

East Broad Top

Steam treasure of the East



6 Pennsylvania's Narrow Gauge Survivor
A 1941 *Trains* article profiles the EBT 15 years before it ended common-carrier operations • *William Moedinger Jr.*

16 A Half Century of Tourist Trains
EBT has been a star of the preservation era • *Dan Cupper*

18 Restarting a Legend
How the EBT was reawakened in 2020 • *Dan Cupper*

26 Mikados, Motor Cars, and Diesels
The power that keeps EBT moving • *Dan Cupper*

34 Backstage Wonderland
EBT's Rockhill Furnace shop complex is a complete early 20th-century industrial facility • *Wayne Laepple*

42 Map: Treasure in the Mountains
150 years of EBT's main line and branches • *Bill Metzger*

44 Coaches and Combines, Hoppers and Dolly Vardens
An all-time round-up of EBT rolling stock • *Kevin Strong*

52 You Gotta Have Friends
EBT's volunteer support group marks 20 solid years of restoration work • *Lee Rainey and Lawrence Biemiller*

60 Photo Gallery
Images from EBT's common-carrier and tourist eras

70 Treasures in the Attic
Thousands of records, some from the road's earliest days, bring new dimensions to EBT history • *Wayne Laepple*

74 EBT's Electric Neighbor
Rockhill Trolley Museum cars have plied the steam road's Shade Gap Branch for nearly 60 years • *Wayne Laepple*

76 Big Plans for the Narrow Gauge
The Foundation and Friends look ahead to a bright future for a national treasure • *Dan Cupper*

ON THE COVER: EBT Mikado No. 15 pulls a train of happy riders south toward Rockhill Furnace during the 2009 "Fall Spectacular." Dan Cupper
ABOVE: On another day during the October 2009 Spectacular, No. 15 heads a photo freight of hopper cars north of Rockhill. Alex Mayes

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A half century of tourist trains



In October 2010, Mikado No. 15 arrives at EBT's station and general offices in Rockhill Furnace, where passengers wait to board the train for a ride north to Colgate Grove. Dan Cupper

After a four-year hibernation, the East Broad Top found a new role carrying tourists and railfans

by Dan Cupper

After a pause following its 1956 shutdown and purchase by Kovalchick Salvage Co., the East Broad Top came back to life on Aug. 13, 1960, when owner Nick Kovalchick agreed to help the borough of Orbisonia celebrate the bicentennial of the town's founding.

In that four-year span, something significant had taken place on North America's railroads. The shift from steam locomotives to diesels picked up momentum through the 1950s, and was all but complete by the end of the decade. By 1960, steam engines were nearly extinct.

But at the dormant EBT, time had stood still. Responding to the community's request to display a train, Kovalchick went

much further, restoring two of the road's six Mikados — Nos. 12 and 15 — and a few freight and passenger cars. He reopened 3 miles of the formerly 33-mile main line for seasonal public rides.

Although the tourist railroad industry was in its infancy, the public response at EBT was overwhelming. When word got out, people drove from near and far to ride in 19th-century cars pulled by 50-year-old steam locomotives.

For that first abbreviated season, trains ran as a shuttle: One engine pulled a train north to the end of operable track, stopped, and cut away. The other engine, following in reverse, coupled to the rear and pulled it back to Rockhill Furnace. After the bicen-

ennial celebrations, EBT operated into the fall, sometimes adding trains into the night to handle demand, according to the late Stanley Hall, longtime general manager.

For 1961, EBT extended the route by 1½ miles and built a wye and picnic area at Colgate Grove near Shirleysburg. One leg of the wye was part of an existing track known as the Clay Spur, which once tapped a nearby clay mine; the other was newly constructed for the tourist operation. This allowed trains to turn for the southbound leg. With another wye already in place at Rockhill, it became a point of pride for longtime Operating Vice President C. Roy Wilburn that EBT trains always ran with the engine first, always facing in the right direction, a rarity in the tourist-railroad world then and now.

Soon, EBT settled into a seasonal schedule that it followed for decades: Weekends in June, September, and October, daily in July and August, with as many as six departures from Rockhill a day. The railroad reactivated its 1927 gas-electric car, the M-1, running it on special occasions. In addition, EBT restored a dozen or more freight cars — boxcars, flatcars, hoppers, and a tank car — to replicate freight trains for photographers. Besides engines 12 and 15, EBT restored Nos. 14 and 17, rotating them in regular tourist passenger service.

A historic-trolley non-profit group, Railways to Yesterday (now Rockhill Trolley Museum), laid standard-gauge track on part of EBT's former Shade Gap Branch and began offering rides in 1963.

About this time, legislation to create a state railroad museum drew EBT into a public-policy debate over where to build it. Seeking the prize were Altoona on the Pennsylvania Railroad, onetime site of the nation's largest railroad shop complex; Strasburg, where a steam tourist line was flourishing amid the area's Lancaster County attractions; and Mount Union, where EBT had promised property in its yard on which to build the museum, and to which the railroad pledged to extend train service.

EBT was a strong contender, having gotten a splash of publicity in 1964 when the National Park Service designated it a



EBT No. 15 waits at Colgate Grove wye before beginning its southward trip back to Rockhill Furnace on a typical day's regularly scheduled operations in 1983. The main line to Mount Union is at left. Dan Cupper collection

National Historic Landmark. But by a single vote on the state Historical & Museum Commission board in 1965, Strasburg won with 4 votes (Mount Union got 3, Altoona, 1), becoming the location of today's Railroad Museum of Pennsylvania.

In 1966, RTY chartered the EBT for a winter railfan event that became an annual tradition over Washington's Birthday weekend. That first year of the "Winter Spectacular," the motive power consisted only of gas-electric car M-1, but soon steam was added. Eventually, the Spectacular became a destination event at which to see all four restored Mikados running at once.

In 1977, founder Nick Kovalchick died and was succeeded by his son Joe. For the next few decades, the son continued operating EBT as a seasonal tourist carrier. The annual Winter Spectaculars ended with the 1981 edition, eventually replaced with a fall event. In 1988, EBT cut its schedule to three trains a day and dropped weekday service, operating weekends only, June through October.

In 1995, a boiler explosion on the Gettysburg Railroad, caused by sloppy maintenance and lack of training, prompted the Federal Railroad Administration to impose strict rules on all steam



EBT's Fall and Winter Spectaculars brought railfans from far and wide. During this October 1993 event, all four operable 2-8-2s were under steam. Dan Cupper collection

locomotives nationwide, dramatically raising the cost of operation and maintenance. As a result, EBT was soon down to running just one engine, No. 14. After its certification and extension ran out, it was replaced by No. 15, which continued as the sole power through the end of private-ownership operation.

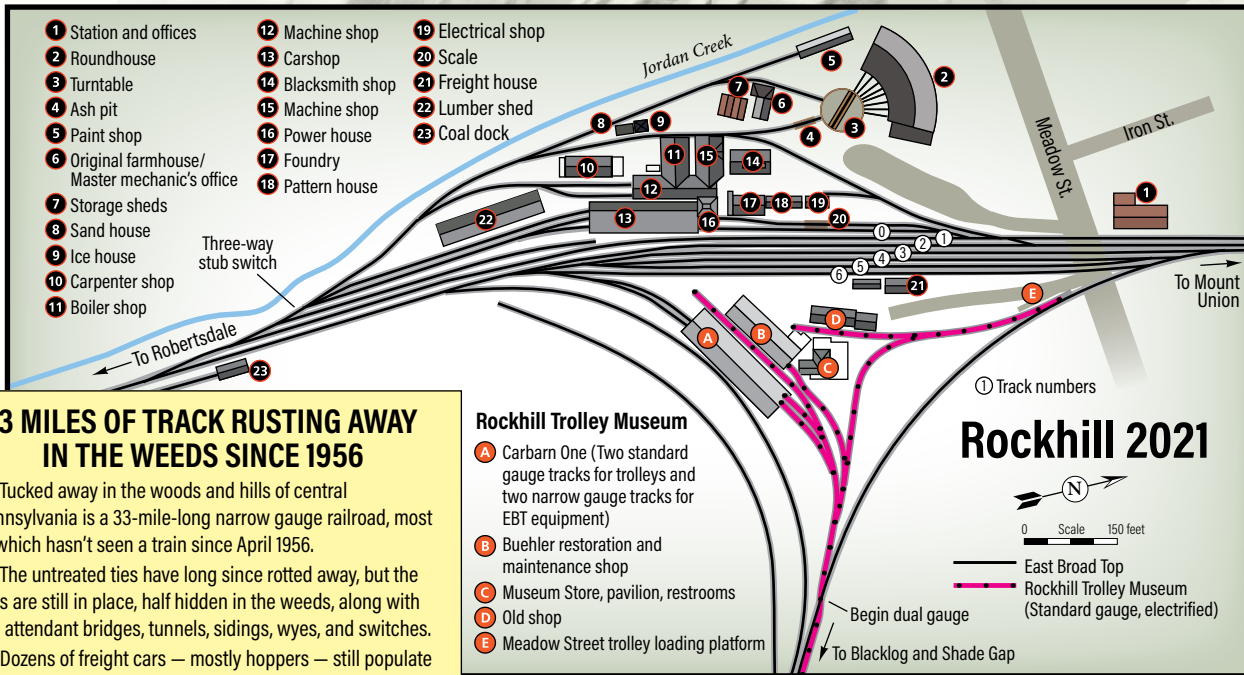
During this time, the East Broad Top appeared on state and national "most endangered" lists, prompting various proposals to take it over, either privately, or through nonprofit groups, or with government or quasi-government ownership. All

came and went without success.

In 2009, the non-profit East Broad Top Preservation Association leased and operated the railroad for three years, including bringing the Thomas the Tank Engine children's promotion to EBT. But the lease was not renewed and the final steam run under Kovalchick family ownership took place in December 2011. After that, EBT operated a few motorcar trips for the Friends of the East Broad Top fall reunion, but otherwise, operations ceased until the nonprofit EBT Foundation, Inc., was formed to purchase it in 2020. **I**

Treasure in the mountains

East Broad Top's 150 years of history



33 MILES OF TRACK RUSTING AWAY IN THE WEEDS SINCE 1956

Tucked away in the woods and hills of central Pennsylvania is a 33-mile-long narrow gauge railroad, most of which hasn't seen a train since April 1956.

The untreated ties have long since rotted away, but the rails are still in place, half hidden in the weeds, along with the attendant bridges, tunnels, sidings, wyes, and switches.

Dozens of freight cars — mostly hoppers — still populate the yards. The shops that built and maintained them are still in place.

Six steam locomotives designed and built for the railroad by Baldwin between 1911 and 1920 have occupied the same roundhouse since they first came on the property. It is probably the only such place in the country.

The East Broad Top is the only remaining intact narrow gauge railroad east of the Rocky Mountains.

The reason the EBT lasted as long as it has is transloading. The inherent problem of a narrow gauge railroad in a standard gauge world is that every shipment, no matter the size, has to be transferred between gauges. The coming of paved highways and trucks that only had to be loaded once killed many a slim gauge operation. Few survived into the 1930s.

The East Broad Top was a coal hauler. What saved the railroad was that every online mine produced run-of-mine coal that had to be cleaned of the inevitable impurities. Placing the cleaning plant at Mount Union solved the problem neatly.

Narrow gauge cars brought the coal in; it went out cleaned and graded on the standard gauge Pennsylvania Railroad.

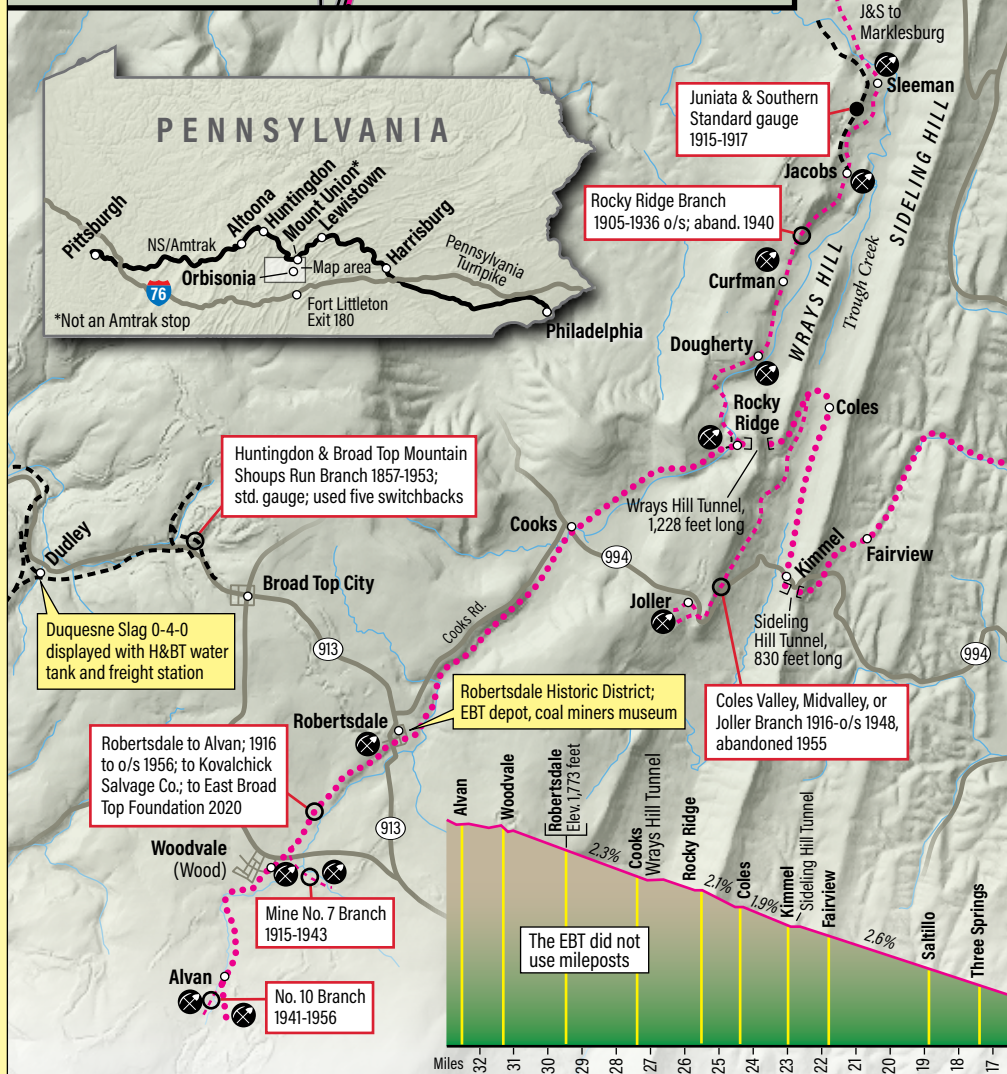
"Plus, about 20% of EBT's coal traffic and all of the ganister traffic went to the silica brick plants online," says EBT author and historian Lee Rainey.

Clean-air laws and wholesale conversion to oil and gas killed the coal market and led to the 1956 demise of the EBT. The Kovalchick Salvage Co. of Indiana, Pa., bought the entire line and, instead of tearing it up and scrapping it, not only saved the railroad but started running excursion trains in 1960. The railroad was never formally abandoned and the parts not used for the excursion trains have remained in place for more than 60 years.

Now, thanks to the East Broad Top Foundation, which purchased the whole shebang in 2020, it's all finally coming back to life. — *Bill Metzger*

Rockhill Trolley Museum

- A Carban One (Two standard gauge tracks for trolleys and two narrow gauge tracks for EBT equipment)
- B Buehler restoration and maintenance shop
- C Museum Store, pavilion, restrooms
- D Old shop
- E Meadow Street trolley loading platform



EAST BROAD TOP

MAJOR MINES/QUARRIES (NOT ALL SHOWN)

- Coal**
Mines in the small (50 square miles) Broad Top Region produced semibituminous coal, harder than bituminous and softer than anthracite, high in carbon and heat value and relatively smokeless.
- Iron ore**
Small high-grade iron ore deposits laced the mountains. Rockhill Iron & Coal Furnaces Nos. 1 & 2 (1876-1908) was the largest operation to use them and one of the reasons the EBT was built.
- Limestone**
Limestone is the necessary catalyst in smelting iron.
- Ganister rock**
Ganister rock, the local name for Tuscarora Quartzite, is high in silica (silicon dioxide) and ideal for making silica brick (refractory) to line furnaces and ovens. Mount Union was home to three refractory manufacturing plants.
- Clay**
Used to make silica cement, a product used to lay and bond silica bricks; mined near Shirleysburg.

- EBT active
- abandoned
- EBT out of service
- Standard gauge abandoned
- East Broad Top Connecting active
- East Broad Top Connecting o/s
- Inclined plane railway
- Uncompleted railroad grade
- Standard gauge active

Mount Union Industrial Track, standard gauge, (owned by EBT Railroad Preservation Association 2014-present)

Mount Union to Orbisonia 1873 to o/s 1956; to Kovalchick Salvage Co.; to East Broad Top Connecting Mount Union to Aughwick Mills 2014-present

Aughwick Mills to Orbisonia 1873 to o/s 1956; to Kovalchick Salvage Co.; to East Broad Top Foundation 2020

It's pronounced AW-wick, ALL-wick, or UL-wick

Rebuilt for excursion service 1961

Shirleysburg Clay Spur 1918-c. 1933

Operated for excursion service 1960-2011; reopened 2021

East Broad Top National Historic Landmark plaque

Rockhill Furnace
Detail map at upper left

Even though the EBT station is in Rockhill Furnace, it's named Orbisonia. The Rockhill Furnace Post Office was in Orbisonia station.

Rockhill Iron & Coal tramway 1876-1908; EBT Shade Gap Branch 1890-1956; to Shade Gap Electric, std. gauge, electrified; rebuilt 1963

Shade Valley Branch 1890 to o/s 1895; aband. 1904

Shade Valley Branch 1888 to o/s 1895; aband. 1904

Tuscarora Railroad 1899 grade from Blairs Mill—never finished

Orbisonia to Robertsdale 1874-o/s 1956; to Kovalchick Salvage Co.; to East Broad Top Foundation 2020

Narco Incline 1912-1942

Three Springs

Narco Spur 1942-1956

Booher Branch 1891-1912; Orig. Booher Branch RR

McKelvey Bros. Lumber Co. 1922-1928; partially built on Booher Branch

Shade Gap Branch 1885-1948

Shade Valley Branch 1886 to o/s 1895; aband. 1904

Stanton Rock Spur 1919 to o/s 1927; aband. 1940; partially built on uncompleted 1899 Tuscarora Railroad*

Shade Gap Branch 1909-1943

EBT Shade Gap Railroad was built to haul supplies to the South Penn Railroad. Construction halted in 1885 on both the entire South Penn south of Neelyton and the Shade Gap.
In the late 1930s the branch was used to haul material for the Pennsylvania Turnpike using standard gauge cars on narrow gauge trucks. (See above)

*Not to be confused with the Tuscarora Valley Railroad



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