## Historic Trusses of Vermont Summer 2017



Casey Holleran, Cole LaFleche, Marie Mueller, Kati Sethares

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#### Introduction

As per the 1998 Historic Bridge Agreement, a Historic Metal Truss Bridge Preservation Plan was developed by the Federal Highway Administration and several Vermont state agencies to protect the many historic trusses located around the state. The 118 trusses were assessed in 1997 by Lichtenstein Consulting Engineers on behalf of the State of Vermont, and their recommendations on which trusses to preserve were used to develop the 1998 Preservation Plan. While Lichtenstein Consulting Engineers and the State of Vermont began these projects with the mindset that every truss in the study was historic and worthy of preservation, the trusses were not always in a condition to be preserved, and some had to be recommended to be documented and destroyed. The preservation options included preserving the trusses for limited or full highway use and preserving the trusses in place or in an alternative location for an adaptive use.

Due to the length of time that has passed since the agreement was made, many of the trusses are in a different condition from when they were first assessed and can no longer be used the way it was recommended by the Lichtenstein Consulting Engineers and the State of Vermont. This report serves to discuss the updated condition of each of the trusses, and updated condition reports on any trusses that are no longer in highway use, and therefore are not consistently inspected by the state. These trusses mainly include those that were rehabilitated for an adaptive use, were abandoned in place, and those that were removed and remain in storage.

### I. Rehabilitated for Adaptive Use

#### Arlington No. 22

#### July 2017

Arlington No. 22 is a 58 foot Warren Pony truss built in 1918 over the Batten Kill River. The bridge was originally called Baker Bridge, and is located on the Fishing Access Road. This truss is considered historically significant due to its location, which serves as a good example of early highway development in the state of Vermont. The construction of the bottom chord is also unique, as the center section is made up of four angles arranged in an 'H' shape, not a singular angle. The bridge was rehabilitated for pedestrian use only in 2001, as a bike path connecting Vermont Route 7a to Tory Lane. The project was done by Renaud Bros. and was part of a statewide rehabilitation project.

The bridge is currently still in good condition. There is moss growing on several places on the top chord, but it does not seem to have done any damage. There is also some rust on the guardrail, but no scaling is occurring. The wood deck and girders are also in good shape. There is some moss growing on the girders and cross beams, but overall the whole bridge is in very good shape. The path has not been maintained recently, and some tall grass and bushes can be seen on the path in the first picture. The top chord length is 43.5 feet, the height is 7.5 feet, and the width is 21 feet.



Truss with dimensions



Looking Northwest



Upstream side, looking West



Looking Northwest from underneath



Downstream side, looking north



Downstream truss and guardrail, looking east

# BRIDGE NO. 22

WARREN PONY TRUSS 1918

RESTORED 2001 VERMONT HISTORIC BRIDGE PROGRAM

STATE OF VERMONT DEPARTMENT OF CORRECTIONS AGENCY OF NATURAL RESOURCES AGENCY OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

DAVID CRAWFORD SCHOOL OF ENGINEERING DEPARTMENT OF CIVIL ENGINEERING NORWICH UNIVERSITY ERIN KING, CLASS OF 1999 JASON P. MAHONEY, CLASS OF 1999

RENAUD BROTHERS, INC., CONTRACTOR

Information plaque on the bridge

#### **Bristol No. 20**

Bristol No. 20 is a Warren pony truss built in 1898 on TH-27 (Harvey Road) over the Little Notch Brook. Replaced in 2002, the truss currently serves as a snowmobile and pedestrian footbridge on a VAST trail in Forestdale. The truss is 45 feet long, 5.5 feet tall, and 12 feet wide. The Forestdale location is an old town highway on which VAST placed their bridge directly on top of the town highway bridge. As of the summer of 2017, the town is planning to replace the bridge and reopen the road to vehicular traffic, meaning the VAST truss bridge must be removed. VAST is currently working on a new location for the truss.

The trusses are in good condition, with some rust and moss growing on them but no holes or section loss. This truss is one of only two Warren pony trusses in the state built before 1900, and therefore is historically significant. The Warren pony truss was one of the most common metal truss configurations in Vermont, especially during the 1927 flood reconstruction, and this truss is an only slightly altered example. Several characteristics of this bridge are not typical for the later flood reconstruction trusses, including the lightweight truss members, narrow width, and wooden deck. All these features are typical of a truss built around 1900.



Truss with Dimensions



Looking North



Bent guard rail



Warped section over gusset plate



Looking Southwest



Looking East



Looking Southeast



Looking North



Wooden deck of old road bridge



Looking East



Looking Southwest



Looking West

#### July 2017

#### Hardwick No. 27

Hardwick No. 27 is a 54.5 foot long steel Warren pony truss bridge with roadway width of 12 feet 10 inches and height of 6 feet. Originally built at another nearby site in 1915, this truss was moved to its current location in 1981. This truss carries Town Highway 41 across the Lamoille River. There are no known historical sites which exist in the immediate vicinity of the bridge. The structure is historically significant because it represents a typical truss bridge from the early 20<sup>th</sup> Century, when Pratt and Warren trusses and riveted construction were gaining popularity.

Hardwick No. 27 is in good condition. Most of the members and joints have some degree of rust. There are a few spots of member deformation, deterioration, and section loss. The bottom chord has heavy rusting and areas of section loss. The top chord also has heavy rusting and pitting losses. The wooden reinforcements and decking are overall in good shape.



Truss with dimensions



Looking Southeast



Looking South; note the new wood plank reinforcements and decking



Looking Southeast



Looking East; note the rusting of the top chord



Joint deterioration



Joint deformation

#### July 2017

#### **Highgate Falls**

Highgate Falls is a lenticular through and pony truss built in 1887, closed to all traffic in 1976, and rehabilitated in 2000 for pedestrian use. It crosses the Missisquoi River over the Highgate hydroelectric dam. The truss is a two span truss, with the approach span being a 69 foot pony truss and the main span a 214.5 foot through truss. Overall, the truss is in good condition. Rust is forming on several members, but no scaling or section loss has occurred.

The Highgate Falls truss was listed on the National Register of Historic Places in 1974, and is considered one of the most important examples of lenticular truss design in the country. It is considered significant because of the use of wrought iron construction materials, unique two-span pony and through truss design, and lenticular shape. The lenticular shape, though economical, was found to have inadequate stiffness, and therefore use of the shape was very limited. In addition, the shape was patented by Douglas and Jarvis of the Berlin Iron Bridge Company, who designed the Highgate Falls truss. The shape represents the large amount experimentation done in metal truss design in the late 1800's, and shows how they were not always successful.



Truss with dimensions



Looking north east; both spans



Looking east from approach span



Looking west from the main span



Plaque on the west approach



Plaque on the east approach

#### July 2017

#### Hinesburg No. 30

Hinesburg No. 30 is a Warren Pony truss built in 1925 crossing Lewis Creek on Turkey Lane. The bridge was dismantled and replaced in 1996, and the Town of Hinesburg stored and preserved the truss for an alternate use. In 1998, the truss was repurposed as part of a pedestrian footbridge on Mechanicsville Road over the Patrick Brook. The pedestrian bridge has a length of 43 feet, a height of 5 feet, 3 inches, and a width of 12 feet.

This bridge is considered historically significant due to its typical design and construction, as Warren trusses and rivet construction were the most popular at the time. This bridge, due to its location on a lightly traveled road, was constructed lighter than many of its counterparts, which makes it similar to trusses built closer to 1900, not 1925 when it was actually constructed. Overall, the truss is in good condition, with only some rust and scaling around the gusset plates. A paint job may be necessary in the near future. The wood deck, new when the bridge was rehabilitated, is in good condition as well.



Truss with Dimensions



Looking North



Information plaque on the bridge

#### Huntington No. 11

#### August 2017

Huntington No. 11 is a Warren curved-chord pony truss that carried Bridges Road (TH-3) over the Huntington River. Built in 1922, the truss is 117 feet long and 12 feet tall. The bridge was replaced with a prefabricated pony truss in 2000, and rehabilitated for pedestrian use only in Wallingford in 2001. The pedestrian path is 7 feet wide, and a new wood deck was constructed for the bridge. The truss is currently in good condition, with no rusting through the new paint coat and only a few areas where the paint is beginning to peel.

This truss was constructed by the Eugene A. Simpson Company of Boston, and is the only known bridge in the state to be built by their company. It is the earliest surviving example of a curved chord Warren pony truss in the state, and one of seven built between 1900 and 1927. The truss is of typical design and construction for the early 1900's, and has only been slightly modified. Four of the built-up diagonals on each truss were replaced with rolled I-sections to increase the load carrying capacity of the truss.



Truss with Dimensions



Looking East



Looking West



Looking West



Looking East



Looking Southwest

Back to TOC

#### Jamaica No. 39

#### August 2017

Jamaica No. 39 is a Warren pony truss built in 1921 on TH-62 (Mill Brook Road) over the Mill Brook. It was replaced by a culvert, however the road is no longer used as a through road and no traffic goes over the culvert. This truss is unique in that it is rectangular in design, not trapezoidal. There are also two pipes running horizontally in each truss about three-quarters of the way up the truss, which either were used to carry amenities across the truss in its original location, or are decorative. Aside from the rectangular frame, the trusses are typical in design to those built in the early twentieth century. The Warren pony truss was the most popular design during flood reconstruction, and this bridge is an early version of the economical design used from 1928 to 1930.

The truss was given to the Crystal Lake Falls Historical Association in 1997, and has been rehabilitated for pedestrian use on their Brick Kingdom Path in Barton. The truss is 37 feet long, 11 feet wide, and 6.5 feet tall. The truss is in good condition, with a new wood deck. Several members have peeling paint, mild rust, and moss, but the structural condition is good and the truss is currently in no need of rehabilitation. It is one of two trusses on the Brick Kingdom Path, with the other being former Middletown Springs No. 21.



Truss with Dimensions



Upstream truss; note the two pipes across the top



Looking Southwest



Looking south; note the rectangular truss shape



Typical mild rust at gusset plates



Looking Southeast

#### Middletown Springs No. 21

#### August 2017

Middletown Springs No. 21 is a steel Warren pony truss built in 1906. Its original location was on TH-15 (Orchard Road) over the Poultney River in Middletown Springs. This bridge has four panels amassing a total of length of 50 feet, and is 6.5 feet tall. Replaced in 1995, the truss has been rehabilitated in Barton as part of the Brick Kingdom Path, owned by the Crystal Lake Falls Historical Association. It is one of two trusses on the path, with the other being former Jamaica No. 39. The width of the new walking path is 11.5 feet.

The truss is currently in good condition. There is some rust at the connections and around the gusset plates, and moss is growing on several members. There do not seem to be any structural issues at this time, and the wood deck is also in good condition. This bridge is considered historical, as it is typical in engineering practice and design for the early 20<sup>th</sup> century. After 1900, most truss designs used larger members to accommodate for the increase in motor vehicle usage, but this is one of the last examples of a truss built with lighter members and not designed for heavy vehicles.



Truss with Dimensions



Looking South



Looking Southwest


Looking north; note some light rust on the guardrail and moss on the diagonal



### July 2017

#### Milton No. 18

Milton No. 18 is a two-span Pennsylvania through truss built in 1902 by the American Bridge Company. The small Pratt pony truss (and third span) connecting the two through trusses was added during rehabilitation, in order to make the bridge long enough to cross the Missisquoi in that location. Each of the spans is 162 feet long and 13 feet wide. The bridge was dismantled in 2003, and rehabilitated as part of the Swanton Bike Path in 2010. The truss is currently in good shape, with only small amounts of rust in localized areas. It is being put to good use on the bike path and is currently in no need of repairs.

This bridge is considered historically significant because it is one of the few surviving Pennsylvania through trusses in Vermont. Pennsylvania trusses are typically used for longer spans due to their subverticals, which allow the use of intermediate floor beams between the main verticals. This means fewer longer and fewer steel panels are necessary, which decreases the cost to fabricate the truss. The American Bridge Company and United Construction Company, the contractor for Milton No. 18, worked together and were major supplies of steel and bridge construction for Vermont in the early 1900's. This bridge is a prime example of the work they did together before the reorganization of the American Bridge Company in 1914.



Truss with dimensions



Looking Southeast at truss and bike path sign



Looking East



Looking Southeast from the first span



Looking East at the Pratt pony truss



Panel between the two trusses



Looking Northwest

### Northfield No. 84

#### August 2017

Northfield No. 84 is a Parker bowstring truss on Vine Street over the New England Central Railway. Built in 1870, the truss was originally used as a railroad bridge before being moved to its current location. The truss was replaced in 1989, and rehabilitated next to its original location as a pedestrian bridge. The bridge is 102 feet long and 6 feet wide. The bridge is currently in good condition. The paint is peeling, especially on the top chord, and there is heavy pack rust in the splice plates along the bottom chords. Some minor rust is present on the top chord, diagonals, and verticals. The sway bars are heavily rusted and have up to 30 percent section loss, and several bolts have shear off along the bottom chord and must be replaced. A minor rehabilitation project soon would benefit this truss, but overall it remains in good condition.

As one of the 50 oldest metal truss bridges in the country, the Vine Street truss is of the highest preservation priority. It is one of two cast and wrought iron examples of a Parker truss in Vermont and was built by the National Bridge and Iron Works of Boston, which exclusively produced the patented Parker truss design. The current flooring system has been altered from the original, and some of the cast iron connectors linking verticals and suspenders with the lower chords may be replacements. In addition to individual significance, the bridge is on the boundary of the Vine Street Historic District.



Truss with Dimensions



Looking East



Some rust at top chord and diagonal connections



Looking West



Looking West



Scaling on sway bars



Peeling paint on top chord



Pack rust on splice plates on bottom chord

# August 2017

### Shoreham No. 24

Shoreham No. 24 is a Warren pony truss built in 1924 on TH-48 (East Shoreham Road) over the Lemon Fair River. The truss was replaced in 1991 with a pony truss and was relocated and rehabilitated in 2006. The truss is now carrying a pedestrian path over an unnamed stream next to the Rock of Ages Visitors Center in Barre. The truss is 54 feet long, 6 feet tall, and 12 feet wide. It is currently in good condition, with very little rust and small amounts of moss growing on the top chord and some diagonals. There are several holes forming in the wood deck, and while they are not full depth holes, the deck should still be maintained soon to avoid exponential wear occurring.

This truss is typical in engineering practice of the early 20<sup>th</sup> century. It is unique, however, in its use of light members for construction, which is more typical of trusses built around 1900, before motor vehicle loads were a major consideration. The tie-rod bottom cross-bracing and a channel rather than box section for the top chord are also not found in any other 1920's trusses.



Truss with Dimensions



Looking South



Information plaque on northern end of truss



Western Truss



Hole formation in deck



Looking North



Gusset plate connecting floor beam and bottom chord



Looking East

## Waitsfield No. 22

# July 2017

Waitsfield No. 22 is a 59 foot Warren pony truss built in 1915 on Butternut Hill Road over the Mad River. The truss is 6 feet 1 inch tall and originally provided a roadway width of 13 feet 3 inches. The bridge does not have any unusual or distinctive details, but is one of many Warren pony trusses with straight top chords in Vermont (Lichtenstein Report). The truss is a good example of the classic pony truss construction that can be seen throughout Vermont. The truss was replaced in 1999, and relocated to a pedestrian path on Clarendon Ave. in West Rutland.

The pedestrian bridge on Clarendon Ave appears to be in good condition, and has been cleaned and painted recently. Many of the rivets appear to have been replaced during the rehabilitation, but some original rivets still remain. The wood deck is new, and has limited wear. Overall, the truss is being put to good use on the walking path, and currently is in no need of maintenance or showing any serious signs of wear.



Rehabilitated Truss with Dimensions



Looking South



Looking West



Looking North on the Western side of the bridge





Looking North on the inner Western side of the bridge

### Wallingford No. 50

#### July 2017

Wallingford No. 50 is a steel warren pony truss that was built in 1929. According to the Lichtenstein Report, the truss was moved to Wallingford, Vermont in 1976 to carry TH-60 (Elm. St.) over Otter Creek. Previously, the truss was in use in Ludlow, from whom Wallingford purchase the truss for one dollar. It spanned 70' with an 11'11" clear roadway width. The bridge is historically significant as a representative example of bridges built as a result of the 1927 flood. The bridge was removed and replaced with a temporary bridge between the years 1994 and 1997.

In 2010, the bridge was replaced and rehabilitated for alternate use by the Vermont Historic Bridge Program. It is currently being used as a pedestrian foot bridge next to 163 VT-100, West Dover, VT over the North Branch of the Deerfield River in Dover Vermont. The truss height is 10'2", the deck width is 12'4", and the truss length is four 17'6" spans tallying to 70' in total length. The truss appears to be in good condition and has been cleaned and painted recently. Many of the rivets and the bottom chord gusset plates appear to have been replaced in the rehabilitation. There are spots of significant section loss that should be monitored but shouldn't pose a problem with the truss being used as a pedestrian bridge. The wood deck on the bridge is new and shows little to no sign of wear. Overall, the bridge is being put to good use on the walking path and currently has no need for maintenance.



Truss with dimensions



Looking east



Plaque with bridge information



Looking Northeast



Looking North



Looking Northeast along the southern truss



Original rivets and replacement bolts



Typical pitting on the diagonals



Flower detail on guardrail



Looking West

# Westfield No. 17

Westfield No. 17 is a 53 foot Warren pony truss that has been repurposed by VAST as a snowmobile and pedestrian bridge in Westfield. The bridge crosses Mill Brook in the North/South direction just east of VT100 behind Brookside Hardware and Lumber. The truss and overall bridge condition are good. There are some bends and twists in members, and the majority of exposed steel is slightly rusted, mossy, and in need of fresh paint. There is little to no section loss on the steel.

The bridge has a wooden deck, made from what looks like 6x6's laid East/West. There are also lanes of 2x6's laid North/South on top of the deck which look to be used for snowmobile traction. The overall deck is in good condition, with minimal wear from recreational use. The girders and abutments seem to be in good condition. There is no visible section loss in the steel girders, or any noticeable deterioration or movement of the abutments.

Originally, the bridge was built in 1910 over the Missisquoi River on Lane Road. This bridge is considered significant because it's extremely light members are like those on town highways built before the start of substantial motor vehicle usage. In addition, the bridge was partially fabricated using bolted connections, which was common if the construction crew was inexperienced in field riveting.



Looking South across Mill Brook



Looking West



Looking West



Diagonal member, slightly rusted and bent



Looking South



Looking West



Eastern truss



Looking North



Looking North



Some warping above the gusset plate; replacement bolts can be seen on top



A bent gusset plate with some moss growing



Western truss



Eastern truss

# II. Currently in Storage

### Arlington No. 25

Arlington No. 25 is a Warren pony truss built in 1927 on River Road over the Batten Kill River. Replaced in 1993 with a prefabricated pony truss, the original truss was taken to Clarendon for storage. The truss is 85 feet long and 8.5 feet tall. The trusses are currently in good condition, with the top chord and one half of each only needing minor repairs and some paint. The other half of both trusses need more work, with one member of the bottom chord completely missing. Several diagonals are also bent out of shape, most likely due to transport. Overall, the trusses can be rehabilitated and only a few members on each truss would need to be replaced.

This truss is considered historically significant for several reasons. It was left relatively unaltered prior to its removal, and is a very common truss for the time period. It differs from its post-1928 flood counterparts, however, in that it uses built-up verticals and diagonals instead of rolled I-beams, and the top and bottom chords are parallel. Its heavy members and concrete slab floor reflected the growing use of automobiles and trucks during the 1920's.



Truss with Dimensions



Looking South



Looking North



Looking East at bent bottom chord



Looking east; note missing bottom chord section and bent members



Typical rusting throughout truss



Typical rusting at gusset plate
## Berlin No. 72

#### July 2017

Berlin No. 72 is a Warren pony truss built in 1926. It was originally located on VT-12 over the Dog River, but when it was replaced in 1996 the truss was stored in Montpelier's Stump Dump for further project use. The truss is 90 feet long and 12 feet tall, and is a typical design for the engineering practices of the early 20<sup>th</sup> century. While it does predate the post-1927 flood trusses, the only differences in construction are the use of built-up verticals and diagonals instead of rolled I-beams and parallel top and bottom chords. The truss is considered historically significant due to its exemplary use of the typical engineering practices of the time and the heaviness of its members, which reflects the growing use of automobiles and trucks at the time. The straight top chord is also unique in that most flood-era bridges had a curved top chord, but this truss was both long and heavy-service, so the savings in material outweighed the increased fabrication costs.

The truss is currently in good condition to be rehabilitated and alternatively used. There is a lot of mud and algae growing on the bottom truss, and moss growing on several of the top gusset plates. There is very little section loss, and it is mainly on the gusset and tie plates. The truss has peeling paint in several places, but very little rust on the main members. Overall, the truss is in very good condition and should be saved for alternative use. It should, however, be moved from its current location if its storage is going to continue, as the location has turned into a small pond and the bottom truss is currently completely under water. Should this continue, the truss condition will decrease rapidly.



Truss with Dimensions



Looking Northwest



Looking West at bottom chord



Looking North at top chord



Looking North at bottom chord



Section loss on a tie plate



Peeling paint and holes on a gusset plate



Minor pitting on bottom chord



Looking east; bottom truss is submerged

### Burke No. 25

#### August 2017

Burke No. 25 is a Pratt pin-connected pony truss previously on TH-39 (Marshall Road) over the East Branch of the Passumpsic River. The truss was constructed in 1907 near the intersection of Routes 5 and 5A in Burke, but was moved to its final location after the 1927 flood to replace a covered bridge. The truss is currently in storage in the District 7 Stump Dump in Burke. It is 66.5 feet long and 7.5 feet tall. Before its removal, a new primary support system was installed. This truss is in satisfactory condition. The bottom chord exhibits 50 to 100 percent section loss in several areas, but everything else is only rusted with small amounts of section loss. Some areas are bent out of shape, and moss is growing on several members.

Built by the American Bridge Company, this truss is one approximately ten surviving pinconnected bridges in the entire state. While repairs and additions to the floor system have been added, the trusses themselves are basically unaltered, making this truss a high preservation priority. This bridge is a late example of the pin-connected truss, as riveted field connections were becoming more popular by 1907 due to their increased rigidity and the saved fabrication costs of specialized connections and eye bars.



Truss with Dimensions



Typical top chord and vertical latticework; 2-piece diagonal



Center diagonals and connections



Typical rust, pitting, and section loss on bottom chord



Typical section loss and rust at pin connections





Bent diagonal



Moss on the end post of the bottom truss



Bent guardrail section

## **Cavendish No. 45**

Cavendish No. 45 is a pin connected Pratt through truss that was located on Howard Hill Rd. over the Black River. Built in 1890, the truss was replaced in 2007, and the town carefully dismantled it and stored it in the town maintenance yard. The truss is 88 feet long and 12 feet tall. All members are located in the maintenance yard except the bridge plaques, which are at the town garage. The top chord diagonals are 29 feet long, the vertical members 22 feet long, and the horizontal top chord members are 16 feet long. Unlike most trusses, the diagonal members and bottom chord of this truss are made of steel rods. The truss is currently in good condition, with some rust and a few holes. Due to the lighter construction of the truss and its poor in-place condition before being removed, a resident privately paid to have two rolled I-beams installed under the bridge, as a precaution should it fail. These are being stored by the town as well, and are in good condition.

This truss is considered historically significant for several reasons, including being pin-connected. It is one of the oldest structures in the state, and has a high degree of integrity of original design. It is also rare to have a through truss only 88 feet long, as usually pony trusses are used for such distances.



Top Chords and Portal Bracing



Top Chord



Tension rods



Top chord and tension rods



Vertical members



Vertical member



Top chord



Portal Bracing



Information Plaque



Information Plaque



Bridge in place, 1984



Bridge in place with manufacturer's plaque, 1984



Bridge in place, 1984; note the added beam at the bottom of the picture

# Corinth No. 34

### August 2017

Corinth No. 34 is a Pratt pin-connected pony truss on TH-50 (Bear Notch Road) over the South Branch of the Waits River. The truss was built in 1900 and moved to Bear Notch Road in 1954. It is 54 feet long and 7 feet tall. Before removal, the truss sustained damage from a collision and two supporting I-beams were added to the structure. Replaced in 2009, the truss is currently stored at the Newbury Town Garage. It is in poor condition, with heavy rust in several locations. Some members have up to 50 percent section loss and holes have formed in several places. The failed truss would need many members replaced in order to get the truss in a working condition again.

This truss was fabricated by the Canton Bridge Company of Canton, Ohio, one of the highest producing bridge companies of the late 1800's. It is technologically and historically important as one of the few remaining pin-connected bridges in Vermont. While the truss has failed due to collision damage, it has the possibility for rehabilitation and restoration to preserve its unique historical and technological features.



Truss before replacement with dimensions



Bottom chord and typical growth at storage location



Pin connection at bottom chord and vertical



Bottom chord and end post



Pin connection between top chord and end post



Replacement connection on a diagonal; typical section loss and holes on beams below



Latticework in the verticals

# Fairfield No. 52

#### August 2017

Fairfield No. 52 is a Warren pony truss built in 1914 on Pumpkin Village Rd., formerly Potter Rd., over the Black Creek. It was moved to its final location in 1952 to replace a covered bridge. Replaced in 1999, the truss was sent to Clarendon and remains in storage there. The truss is 89 feet long and 10.5 feet high. Some girders from another project were put on top of the truss while it was in storage, so the entire truss cannot be seen currently. What can be seen looks in good condition, with high amounts of rust and moss growing on several members. A few members are twisted, but there appears to be little section loss.

This truss is considered significant as it is representative of the engineering practices of the early 1900's. The diagonals and verticals all use the same built-up members, which represents the standardization in design and construction of the time. The truss was built by the Canton Bridge Company of Ohio, which was seeking to expand the region in which they worked. The setting of the truss also made it unique, as it was located in an unspoiled rural setting, unlike many trusses of the time.



Bottom chord and diagonal



Truss lying underneath girders



Diagonals and verticals extending under the girders





Bottom chord and vegetation growing over truss

Back to TOC

# Medburyville Bridge (Old No. 57)

## July 2017

The Medburyville Bridge is a 98 foot span double-intersection Warren through truss. This bridge was built in 1896 over the Deerfield River. This structure is historically significant because of the rarity of a double intersection Warren through truss in Vermont. The truss remains in its original location, with the deck removed, and is owned by the Department of Historic Preservation. The project was completed mostly by the Vermont Construction Company.

The bridge was difficult to observe due to the removal of the deck. The floor beams show deterioration, as shown in the third picture. The top and diagonal chords seem to be in good shape. There appear to be areas of rust which could indicate corrosion. The top chord span is 65'4", the bottom chord span is 98', the height is 18'3", and the width is 14' 1 1/4" according to Lichtenstein metal truss bridge study.



Truss dimensions



Upstream side, looking Southwest



Looking North



Looking Northwest



Looking at the most Northerly abutment

#### August 2017

#### **Montpelier No. 6**

Montpelier No. 6 is a 140 foot long, 22.5 foot high Pratt through truss built in 1929 on Pioneer Street over the Winooski River. The truss was replaced in 2002, and is in storage behind Casella Waste Systems in Montpelier. It is currently in fair condition, with several members that are well preserved and several that will need to be replaced. When removed, the truss was cut in half and is currently stored that way. The bottom chord is in poor shape, with mild to heavy section loss and pitting throughout. The latticework is rusted through in several spots on both the bottom and top chords. The top chord is in better shape than the bottom, with mild rust but no scaling or heavy pitting. Overall, this truss is in good enough condition to be rehabilitated by only replacing a few members.

This bridge is typical of steel trusses built during the flood reconstruction campaign. The truss, while not in the Montpelier Historic District, was considered the gateway to the historic part of the city when in place. Many of the trusses built in the flood reconstruction campaign were made in the most efficient way possible, as hundreds of bridges had to be fabricated in a short span. The rolled sections instead of built-up members was one way of cutting costs, as well as the T-pattern top bracing and use of channels in the portal brace. This truss was built by Palmer Steel, a small company in Springfield, Massachusetts.



Portal bracing



Bottom chords; note the lattice on both sides of the chord



Bottom chords, diagonals, and verticals



Bottom and top chords; some typical rust and pitting can be seen on the middle chord





Top and bottom chords

### Morrisville No. 53

Morrisville No. 53 is a Warren pony truss built in 1900 on B Street over the Lamoille River. The truss was closed before 1997, replaced in 2006, and is currently stored at the Morristown Garage for future use. The truss is 84 feet long and 10.5 feet tall, and features plaques at either end detailing the town selectman at the time of construction and the Vermont Construction Company, the builders of the bridge. This bridge is of high historical significance in Vermont. The Vermont Construction Company was the state's only notable bridge building firm, and this bridge was built in the last year they went by that name. In addition, the truss is one of the earliest examples of a Warren pony truss in the state, but also exhibits some unique characteristics for its time, including placing the floor beams above the lower chords, a decorative traffic railing, and cast-iron end posts.

The truss is currently in okay condition, with several members and tie plates needing replacement should the bridge be repurposed. The entire truss is rusted, and the bottom chord is bent out of shape in a couple places. One of the diagonals is broken in half due to a rusted tie plate and section loss. The connections with the gusset plates on the bottom chord have more than 50 percent section loss, and there are holes in several gusset plates. Many of the rivets have been replaced with bolts, but more replacements would be necessary to rehabilitate this truss. The guard rail and end posts are all stored with the truss and in good shape, rusty but with no section loss.



Truss with Dimensions



Looking East



Looking Northwest



Bent member on bottom chord



Decorative guard rail and posts



Missing tie plate and broken diagonal



Section loss and holes in bottom chord and gusset plate



Replacement bolts and angle section on the bottom chord



Information plaque 1 and section loss at the joint


Information plaque 2 and section loss at joint



Section loss at tie plate



Missing tie plate

## Poultney No. 5

Poultney No. 5 is a Warren pony truss built in 1928 on Granville Street over the Poultney River. The truss has an 80 foot span and is 10 feet tall. Replaced in 2001, the truss has been stored in Clarendon for future project use. It is currently in poor condition, with heavy section loss on the flanges of the bottom chord and pitting throughout. There is heavy section loss at many of the connections between members and at the railing. Several members would have to be replaced in order to rehabilitate this truss, but much of the heavy section loss is limited to the connections and certain members, so a rehabilitation is feasible.

This truss is considered representative of the common period technology and truss design. There are no unusual or distinctive design or construction details. It is one of hundreds of bridges built after the 1927 flood by the American Bridge Company, and is one of fourteen post flood Warren pony trusses with straight top chords in Vermont. Several welded repairs have been made to lower portions of the bridge, which compromises the historical significance and design integrity of the truss.



Truss with Dimensions



Looking East



Looking East



Rusted and bent latticework on top chord



Bent guard rail



Typical section loss in tie plate



Typical section loss and pitting



Plaque with year built and company

## III. Abandoned

## Ludlow No. 57

Ludlow No. 57 is a steel Warren Pony truss that carried TH-324 (Mill St.) over the Black River. It is 77 feet long, 10 feet high, and has a deck width of 19 feet. It was built by the Penn Bridge Company of America in 1929 and rehabilitated in 1994 to repair several areas of the superstructure. The top chords are built up box shaped sections made from two channels with a continuous top cover plate and lattice on the underside. The vertical, diagonals, and floor beams are rolled I-beams. According to the Lichtenstein Report, this bridge is a typical truss design used during the 1927 flood reconstruction campaign. The floor system is its one unusual feature, as the deck is supported by floor beams only, no stringers, with the vertical members acting as floor beam hangers.

The bridge is currently closed to traffic due to its poor condition. The deck is currently in terrible condition, with exposed rebar on the top and bottom of half of the bridge. The top chord of the truss has significant section loss, particularly in the lattice work on the underside. The floor beams also have significant section loss, especially the ones on either end of the bridge which exhibit an average of 50 percent loss. The bottom chord has some section loss that was painted over during the 1994 rehabilitation. The vertical and diagonal members are in fair condition with some mild section loss and rust but they could be salvaged. The guard rail has many holes and cannot be salvaged. Overall, this truss is in poor condition and a rehabilitation would require complete replacement of several members.



Truss with Dimensions

## July 2017



Looking South



Guardrail



Top chord looking south



North end floor beam



Looking South



Deck from underneath



Guardrail



Exposed rebar on deck

## **Middletown Springs**

#### July 2017

Middletown Springs is a 28 foot Warren pony truss that has been abandoned on site since at least 1965, when it was listed as condemned on state aid highway maps. A bridge has most likely been at that location since before 1780, but it was not constructed as a truss bridge until a later, unknown date. It is currently in very poor condition, with the deck completely rotted away except for two beams that are ready to fall. One truss is bent at a 45-degree angle and heavily rusted, missing several members. This truss would need extensive rehabilitation in order to be used alternatively, and this site would also need work done, as the abutments are old and in need of repairs or replacement. The Town of Middletown Springs has expressed interest in rehabilitating the site for an alternative use, as there is a waterfall, Scholar Falls, just downstream and walking trails on the southern bank.



Looking Northeast



Looking East



Looking Northeast at upstream bridge seat and broken bottom chord



Looking East at upstream truss



Looking East; note the remaining deck members



Looking Northeast



Looking North from below truss



Looking North; note the twisted truss and cable from guard rail



Looking North

## July 2017

#### Moretown No. 40

Moretown No. 40 is a 72.5 foot long steel Parker pony truss with a roadway width of 16 feet and a height of 10 feet. The truss was built in 1928 by The Palmer Steel Company of Springfield Massachusetts. It carries TH-11 (Lovers Ln.) over the Mad River in Moretown, VT and connects VT Route 100B to U.S. Route 2. The truss top chord are riveted built-up box sections made of two channels with a top cover plate and latticework on the underside. According to the Liechtenstein Report, Moretown No.40 is one of four rivet-connected Parker pony trusses in the state and one of the only two built during the flood reconstruction program. This truss is included in the VT Historic Sites and Structures Survey, the official town-by-town inventory of all buildings and structures that are significant locally, statewide or nationally for their for their historic, architectural or engineering merit.

The bridge is currently closed due to its very poor substructure, superstructure, and deck condition. The truss itself however is not nearly as bad as the bridge as a whole. It is very rusty with complete loss of paint and there are some holes in the bracing, but the top chord as well as the diagonal and vertical members look good. This truss should be rehabilitated either in place or as a foot bridge.



Truss with Dimensions



Looking Northwest



Rebar sticking out where the deck has broken off



Rust, section loss, and holes at joints



Looking East



Looking Northeast

#### Wolcott No. 7

Wolcott No. 7 is a Warren pony truss on Fort Hill Road over the Wild Branch of the Lamoille River. It is currently closed to all traffic and has not been replaced. It was built in 1928 by the Palmer Steel Company and is a representative example of post flood trusses. It is 90 feet long, 22 feet wide, and 12 feet in height. Its historical significance mainly lies in how typical it is in design and construction. After the 1927 flood, which destroyed over 1,200 bridges, a large number of bridges needed to be built as quickly as possible, meaning many standardized designs and economical construction practices were used. The area in which the bridge is located was a crossroads settlement that has since been bypassed by VT-15, and there are many recognized historic buildings in the area as well.

The trusses are currently in average condition. The top chord, diagonals, and verticals are all in good shape, with only minor rusting and some dents from traffic incidents. The deck is in poor condition, with heavy spalling occurring on the edges and exposing a significant portion of the rebar. There are several cracks on the underside with efflorescence and active leakage. The bottom chord is also in poor condition, with high amounts of section loss, and rust scaling. The bottom chord has about 50 percent section loss, while many of the tie and gusset plates have 75 to 100 percent section loss. The floor beams also have heavy section loss on the top and bottom flanges, and several holes have formed. The northern abutment has severely deteriorated on the western side. Overall, the trusses are in good condition, but the bottom chord, stringers, and floor beams would need replacement should this truss be rehabilitated for an alternative use.



Truss with Dimensions



# Looking Northwest



Looking North



Plaque at Northern end of bridge



Plaque at Southern end of bridge



Impact damage on Eastern side



Looking Southwest



Spalling on Western edge of deck



Section loss on bottom chord



Section loss and hole formation on floor beam



Section loss in a gusset plate



Section loss in floor beams and stringers and efflorescence in the deck



Looking Northwest

## **Bridge Locations**

<u>Arlington No. 22</u> 5679 VT-7A Arlington 43.097703, -73.141440

Arlington No. 25 783 Clarendon Ave. North Clarendon 43.499316, -72.971120

Berlin No. 72 150 Finch Rd. Montpelier 44.282673, -72.579854

Bethel No. 4 Renaud Bros. 283 Fort Bridgman Rd. #2 Vernon

Bristol No. 20 3128 Forest Dale Rd. Brandon 43.838466, -73.040611

<u>Cavendish No. 45</u> 50 Power Plant Rd. Cavendish 43.386258, -72.600291

<u>Corinth No. 34</u> 7105 Scotch Hollow Rd. Newbury 44.139294, -72.143225

Fairfield No. 52 783 Clarendon Ave. North Clarendon 43.499316, -72.971120

Hardwick No. 27 387 Wolcott St. Hardwick 44.508019, -72.372427

Highgate Falls 345 Mill Hill Rd. Highgate Center 44.934371, -73.047569

<u>Hinesburg No. 30</u> 90 Mechanicsville Rd. Hinesburg 44.332923, -73.109364 <u>Huntington No. 11</u> 150 Waldo Ln. Wallingford 43.469781, -72.982356

<u>Jamaica No. 39</u> 23 Water St. Barton 44.748059, -72.176765

Ludlow No. 57 118 Pleasant St. Ludlow 43.394570, -72.691871

<u>Medburyville Bridge (Old No. 57)</u> 567 VT-9 Wilmington 42.870844, -72.919736

<u>Middletown Springs No. 21</u> 133 Water St. Barton 44.747933, -72.178833

<u>Middletown Springs</u> 361 East St. Middletown Springs 43.481967, -73.086910

<u>Milton No. 18</u> 58 S. River St. Swanton 44.916374, -73.127866

<u>Montpelier No. 6</u> 408 E Montpelier Rd. Montpelier 44.240764, -72.548376

<u>Moretown No. 40</u> 6691 VT-100B Moretown 44.297144, -72.701309

<u>Morrisville No. 53</u> 832 Cochran Rd. Morristown 44.530907, -72.627029

<u>Northfield No. 84</u> 75 Vine St Northfield 44.151844, -72.656710 Poultney No. 5 783 Clarendon Ave. North Clarendon 43.499316, -72.971120

<u>Shoreham No. 24</u> 560 Graniteville Rd. Barre 44.155209, -72.492872

Waitsfield No. 22 642 Clarendon Ave. West Rutland 43.584354, -73.043912

<u>Wallingford No. 50</u> 163 VT-100 West Dover 42.942392, -72.859856

Westfield No. 17 1219 VT-100 Westfield 44.888591, -72.427105

<u>Wolcott No. 7</u> 299 Fort Hill Rd. Wolcott 44.563632, -72.487485

## **Contact Information**

<u>VAST</u> Matt Tetreault, Trails Administrator 802-229-0005 Ext. 12

<u>Arlington</u> Keith Squires, Selectman 802-375-6474

Berlin Tim Davis, Road Foreman 802-223-7337

Shauna, District 7 Office 802-748-6670

Bristol Peter Bouvier, Road Foreman 802-453-4707

<u>Cavendish</u> Brendan McNamara, Town Manager 802-226-7291

Bruce McEnaney, Assistant to the Town Manager 802-226-7289

<u>Clarendon</u> Gloria Menard, Town Clerk 802-775-4274

Heather Kent, Administrative Assistant 802-747-4074

<u>Huntington</u> Yogi Alger, Road Foreman 802-434-2710

Jamaica Pamela Tweedy, Town Clerk 802-874-4681

Chad Greenwood, VTrans 802-498-8253 chad.greenwood@vermont.gov <u>Middletown Springs</u> Laura Castle, Town Clerk 802-235-2220

Terry Redfield, Selectman redbonevt@gmail.com

Jon Mathewson and David Wright, Middletown Springs Historical Society jonm@vermontel.net; montvert@vermontel.net

Moretown Cherilyn Brown, Town Clerk 802-882-8218

<u>Morrisville</u> Dan Lindley, Town Administrator 802-888-5147

Rochester Joanne McDonnell, Town Clerk rochestertown@comcast.net

Joan Allen, Selectboard Assistant rochesterassistant@comcast.net

<u>Rutland City</u> Pete Kelley, Engineer Technician, DPW 802-773-1813

Shoreham Jason Paquette, Road Foreman 802-897-5451

<u>Wallingford</u> Jon Kaplan, Bicycle and Pedestrian Program Manager, VTrans Jon.Kaplan@vermont.gov

Westfield Town Office 802-744-2484

Wolcott Jim Kota, Project Manager 802-782-0802

# Sources

Bridge Hunter https://bridgehunter.com/vt/

Historical Bridge Surveys- Division for Historic Preservation DocumentType: Bridge Survey http://www.orc.vermont.gov/Resource/Show-Resource-Table.aspx

Lichtenstein Reports (1997 Vermont Historic Metal Truss Bridge Study) http://orc.vermont.gov/Documents/Bristol TownReport BridgeSurvey 10000124.pdf

Back to TOC

# Correspondence

## Matt Tetreault, VAST

Wet 6/28/2017 3:40 PM         Matthew Tetreault < Matt@vtvast.org>         Pony Truss Bridges         To       Holleran, Casey         Contreles@concast.net; Dan Courchaine         To       You replied to this message on 6/29/2017 8:45 AM.         Action Items       + Get more apps         Casey,       Great chatting with you about the bridges earlier today. Attached are a couple of photos of the bridge that was originally in Bristol. The club in Bristol did not have a use for it at the time but the club in Middlebury did, so the bridge was sent to Forestdale for use on an old town highway with a bridge in a state of disrepair. The pony truss bridge was installed directly over the existing town bridge temporarily. The town bridge is being repaired this summer so the pony truss bridge will need to be removed and moved to a new home. We are currently searching for a new home for it on the VAST trail. As you can see by the barricades on the bridge, it was only being used by snowmobile/pedestrian traffic, and not by motor vehicles.         The pony truss bridge that went to Hardwick is still in use directly behind the House of Pizza on Route 15 in Hardwick. VASA and VAST utilize the bridge. I was told that it was redecked last fall and is in good condition. Next time I am in Hardwick I will try to grab a few photos of it for you. I am through that area often (possibly Friday this week) and will snap some photos.         I will look through files here and talk with the local clubs to see if there is any paperwork that goes along with the bet be bridge. I was told at the time however I believe all of this predates my employment here(2002) so where the files are can be somewhat of a mystery. I will do the best I can. Let m
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Matt letreault
VAST Trails Administrator
802-229-0005 x12

## Chad Greenwood, Jamaica No. 33

From: Greenwood, Chad Sent: Tuesday, July 11, 2017 10:23 AM To: Holleran, Casey <u>Casey, Halloran@vermont.gov</u> > Subject: Re: Historic Trusses				
Just to confirm this you could call Renaud brothers at 802-257-7383 to make sure they didn't keep it, but I am pretty sure it was scrapped.				
Sent from my iPhone				
On Jul 11, 2017, at 9:00 AM, Holleran, Casey < <u>Casey.Halloran@vermont.gov</u> > wrote:				
Hi Chad,				
I spoke with Tammy Ellis yesterday on the phone, and she gave me your contact info. I am an intern with the VTrans structures department in Montpelier this summer. I am working on a project to help identify and track down some of the historic trusses that have been removed from or re-used for bridges across Vermont. Some of these trusses have been destroyed, used for bike paths, put in storage behind town garages, etc. Most of the district 2 trusses we have been able to identify, but we are having a lot of truble tracking down the trusses from Jamaica bridge no. 33. I have spoken with the town of Jamaica, and all they were able to tell me was that it was no longer stored on site, and they didn't know where it had gone to. We can go to the Jamaica town offices to try to sort through old files and see what we can find, but I thought I would try to contact you first to see if you might have an idea of what happened to it. If you have any information feel free to give me a call, or just respond via e-mail.				
Thank you,				
Casey Holleran 570-561-6037 <u>Casey holleran@vermont.gov</u>				

Town of Jamaica, Jamaica No. 39



# Middletown Springs Historical Society, Middletown Springs

From: Jon Mathewson [mailto:jonm@vermontel.net]         Sent: Tuesday, July 25, 2017 12:46 PM         To: Holleran, Casey < <u>Casey. Holleran@vermont.gov</u> >         Cc: David Wright < <u>montvert@vermontel.net</u> >         Subject: Re: Daisy Hollow Rd Bridge					
Hi Casey -					
Gideon Minor built a mill on that site back in the 1780s or so. The intersection also had a tavern, the large white house standing across the street from the bridge. The bridge may have been originally constructed before 1780, but, not, obviously, as a truss bridge. The bridge shows up in state aid highway maps from 1931 - 1962, but in the Inventory Map of 1965, it is listed as "condemned," and "untravelled" in later maps. When I get the chance, I will look over old Town Reports to see if they have any info on the exact year and reason for it's disuse.					
Jon					
On Jul 21, 2017, at 8:41 AM, Holleran, Casey < <u>Casey Halloran@vermont.gov</u> > wrote:					
Hello David and Jon,					
I am an intern for Vermont Agency of Transportation this summer. I am working on a project to identify, find, and document historic truss's from old bridges throughout the state. There was once a bridge connecting Daisy Hollow Rd to East St in Middletown Springs. I was at the site last week and was able to see the old truss still in place. I was able to get some pictures and take some measurements, but that is the only information I have on the truss. I was working ingit horizontal society and was able to see the old truss still in place. I was able to get some pictures and take some measurements, but that is the only information would be great, including dates of construction/closure, year built, reason for closure, etc. If you can't find anything that's ok, I just want to be as thorough as possible for my reports, so I thought it couldn't hurt to ask.					
Thank you,					
Casey Holleran Vermont Agency of Transportation <u>Casey Holleran@vermont.gov</u> 570-560-6037					

# Town of Rochester, Rochester No. 36

	Rochester Selectboard Assistant <rochesterassistant@comcast.net> Sethares, Kati</rochesterassistant@comcast.net>							
0	You replied to this message on 7/17/2017 10:12 AM.							
E	3ing Maps							
F	Hello Kati, in case no one else here has gotten back to you, below is a former Selectman's recollection of the truss bridge's fate.							
J S	oan ielectboard Assistant							
F S T S	From: <u>Barb Harvey</u> Sent: Friday, July 14, 2017 5:42 PM To: <u>Rochester Selectboard Assistant</u> Subject: Ber Ewr. Rochester Truss Bridges							
Joan, I was led to believe that the truss bridge that was removed in Talcville crossing the White River was labeled and transported to a VTrans stockyard in Clarendon, VT. I never did know where that stockyard is. The salvaging of this bridge held up the replacement for about 4 or 5 years. Hope this helps. Marv								
C	On Thu, Jul 13, 2017 at 2:42 PM, Rochester Selectboard Assistant < <u>rochesterassistant@comcast.net</u> > wrote: Hello Marv, Joanne says you might have some information on this. Would you let me know if you do?							
	Thanks, Joan							
	Joan Allen Assistant to the Rochaster Selectboard Torm of Rochaster PO Bax 238/67 School St Rochaster, V7 05/67 (802)167-3631 Ph (802)167-3631							

# Jon Kaplan, Wallingford No. 50

🕰 Reply 🛱 Reply All 🚔 Forward
Thu 6/29/2017 3:58 PM
Kaplan, Jon
RE: Historic Truss Bridge Project
To Mueller, Marie
Cc Carlson, Carolyn; Ehrlich, Judith; Holleran, Casey; Sethares, Kati; LaFleche, Cole
Follow up. Start by Wednesday, July 05, 2017. Due by Wednesday, July 05, 2017. You replied to this message on 7/6/2017 11:59 AM.
IMG_3791.JPG         IMG_3792.JPG           76 KB         200 KB
Jon Kaplan, P.E. Bicycle and Pedestrian Program Manager Municipal Assistance Bureau, Highway Division VT Agency of Transportation 1 National Life Drive Montpelier, VT 05633-5001 Ph: 802.828.0059 Fax: 802.828.5712 VTrans Bicycle and Pedestrian Program Go to: http://vtrans.vermont.gov/highway/local-projects/bike-ped VT Safe Routes to School Web site www.SafeRoutesVT.org  Found Member WERMONE

# Bob McCullough, Various Bridges

Re: Vermont Historic Truss Project         You replied to this message on 7/14/2017 7:31 AM.	7	
Action Items	+ Get mo	
HI Kati:		
Burke No. 25 is stored at one of the Burke public works sites; it's a pin connected bridge and is important. Walcott No. 25 was demolished for salvage. Berlin No. 72 is stored in Montpelier's Stump Dump. I believe Middlesex No. 50 was demolished - you can probably check with Judith Ehrlich on that. Not sure about Rutland No. 17; if it's a through truss, it may have been demolished. If a pony truss, I know we installed one on a bike path in West Rutland, but I don't think that is No. 17. I'll check my records next time I'm in Burlington. Hope this helps.		

Bob Mc.

<b>Original Recommendation</b>	Bridge	Actual Use
	Arlington No. 17	Open for limited highway use
	Barnet No. 10	Open for full highway use, substantial repairs necessary soon
	Barnet No. 48	Rehabilitated in place for full highway use, 1991
	Berlin No. 27	Rehabilitated in place for full highway use, 1994
	Berlin No. 29	Rehabilitated in place for full highway use, 1991
	Berlin No. 67	Open for full highway use
	Bethel No. 45	Open for limited highway use; truss is old railroad truss
	Bloomfield No. 9	Open for full highway use
	Bradford No. 22	Rehabilitated in place for limited highway use, 2007
	Brandon No. 25	Open for full highway use
	Bridgewater No. 14	Documented and Destroyed, 2011; replaced with prefab through truss
	Bridgewater No. 26	Open for full highway use
	Brookline No. 19	Rehabilitated in place for full highway use, 2004
	Cavendish No. 12	Rehabilitated in place for full highway use, 2005
	Dummerston No. 37	Rehabilitated in place for limited highway use, 2010
Preserved for limited	Enosburg No. 45	Open for limited highway use
ingnway use	Hartford No. 7	Open for full highway use; some repairs necessary soon
	Hartford No. 8	Documented and Destroyed, 2006
	Hartford No. 38	Rehabilitated in place for full highway use, 2013
	Hartford No. 61	Open for full highway use; rehab necessary soon
	Highgate No. 25	Document and Destroy, 2017
	Jamaica No. 32	Open for limited highway use
	Ludlow No. 57	Bridge closed to all but pedestrians, 2007; currently a VTrans scoping project
	Montpelier No. 5	Rehabilitated in place for full highway use, 2010
	Montpelier No. 17	Rehabilitated in place for limited highway use, 1992; rehab will be necessary soon
	Moretown No. 40	Closed; in place on Lover's Lane
	Moretown No. 41	Destroyed due to Irene in 2011, replaced with pony truss 2013
	Moretown No. 42	Rehabilitated in place for full highway use, 1991; rehab will be necessary soon
	Morristown No. 8	Rehabilitated in place for limited highway use, 2012
	Morristown No. 215	Documented and Destroyed, 2009; replaced with prefab pony truss
	Newfane No. 49	Rehabilitated in place for limited highway use, 1997
<b>Original Recommendation</b>	Bridge	Actual Use
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Preserved for limited highway use	New Haven No. 26	Rehabilitated in place for limited highway use, 2008
	Northfield No. 65	Recent repairs done to keep bridge open for limited highway use
	Putney No. 32	Open for limited highway use
	Poultney No. 4	Rehabilitated in place for full highway use, 1975; rehab necessary soon
	Poultney No. 7	Open for limited highway use; currently a VTrans scoping project
	Richford No. 3	Open for limited highway use; rehab slated for 2018
	Richmond No. 24	Rehabilitated in place for full highway use, 2013
	Richmond No. 31	Rehabilitated in place, 2009
	Rockingham No. 39	Open for full highway use; rehab must be done soon
	Royalton No. 30	Rehabilitated in place for limited highway use, 2007
	Royalton No. 31	Open for limited highway use
	Sharon No. 15	Rehabilitated in place for limited highway use, 1994
	Sheldon No. 9	Rehabilitated in place for limited highway use, 1996
	Sheldon No. 10	Open for full highway use
	Springfield No.81	Rehabilitated in place for full highway use, 2009
	Stockbridge No. 35	Open for limited highway use; rehab must be done soon
	Wallingford No. 54	Open for full highway use
	Waterbury No. 31	Rehabilitated in place for full highway use, 1997
	West Haven No. 10	Mabey bridge on top of truss since 2007; Bridge replacement slated for 2019
	Woodstock No. 30	Rehabilitated in place for full highway use, 2002
	Barnet No. 54	Rehabilitated in place for full highway use, 2003
	Bethel No. 38	Will be documented and destroyed, 2020
	Bethel No. 44	Rehabilitated in place for full highway use, 1997
	Enosburg No. 12	Rehabilitated in place for full highway use, 1997
	Fairfax No. 27	Rehabilitated in place for full highway use, 1999
	Johnson No. 6	Rehabilitated in place for full highway use, 2006
	Lincoln No. 46	Rehabilitated in place for limited highway use, 1970
	Richford No. 41	Rehabilitated in place for full highway use, 2009
	Wolcott No. 6	Rehabilitated in place for limited highway use, 2004
	Wolcott No. 7	Closed; in place on Fort Hill Road

Original Recommendation	Bridge	Actual Use
Preserved and adapted to alternative transportation use at existing sites	Arlington No. 22	Rehabilitated in place for pedestrian use only, 2002
	Highgate Falls	Rehabilitated for pedestrian use only, 2000
	Middlesex No. 50	Documented and Destroyed 2010
	Milton No. 18	Moved from Milton, rehabilitated as part of the Swanton Bike Path
	Northfield No. 84	Rehabilitated as pedestrian bridge next to original location, 1989
	Rutland No. 17	Documented and Destroyed 2007, replaced with prefab pony truss 2016
	Medburyville Bridge (Old No. 57)	Partially rehabilitated without deck, owned by DHP
	Woodstock No. 9	Destroyed due to Irene in 2011, not replaced
Modified for continued limited or unlimited highway use	Montpelier No. 10	Replaced 1991, trusses are false fascias
	Montpelier No. 11	Replaced 2006, trusses are false fascias
	Woodstock No.15	Replaced 1980, trusses are false fascias
	Bethel No. 4	Replaced with pony truss 1998; UVM project, stored at Renaud Bros.
	Bristol No. 20	In use by VAST in Forestdale; may be removed Summer 2017 for TH bridge rehabilitation
	Bristol No. 31	Documented and Destroyed, 2014
	Burke No. 25	Replaced 1998, stored in District 7 stump dump
	Cavendish No. 45	Replaced with pony truss 2007; truss stored by town
	Corinth No. 34	Replaced 2009; stored in Newbury
	Fairfield No. 49	Rehabilitated in place for limited highway use, 1995
	Hardwick No. 27	In use by VAST in Hardwick
Relocated and preserved for	Hinesburg No. 30	Rehabilitated at alternative site in Hinesburg for pedestrian use only
limited highway use or for alternative transportation use	Huntington No. 11	Replaced with prefab pony truss 2000; Rehabilitated in Wallingford for pedestrian use only 2001
	Jamaica No. 33	Documented and Destroyed, 2010
	Montpelier No. 6	Replaced 2002; In storage behind Casella in Montpelier
	Morristown No. 1	Documented and Destroyed, 2007
	Morrisville No. 53	Replaced 2006; In storage in Morrisville
	Poultney No. 5	Replaced 2001; In storage in Clarendon
	Richmond No. 10	Documented and Destroyed, 2002
	Rochester No. 36	Documented and Destroyed, 2002
	Rutland No. 2	Documented and Destroyed, 2014
	Sheldon No. 20	Open for limited highway use

Original Recommendation	Bridge	Actual Use
Relocated and preserved for limited highway use or for alternative transportation	Stockbridge No. 130	Documented and Destroyed, 2009
	Tunbridge No. 31	Rehabilitated in place for limited highway use, 2011
	Waitsfield No. 22	Replaced with pony truss 1999; rehabilitated as pedestrian bridge in W. Rutland
use	Westfield No. 17	In use by VAST in Westfield
Placed in adaptive use program	Arlington No. 25	Replaced with prefab pony truss 1993; stored in Clarendon
	Berlin No. 29	Sent to UMASS Amherst
	Berlin No. 72	Replaced 1996; stored in Montpelier's Stump Dump
	Jamaica No. 39	Replaced with culvert 1997; Rehabilitated in Barton by the Crystal Lake Falls Historical Association
	Middletown Springs No. 21	Replaced 1995; Rehabilitated in Barton by the Crystal Lake Falls Historical Association
	Middletown Springs	Connected Daisy Hollow Rd and E St, still in place in poor condition; closed since 1965
	Shoreham No. 24	Replaced in 1991 with pony truss; Rehabilitated in Barre for pedestrian use, 2006
	Thetford No. 25	Sent to UMASS Amherst
	Wallingford No. 50	In use by VAST in Dover
	Bethel No. 15	Documented and Destroyed, 2013; Replaced with through truss
	Cambridge No. 21	Documented and Destroyed, 2014
	Clarendon No. 7	Documented and Destroyed, 1994
	Clarendon No. 14	Documented and Destroyed, 2006
Document and Destroy	Fairfield No. 52	Replaced 1999; In storage in Clarendon
	Jamaica No. 80	Documented and Destroyed, 2004; Replaced with through truss
	Jericho No. 38	Open for limited highway use; Rehabilitation done privately/by town
	Montgomery No. 24	Documented and Destroyed, 2007
	Pownal No. 41	Documented and Destroyed, 2009
	Royalton No. 3	Documented and Destroyed, 2003
	St. Johnsbury No. 29	Documented and Destroyed, 2006; Replaced with pony truss
	Warren No. 173	Documented and Destroyed, 2012; Replaced with prefab pony truss
	Waterbury No. 25	Documented and Destroyed, 2014
	Wolcott No. 25	Documented and Destroyed, 1997