge investment to keep this downtown vibrant... and to keep this downtown special,” a Vergennes forum participant said. “It’s a derelict of duty for the state to ignore this... It is their duty to protect this asset that is the City of Vergennes.”

Added another forum participant: “we invest a lot to keep this place beautiful so people want to come here. We need to find ways to keep this place beautiful or people will not come and we are wasting our money.”

The best way to improve safety and protect the community is to divert as much of the truck traffic around the city’s core as possible, Vergennes forum participants said. To accomplish this, they look to the Agency of Transportation because the Agency not only owns and controls Route 22A, but also all the other main roads that cut through the region.

“The Agency of Transportation needs to address this issue because it is their issue to deal with,” a Vergennes resident wrote in an email.

To help solve the city’s truck problem, both the community of Vergennes and the Addison County Regional Planning Commission, as well as the Agency of Transportation, have conducted numerous and substantive studies. These studies, which date back to 1992, have yielded zero results.

They have not even resulted in a possible plan of action, wrote Vergennes Mayor William Benton. “Studies have been undertaken with no concrete efforts at instituting a solution,” he wrote.

Most recently, the Vermont Freight Network Plan 2015 urged capacity improvements on Route 22A and parallel routes. But by improving the capacity of Route 22A to take on a greater number of oversized commercial trucks as they pass through Vergennes, the effect instead will be to exacerbate the city’s downtown congestion. Such an outcome would run counter to the national freight policy goal of reducing congestion and improving the efficiency of the transportation system.

Instead, truck traffic through the city continues to grow disproportionately, and future projections indicate the situation only will get worse. A cold

irony given that a second state study — the Truck Network Improvement Study conducted by VTrans — also states that large trucks should avoid congested and historic urban areas that have on-street parking and pedestrian and bicycle traffic, Mayor Benton wrote in a letter to the Board.

“The City of Vergennes is the poster child for why trucks should not be traveling in downtowns,” the mayor wrote.

The mayor’s frustration was shared by every one of the 46 people who attended the Board’s forum in Vergennes.

“Why is this taking so long?” asked a forum participant. “I like passenger rail,” which the state plans to bring to Vergennes by 2021. “But if I had to pick or choose a priority, I would choose getting a handle on the truck traffic and address that first.”

Said another Vergennes forum participant: “I would like to see a timeline from the Agency of Transportation for the state to address our concerns.”

Many in attendance pointed to Route 17 as a natural truck bypass. They said they understood designating this route would mean inconveniencing others. But they also said this alternative route is not nearly as densely populated, and would inconvenience far fewer people and businesses.

VTrans has never supported this idea. The eight-mile segment of Route 17 that lies between Route 7 and Route 22A has some narrow stretches with challenging sight distances. In short, it was not designed to safely carry heavy truck traffic.

Locals said they understand this. However, they also believe Route 22A through downtown Vergennes was not designed to safely carry heavy truck traffic.

Many believe Route 17, with a little planning and money, could be improved.

“Route 17 was redone recently, but the work was not done with truck traffic in mind,” a Vergennes forum participant said. “Why was the work done without looking to the future and how it could be upgraded for truck traffic?”

If not Route 17, then there must be another alternative. The status quo, which violates transportation best practices, should not be allowed to continue well into the future, forum participants said.

“We need help,” Mayor Benton wrote. “We need

“We need help in protecting our fragile economy and protecting the health and wellbeing of our engaged and concerned community.”

help in protecting our fragile economy and protecting the health and wellbeing of our engaged and concerned community.”

Any solution that aids Vergennes will have impacts elsewhere. The mayor, as well as other city officials and local residents, said they understood this. They said they stand ready to seek solutions as part of a greater regional initiative that will benefit everyone involved.

“The planning commission and the entire City of Vergennes is willing to work with the Agency of Transportation and surrounding communities to develop a meaningful solution to this, our number one problem,” wrote Shannon Haggett, chair of the Vergennes Planning Commission. “But we can’t do it alone — we need help!”

≡ **Brattleboro Malfunction** ≡

In Brattleboro, Routes 5, 119 and 142 collide at the base of the downtown’s Main Street at a multi-pronged intersection known locally as “Malfunction Junction.” Complicating the local traffic pattern are the railroad tracks, which cross Route 119.

Not only do freight trains pass through the intersection during heavy traffic times, but when the Amtrak passenger train pulls into town the location of the station and its platform forces part of the train to block the street, often backing up traffic.

The intersection was recently signalized in an attempt to better traffic flow, but the signals do not take the train into account.

“This traffic configuration, when it includes tractor-trailer trucks, is extremely challenging,” a Brattleboro forum participant said.

“People get very impatient so they go through the yellow light (even when there is no room to queue outside the intersection) so it gets clustered and dangerous,” another forum participant said. “Trucks tend to back up and take up a lot of space” when there isn’t much to begin with.

While several forum participants highlighted this intersection — some said it worked better before the state signalized it — they also mentioned that the planned closing of the Hinsdale Bridge along Route 119 should help ease the crunch as it will largely remove Route 119 from the equation.

While the bridge closure, and the relocation of Route 119 over a new bridge downstream, is a project led by the New Hampshire Department of Transportation, forum participants encouraged VTrans to stay in the loop and be prepared to make whatever local changes or roadway improvements may be needed.

Brattleboro forum participants also said they could not wait for the multiyear bridge construction along Interstate 91 to be finished.

“The new bridge will change the downtown traffic pattern,” a forum participant said. “Oversized loads currently come through the downtown due to the bridge’s construction. When the new one opens, hopefully these and other trucks will (remain on) the Interstate.”

RAILSIDE ECONOMIC DEVELOPMENT

Just before the crippling 2008 economic recession took hold, the Vermont Agency of Transportation estimated that some \$58 billion worth of goods moved either by train or by truck to, from, within or through the state of Vermont.

In short, moving freight is big business, one that Vermont's railroad industry in recent years has unfortunately struggled to capitalize on.

More than 83 percent of these billions of dollars in goods moved by truck in 2007. After the recession, the picture got even worse. VTrans estimates that in 2011, the last year for which we have statistics, only 5 percent of all Vermont's inbound, outbound and intrastate freight tonnage moved by rail.

While this paints a bleak picture for the rail industry, the tiny Vermont towns of Lyndon and Barton know the other side of this economic coin.

In 2010, Vermont-based Couture Trucking, Inc. opened a rail-side transload facility in Lyndon with the goal of serving the burgeoning micro-brew industry. By 2014, the company was shipping to breweries all over the northeast and maxed out the Lyndon property after erecting 27 silos that can store 5.5 million pounds of malted barley.

Looking to expand, Couture in 2014 purchased rail-side property in Barton. Today, the Barton transload facility contains four silos that store 800,000 pounds of malted barley.

All told, the trucking company, which partners with the Washington County Railroad, employs 26 people. More than a dozen trucks use the two transload facilities to ship beer-making goods to breweries a far away as Pennsylvania, Maryland and occasionally the Carolinas.

Plans for future expansion at the 50-acre industrial park in Barton already have been drawn should the micro-brew industry continue to expand.

Couture's success in partnering with the railroad not only supports the micro-brew industry but its investment, which included an upgrade to the Barton rail bed as well as installation of all the equipment needed to load and unload train cars, also could pave the way for other rail-friendly businesses to set up shop in the new railyard.

"Once you do something like this, you have a rail siding on which you can do other things," said Dan Delabruere, VTrans' rail director.

While Barton represents a success for the local railroad industry, finding similar rail-friendly property in other parts of the state is not easy.

Although the railroad industry in Vermont is more than 150 years old, its heyday has long been surpassed. At the turn of the last century, property near the state's more than 600 miles of track was plentiful. Today, land is often developed without possible rail use in mind. Even in places where land is available, the industry's impacts — which at minimum include noise and associated truck traffic — are not always welcome.

≡ Resistance ≡

A prime example of this resistance is playing out in the Town of Shelburne where Vermont Rail Systems recently purchased land along the track that was zoned industrial. This past summer the railroad, which decided against first seeking local permission, began constructing a new facility designed to handle the storage and trucking of road salt.

The development, which is located directly on the LaPlatte River within Shelburne Village, instantly sparked backlash and spawned lawsuits.

Even though the town has made it clear that it is not a willing host, the railroad, with few if any other options, is moving forward with the project, gambling that federal law, which preempts the railroad industry from much of the local permit process, will trump the community's dissent.

Similar resistance to a rail project is also taking place in Middlebury where the state wants to spend an estimated \$40 million to build a train tunnel under the heart of downtown, in part, so that it can lower the tracks to allow trains carrying taller, so-called "modified double stack" cars to pass through town.

Currently, the clearance beneath the community's historic bridges — which the tunnel would replace — are not sufficient to allow either these taller freight trains or some designs of passenger rail cars to pass. A higher clearance is now standard out west where historic infrastructure such as the Middlebury bridges do not cause such impediments.

“Identifying developable property around rail is critical ... Everyone needs to work together to raise awareness with communities so that they understand this critical need.”

The ability to haul taller train cars is important to the rail industry because it creates an economy of scale where it can move more goods and people on fewer cars, which saves money. Some shippers, if they cannot use these taller cars, will bypass these rail lines altogether.

The tunnel project also would make it safer — the tracks in this area now suffer from poor drainage and related icing in the winter — for the state to restore passenger service between Burlington and Rutland, with ongoing service to New York City.

In Middlebury, however, this wish to modernize and increase the train clearance from about 17.5 feet to 21 feet has run up against local resistance, including threats of lawsuits, which have at best delayed the project and at worst could derail it altogether.

Also hanging in the balance is the state's timetable to expand passenger-rail service from Rutland to Burlington because Amtrak's Ethan Allen Express train needs to pass through Middlebury.

VTrans hopes to begin the new service, which includes stops in both Middlebury and Vergennes, as early as 2020. But until the Middlebury bridge vs. tunnel issue is resolved, expanding passenger rail along the state's western corridor likely will be placed on hold.

Middlebury residents and business owners don't necessarily object to the taller train cars running through town — although some do question the need — but they are afraid that the 360-foot tunnel's construction, which is expected to span three years,

will cause pollution and disrupt downtown traffic patterns.

Local merchants who have just weathered one of the worst economic recessions in generations believe such a lengthy disruption, which would include a complete street closure for an estimated 10 weeks, could kill their businesses.

Simply building new bridges, which would maintain the historically low train clearance, would be less disruptive and still allow Amtrak to use the tracks, tunnel critics believe.

“The project's complexity, duration and, in turn, enormous cost are driven by the presumed need to increase the vertical clearance of the two bridges,” wrote a Middlebury resident in a letter to the Board. “Our research, however, reveals that... there is no plausible, practical reason for increasing the clearance.”

As a result, many in town favor simple bridge replacement, which would cost less. This solution, however, would maintain the lower train clearance and, according to railroad advocates, cost the railroad money in the long run because the line would not be able to accommodate taller train cars.

≡ Property Identification ≡

Recognizing that the kind of adversarial relationship playing itself out in both Middlebury and Shelburne is neither healthy nor ideal, the Transportation Board asked forum participants for their thoughts regarding railside economics and how the state and its railroads can best work with local communities to help foster ways in which the industry cannot only thrive, but do so in a way that host communities can support.

No one at the forums raised either the Middlebury tunnel or the Shelburne salt trucking facility along the LaPlatte River. Other, more general subjects, were broached.

“Identifying developable property around rail is critical,” said a Burlington forum participant. “Everyone needs to work together to raise awareness with communities so that they understand this critical need.”

Burlington forum participants commented extensively about how transporting freight by rail

instead of truck consumes far less energy, with some estimating up to five times less energy, coupled with the additional benefits of spewing fewer pollutants and not congesting our roads.

“If we are going to be ready for the future in a way that uses less energy, this (developing rail-side trans-load facilities) needs to be done,” a Burlington participant said.

“This is going to be our future,” said another Burlington participant. “I hope we will be ready for it.”

To be ready, forum participants said the state needs to attract rail-friendly industry to locate in Vermont, as well as find ways to incentivize both track-side land owners and their surrounding community to be willing to accept rail and the impacts with which it is associated.

≡ Financial Incentives ≡

To do this, forum participants suggested that the Legislature develop some kind of financial incentive that would help motivate landowners and their host community to support rail-side development.

“Money is a good motivator,” a Rutland forum participant said. “That is what it will take to incentivize some land owners and neighbors.”

Said another Rutland participant: “Offer a tax break on real estate for people who own land near the tracks. Sort of like Current Use for railroads.”

Participants at other forums agreed.

“We are going to need tax incentives to reestablish the rail spurs that were torn up over the years,” a Burlington participant said. “The railroad does not want to do it, and the shipper does not want to do it. We need to incentivize this kind of development or the rail industry is going to go away.”

The Vermont Rail Action Network, a Vermont-based nonprofit, is working to identify land around the state suitable for rail. One property it has zeroed in on is the GlobalFoundries property in Essex Junction.

Essex Junction officials attended the Board’s Burlington forum and said the community has already rezoned the property to allow a railyard. But they don’t expect that to occur unless something else is done to sweeten the pot.

“GlobalFoundries needs an incentive,” an Essex

Junction official said. “It won’t do it on its own. But if they had interest and (financial) partners, I’m sure they would listen.”

Forum participants applauded Vermont Rail Action Network for its work to identify rail-friendly property. But some questioned why the state has not taken a more active role.

“The state is being somewhat complacent in letting a nonprofit do this,” a White River Junction participant said. “The state should be active and identify all the properties that are suitable.”

The state also should take an active role in developing educational information that demonstrates the potential financial positives of rail-side development, forum participants said.

A good place to start, forum participants said, would be for the state to publish just how damaging trucks are to the local road network, calculate how much taxpayers spend to repair this damage, and show what could be saved by removing some of these trucks from our roads and moving more freight by rail.

“Are the trucks paying their fair share?” a St. Albans participant asked. “Everybody howls about the amount we spend on rail. But everybody forgets about what we pay to subsidize trucks.”

Money and education, however, will not be enough to spawn additional rail-side economic development, forum participants said. Proper long-term planning and better communication from the railroads also are key components.

≡ Better Communication ≡

Railroads, which are famously secretive, need to be both open and upfront about their needs as well as their plans, forum participants said. They need to approach communities that have potential land well in advance of trying to develop so that once they start construction the host town accepts them rather than fights them, participants said.

Railroads need “to communicate with local communities to strategize and work through things,” a Rutland forum participant said. “The key is good information and communication,” added a Newport participant: “Talk to one another and involve the community way ahead of time.”

These conversations should be very specific and take place well before the railroad wants to break ground, forum participants said.

“If someone is going to develop a railroad siding there needs to be a dialogue with the local community about the impacts — the amount of trucks, the noise, and how trucks create wear and tear on the roads,” a White River Junction participant said. “We are in this together, and the railroad has to approach it as if we are in it together.”

Said a Vergennes participant: “Are the rail companies talking to the local planning commissions? That would be a good conversation for them to have... They could ID possible (rail siding) locations well ahead of time and work with the commissions to zone them appropriately.”

If the railroads want to be successful and work constructively with communities, they will need to compromise, forum participants said. Railroads could help themselves tremendously by avoiding two types of property: waterfront and anything close to a village’s core.

“Be careful not to site the sidings directly in a downtown as it creates truck impacts,” said a White River forum participant.

“Try to keep the lake clear of such development,” said a St. Albans participant. “All it will take is one oil spill to set our environmental cleanup efforts back decades.”

Towns can aid these discussions, forum participants said, by taking it upon themselves to identify the proper places within their borders that are suitable for rail-side development and zone them appropriately.

“Towns need to identify these parcels in their town plan,” a Rutland participant said. “This way you don’t end up with something along a road that cannot handle the truck traffic because truck traffic and rail development go hand in hand. They have to be looked at together.”

≡ **Competition Issues** ≡

While battles between communities and railroads can stifle rai-side economic development, so can a lack of cooperation between competing railroad companies.

RSD Warehouse Services, Inc. is located just west of White River Junction along the New England Central rail line and is accessed by a spur well removed from the community’s downtown. The company, which has been in business for years, believes its ideal location — one that does not clog downtown streets with truck traffic — is being short changed because the Washington County Railroad and the New England Central Railroad will not cooperate with each other and allow trains that use the WACR to switch tracks in White River Junction to access its facility.

“We don’t know why they won’t share business,” a company official said. “But we have lost potential clients due to the fact we are on the wrong rail line and we cannot service them.”

An example of lost business, company officials said, is that during the early part of the century the company used to receive pulp from the Midwest and Canada that used to be transported along the New England Central line. But when the state refurbished the WACR, which was once abandoned, the product changed routes.

When this happened, even though RSD is located just a couple of miles off the WACR, its pulp business was relocated to a rail yard along Nutt Lane in downtown White River Junction. This was done because the two railroad companies either could not or would not work out a way the trains delivering the pulp could switch lines, RSD officials said.

“We would like to know what the conflict is and what the reasons are, and can they be solved, because we are missing business opportunities because of it,” a company official said.

RSD’s facility is located on 25 acres and has room for expansion, company officials said. And unlike the railyard in downtown White River Junction which requires that large, noisy trucks use crowded village streets, RSD’s warehouse is located in a sparsely-settled area with easy truck access to both Interstate 89 and Interstate 91.

RAILROAD SAFETY

In the decade between 2004 and 2013, Vermont experienced 33 accidents at rail crossings along public highways. Ten of these accidents involved passenger trains, while 23 involved freight trains. Two people died as a result of these mishaps, while 13 others were injured.

Recent history is even gloomier. In the 12 months prior to the Board holding its first rail forum in mid-October of 2016, seven accidents involving trains were recorded resulting in five deaths.

Despite this unusually high recent accident rate, train travel is generally considered safe.

According to Vermont's most recent rail plan, published in 2015, freight trains are less likely to be involved in accidents than trucks when distance is calculated on a per ton-mile of freight hauled. The report also said that it is much safer to be a passenger on a train than a motorist on a highway.

Still, train travel has risks. As the state's rail plan appropriately points out, if left unabated these risks will increase as the state works to expand passenger and freight traffic.

To combat risk, the Vermont Agency of Transportation in the past year took over the outreach mission of Operation Lifesaver, a grade-crossing safety program once operated by a nonprofit that recently closed its doors. To run the program, the Agency employs someone who dedicates half his time to the program. The other half involves duties related to Amtrak.

VTrans also inspects every one of the state's nearly 400 public railroad crossings on an annual basis, and prioritizes how they should be maintained and improved.

To date, only about 58 percent of Vermont's highway crossings have train-activated warning devices. The remainder are equipped only with signs or crossbucks.

Given that VTrans hopes to soon establish passenger service between Burlington and Rutland, the Agency has prioritized this rail corridor for improvement and plans to establish lights at every one of its crossings before the new service begins in either 2020 or 2021.

According to the Department of Public Safety, Vermont's railroad companies also have recently stepped up their efforts regarding public safety.

In the past, it was rare for railroads, which operate with a significant level of federal preemption, to inform state officials of what was running along its track. But over the past decade, both communication and local involvement have improved.

Railroads now regularly report to Vermont Emergency Management what is being shipped through the state so that they can inform local first responders should that be necessary.

Due to proprietary concerns, this information is not publicly available. But Vermont Public Safety officials, using an information portal run by the Federal Department of Homeland Security, now have secure access to a data base of what each freight train is carrying.

Vermont Rail Systems also works regularly with the state hazmat team and supplies it fire-resistant foam that can be used during a derailment, as well as works to train local firefighters in the dangers and nuances of responding to a train crash.

"The railroad has come a long way," said VTrans Secretary Joe Flynn, who until recently was Vermont's deputy commissioner of the Public Safety Department. "It has good people in these important safety roles."

The Vermont Legislature in 2016 also took measures to improve rail safety.

Until this past summer, fines for trespassing along railroad tracks in Vermont carried just a \$25 fine and could only be issued by the railroad police, officers who were employed directly by the railroad.

Believing that rail safety could be improved if state and municipal police forces were empowered with jurisdiction over the tracks, the Legislature in 2016 changed the law and increased the fine. Now

“If you have a well-designed trail by the tracks that gives people safe access to this land it can increase safety. But the railroad does not want to talk to us... Its attitude is anytime you have people near the rail it is a hazard.”

any state or local police officer can issue a trespassing ticket, which carries a \$200 fine.

The state also is working with local police departments to stress the importance of rail safety, and is encouraging the public to report trespassing to the local authorities whenever they see it.

≡ Trespassing Fines ≡

The new law, however, received mixed reviews from those who attended the Board's forums.

While some applauded the new enforcement tool, others said the railroad tracks in some cases supply the only way for pedestrians and bicyclists to reach certain destinations within a reasonable amount of time.

Given that the railroad is usually unwilling to grant communities either permission to create new public crossings or to construct multi-use paths within the railroad right-of-way, some forum participants said the new trespassing law does nothing more than provide the railroad with a way to punish locals, who are often of modest or low economic means, when they use what to them is nothing more than an historic and convenient transportation corridor.

“Two hundred dollars is a lot of money to some people,” said a Rutland forum participant. “The ramifications to someone of a lower income is more severe than someone who lives a comfortable lifestyle, and it is likely that the person walking along the track is going to be one with fewer means. We all understand the need for safety, but I don't think fining people is necessarily the right way to keeping people off the tracks.”

Said a White River Junction participant: “the state should encourage the review and development of pedestrian crossings to ensure safety rather than slapping fines on people. That would be more friendly as well as more effective.”

In Brattleboro, forum participants said the railroad tracks separate the heart of downtown from the riverfront, which is a community asset. But instead of working with locals to provide safe access to the river, the railroad works to keep people away.

“If you have a well-designed trail by the tracks that gives people safe access to this land it can increase safety,” a Brattleboro forum participant said. “But the railroad does not want to talk to us... Its attitude is anytime you have people near the rail it is a hazard.”

Increasing the fine amount and allowing the railroad to call the police works to encourage this non-cooperative attitude, and has the potential to make things worse, the participant said.

In Essex Junction, the village recently worked out an agreement with the New England Central Railroad that allowed the municipality to build a multi-use path within parts of the railroad right-of-way. The path helps connect the local high school with the heart of downtown.

Forum participants in Burlington cited this as an example of how railroads, if they want to be cooperative, can work with local communities to create safe bike and pedestrian travel lanes.

They then called on the state, which owns more than half the active track in Vermont, to engage Vermont Rail Systems, which leases all the state-owned track, to take similar measures in other locations.

“The State of Vermont owns the lines and leases them to the railroad,” a Burlington participant said. “The state should not let the railroad dictate how this is going to work. If Essex Junction can work with the New England Central Railroad (which is a private corporation), we should be able to work with Vermont Rail Systems.”

While people all around the state called for better communication and collaboration between the railroads and their host communities, not everyone believed that the new trespassing policy was onerous.

In Newport, participants spoke of a local railroad bridge which crosses Prouty Bay. The participant said that pedestrians often use the bridge — sometimes while pushing baby carriages — to walk into town.

Being over water, the bridge offers no escape should a train come barreling down the tracks.

“Particularly in the summer, 50 people a day walk over this railroad bridge — it’s an accident waiting to happen,” a Newport participant said.

“It’s a huge problem,” added another Newport participant. “I’d like to see some action taken to stop a tragedy before it happens.”

A St. Albans participant said a similar level of trespassing occurs there.

“People are on the tracks all the time,” the participant said. “But you never see any police officers.”

Some participants said they were unaware that either walking along the tracks or crossing them at a non-designated location was trespassing. Given that expensive fines are now involved, they encouraged the state to better educate the public.

“We have been negligent in getting the word out,” a Burlington participant said. “Public education and signs informing people that it is trespassing would be a good idea.”

The railroad in some locations has erected fences to help keep people away from the tracks. These fences, however, often fall into disrepair, forum participants said.

Fines are one way to enforce safety, but so is good fence maintenance, they said.

“Much of the railroad’s fence is in disrepair and lying on the ground,” a Brattleboro participant said. “Repair may go a long way to keep people off the tracks.”

≡ Oil & Gasoline ≡

No safety topic concerned forum participants more than proper track maintenance.

Given that train cars carrying oil, propane and other potentially flammable material regularly travel along Vermont’s tracks, forum participants stressed that regular track inspection and constant maintenance must be a matter of routine.

State and federal governments do not regularly inspect railroad tracks. Inspection as well as performing routine maintenance are done locally by the railroad companies themselves. While railroads perform these duties with a high degree of diligence, some forum participants questioned whether such a self-policing system was wise.

“It would be good to have outside inspection of

“We need transparency in the decision-making process of what is running along our rails... We have a right to know what is running on our tracks.”

the track,” said a White River Junction participant. “Someone who would have the authority to levy fines if they found an unsafe track condition.”

Proper maintenance was one concern. Knowledge or, to be precise, the lack of public knowledge about what the railroads are hauling was another.

Participants at several forums expressed contempt for a public system that keeps from them knowledge of when flammable cargo like oil and propane is moving past their homes.

“We need transparency in the decision-making process of what is running along our rails,” a Vergennes forum participant said. “We have a right to know what is running on our tracks.”

A St. Albans participant said the vast majority of railroad oil cars that he sees appear to be old and rusty. Modern cars are likely safer, and he would like to see more of them used.

“Can the state impose any regulation that new tankers be used?” the participant asked. “Right now they use a lot of old ones.”

The Charlotte Selectboard, in a letter emailed to the Board, questioned whether the state was doing enough to financially protect Vermonters should a significant railroad accident occur.

The state leases some 300 miles of track to Vermont Rail Systems. These leases require the company only to carry \$1 million in liability insurance per occurrence. While the railroad carries significantly more insurance than that, the selectboard worries the coverage still is not enough should there be a significant loss of life or large spill.

“The most recent Amtrak derailment in Philadelphia in May, 2015 resulted in damage-and-loss payments of over \$265 million,” the selectboard wrote. “Adequate insurance coverage should be required for all operators. Additionally, protections should be put in place should the operator elect to declare bankruptcy, leaving Vermont taxpayers and/or property owners to cover the damages.”

While fuel oil does move along Vermont's rail lines, Bakken crude oil currently does not. Bakken crude is the highly flammable oil that in 2013 was being transported through Lac-Magantic, Quebec when a train derailed, causing a massive explosion that killed at least 42 people and destroyed half the downtown.

Several forum participants encouraged the state to do all it could to prevent Bakken crude oil from ever being transported through Vermont, especially on our publicly-owned rail lines.

"I would like to know that they will not be allowed to have Bakken oil on our tracks," said a Vergennes forum participant.

While Bakken crude oil is not presently transported through Vermont, a Rutland forum participant speculated that may change once the Genesee & Wyoming Railroad completes its anticipated takeover of the Providence & Worcester Railroad.

The participant worried that the merger, which was expected to be complete by the end of 2016, could open up the New England Central line that runs through the heart of Vermont to new freight traffic that is potentially more dangerous than what it carries now.

"Real nasty stuff that is not now coming through Vermont is going to start coming," the Rutland participant said. "We are going to have hazardous

materials soon going through our towns at high speed."

While no one at this time knows for sure what this railroad merger will mean for Vermont, forum participants encouraged the state to remain vigilant and to take as many safety measures as it can to best protect its citizens.

A White River Junction participant encouraged the railroads to begin using more technology to aid human track inspectors.

"Use robotics to inspect the tracks before every train comes through," the participant said.

Also in White River, people asked for the railroad crossing at Nutt Lane to be improved.

In Rutland, people asked for roadway crossings in West Rutland — where there is a series of four highway crossings within close proximity — to be gated, while in Newport people asked the state to develop a system-wide, track-inspection protocol following significant rain storms.

And in Vergennes, people asked the state to install more than just lights at all the crossings along the Western Corridor before the new Amtrak passenger service begins.

"Sometimes when the sun is just right, it's hard to see lights," a Vergennes participant said. "Cross gates would be better."

CONCLUSION

The Transportation Board thanks all who participated in making this report possible, including the many employees of VTrans and Amtrak who provided background information, Vermont’s regional planning commissions who co-hosted various public forums, the community groups who helped spread the word about the forums and, of course, the more than 270 Vermonters who participated by either attending a forum or providing the Board with written comments or phone calls.

The Board’s public-forum process is not meant to provide VTrans and the Legislature with a “scientific” cross-section of opinions. Participation is both self-selected and 100 percent voluntary. We nonetheless consider the information gathered to be a valuable resource to policy makers.

The people who participated in the Board’s process represented a significant cross section of the Vermont population. Most, if not all, were neither activists nor professionals that typically lobby state and local officials for needed changes to the transportation sector, so their views represent an extremely important perspective.

In the world of transportation, there are perhaps no more passionate advocates than those who champion rail. So it was with no surprise that this year’s forums drew record crowds.

These sessions, which covered just six basic subjects, lasted nearly two hours in many locations. In some instances, the sessions could have gone on longer had the Board not concluded discussion regarding some topics in order to move the program along. As a result, the evenings did not appear to run longer than most people were prepared to stay.

At the forums, people often spoke passionately when expressing their support as well as concerns. But no two forums were the same. Although participants addressed every subject in all locations, the number-one issue of interest varied depending on the location.

In Burlington, the subject that drew the longest discussion was passenger rail. In Rutland, the most discussed issue was rail-side economic development. In Vergennes, the galvanizing subject was downtown truck traffic. And in White River Junction, the issue

that drew the most attention was living with railroads as neighbors.

Discussions in Brattleboro, Newport and St. Albans focused evenly on all subject matters with no clear emphasis on one over another.

This regional diversity shows the wisdom of holding numerous forums spread over various geographic locations. While the Board annually finds great value in spanning the state so that it can look for trends that transcend specific regions, there is just as much importance in understanding specific, local concerns.

While these unique concerns were many, they all appeared to have a singular, common trait: fear that the health of Vermont’s railroads has been in decline for too long, and a want for the state to do everything it can to reverse this trend.

In short, those who participated in the Board’s program — even when they were expressing concern — presented their opinions in a way that asked for help because they believe that healthy and well-run railroads can improve Vermont’s quality of life and advance its prosperity.

On an economic front, Vermonters believe healthy railroads can spawn new business opportunities and create jobs.

When it comes to public health, Vermonters yearn for a robust rail system that can reduce truck traffic and improve the tranquility of their historic downtowns.

In terms of saving energy, Vermonters understand that moving people and goods via rail burns far less fuel than covering the same distance using cars and trucks.

As a means of transportation, Vermonters know that passenger and commuter rail provide an option

that allows them to live a car-free, or at least a far less car-dependent, lifestyle.

To help protect the environment, Vermonters appreciate that greater than 45 percent of Vermont's green-house gas production comes from the transportation sector and that a healthy increase in rail use can help reduce these damaging emissions.

While support for the railroad ran strong at every one of the Board's seven forums, that support was not without criticism.

Trains and railyards can be, and often are, noisy and messy. Given that Congress more than a century ago bestowed upon the rail industry federally protected preemptions from most local law, railroads are often secretive and, at times, appear unwilling to work with local communities to help curb the very issues that they create.

This perception of an uncooperative attitude does not endear the railroad to its hosts, erodes public trust and support, and works against a healthy future. It would behoove the railroads greatly to more often come out from behind their protective veil and work to forge stronger relationships with their local communities.

This may mean that at times the railroad would have to alter its plans or, where it can be done safely, provide greater public access to or across its right-of-way. But in return, the railroads may be surprised how these acts of goodwill come back to aid them in ways that can help their business.

As a White River Junction forum participant so aptly put it: "the local communities can make life for the railroad more difficult. So if the railroads are going to thrive like they can, they should have a more open mind into what the possibilities are."

This is where VTrans and the Legislature could also play a greater role.

The state owns more than half the active track in Vermont and leases it to Vermont Rail System. While VTrans often works with the railroad to make track and other capital improvements to its infrastructure, the Agency does not get involved in the day-to-day involvement of operating the railroad.

While such a relationship is proper, many forum participants called for the state, as the railroad's landlord, to use whatever leverage it has — which is often financial — to work to help foster greater community cooperation from its tenant.

In a lot of ways, this sentiment is indicative of the wishes of many Vermonters. The comments the Board received at these public hearings highly encouraged VTrans, as well as the General Assembly, to do everything it can to find ways to improve rail service — in all capacities — all around the state.

Doing this, they said, would not only help foster strong economic conditions, but also bolster the quality of life for future generations.

