

**Trains** SPECIAL

**AMERICA'S TOP TRAIN-WATCHING LOCATIONS**

# HOT SPOTS

Special 2018

## 75 BEST SPOTS FOR RAILROAD ACTION

- Sacred turf p. 51
- Busy junctions p. 72
- Scenic places p. 28
- 50 detailed maps

## Expert railfan essentials

- Train-watching basics p. 5
- What train symbols mean p. 17
- Interpreting signals p. 11

**PLUS**

**Amtrak sunrise/sunset map** p. 26

**Must-see museums** p. 25



\$9.95 • DISPLAY UNTIL APRIL 23, 2018





# Join the Fun!

## ENTER THE HOT SPOTS CONTEST AND WIN!

*Trains* latest special issue, *Hot Spots*, describes 75 exciting locations to experience the best train-watching in North America. To kick-off this ultimate go-to guide, we're giving away a \$50 gift code to [KalmbachHobbyStore.com](http://KalmbachHobbyStore.com) each month to one lucky winner.

To enter, just visit one of the special issue's "hot spots," take a photo of the location, and share it on [TrainsMag.com/shareyourphoto](http://TrainsMag.com/shareyourphoto). Safe travels!



## Enter Today at [TrainsMag.com/shareyourphoto](http://TrainsMag.com/shareyourphoto)

One prizewinner will be selected each month in a random drawing. For details, visit [trainsmag.com/shareyourphoto](http://trainsmag.com/shareyourphoto).

P32056

# The Past is Back!

## Get a Full Year of *Classic Trains*!

- Legendary trains & locomotives.
- Railroading history.
- Spectacular photographs.
- Tales from railfans & railroaders.
- Detailed reporting.



To subscribe, visit [ClassicTrainsMag.com/Offer](http://ClassicTrainsMag.com/Offer)

P30484

# Where to find the action

**TRAIN-WATCHING** is a long, honored pastime in the U.S. and Canada. Blessed with amazing locomotives, colorful passenger trains, and long freights, we are a continent that screams out big and bold. As spectators, we go in search of the places that excite us for their hustle, their fame, their splendor, and exotic mixtures thereof. In this issue, we present our 75 favorite hot spots — those places that rise above the norm in the viewpoint of railroad enthusiasts. But that's not all.

We'll also help you understand the basics of the hobby we call railfanning. We'll cover the inside lingo of the railroad business and tell you how trains get their names so that when you hear them called out on a scanner radio, you'll know which train they're talking about and where you can see it.

We'll help you understand trackside signals so that you know when the train is coming, and when it's already passed. All this and much more useful information awaits you in these pages.

So, please join us, the legion of train-watchers nationwide. Somewhere right now in America, there's a train headed in your direction, and its locomotives and cars are ready to speak to you with stories of technology, history, commerce, and so much more. Join us as we go trackside in search of North America's top railroad hot spots, the best train-watching locations in the land.



editor@trainsmag.com



**Union Pacific SD70ACe-T4 No. 3051 leads coal empties into the Powder River Basin, north of Douglas, Wyo.** TRAINS: Drew Halverson

## HOT SPOTS contents

5

### Train-watching 101

Your introduction to train-watching, locomotives, how railroads work, and more

11

### Reading the lights

Interpreting railroad signals for more productive photography

17

### Breaking the code

Knowing how the seven Class I railroads label their trains provides useful train-watching info

25

### Must-see museums

Where history lives near hot spots

26

### Amtrak day and night

We plot the long-distance routes between sunrise and sunset

28

### Photo stops

Sometimes a killer backdrop is nice, too

51

### Hallowed turf

Fabled locations beckon to everyone who loves trains

72

### Maximum action

When you want to see lots of trains, these are the places to visit

94

### 25 (more) places to see

Compare our railroad bucket list to yours

**ON THE COVER:** An eastbound BNSF Railway manifest, led by SD70ACe No. 8441, rolls along the beautiful Columbia River at milepost 133 near Bates, Wash. TRAINS: Tom Danneman

**Trains** SPECIAL

TRAINS MAGAZINE SPECIAL EDITION NO. 21-2018

EDITOR Jim Wrinn

ART DIRECTOR Thomas G. Danneman

ASSOCIATE EDITORS Angela Pusztai-Pasternak,

Brian Schmidt, Steve Sweeney, David Lassen

EDITORIAL ASSISTANT Diane Laska-Swanke

SENIOR GRAPHIC DESIGNER Scott Krall

SENIOR GRAPHIC DESIGNER Drew Halverson

LEAD ILLUSTRATOR Rick Johnson

PRODUCTION SPECIALIST Sue Hollinger-Klahn

LIBRARIAN Thomas Hoffmann

CUSTOMER SERVICE

Phone: (877) 246-4843

Outside the U.S. and Canada: (813) 910-3616

Email: [Trains@customersvc.com](mailto:Trains@customersvc.com)

Digital: [Trains.Digital@customersvc.com](mailto:Trains.Digital@customersvc.com)

Back issues: [Trains.SingleCopy@customersvc.com](mailto:Trains.SingleCopy@customersvc.com)

EDITORIAL

Phone: (262) 796-8776

Email: [editor@trainsmag.com](mailto:editor@trainsmag.com)

Fax: (262) 798-6468

P.O. Box 1612

Waukesha, WI 53187-1612

TRAINS HOME PAGE

[www.TrainsMag.com](http://www.TrainsMag.com)

KALMBACH PUBLISHING CO.

CEO Dan Hickey

SENIOR VP, SALES AND MARKETING Daniel R. Lance

VICE PRESIDENT, CONTENT Stephen C. George

EDITORIAL DIRECTOR Diane M. Bacha

VP, CONSUMER MARKETING Nicole McGuire

ART AND PRODUCTION MANAGER Michael Soliday

CIRCULATION DIRECTOR Liz Runyon

NEW BUSINESS MANAGER Cathy Daniels

RETENTION MANAGER Kathy Steele

SINGLE-COPY SPECIALIST Kim Redmond

CORPORATE ADVERTISING DIRECTOR Ann E. Smith

ADVERTISING SALES REPRESENTATIVE Mike Yuhas

AD SERVICES REPRESENTATIVE Christa Burbank

FOUNDER

A.C. Kalmbach, 1910-1981

Hot Spots (ISBN 978-1-62700-555-5) is published by Kalmbach Publishing Co., 21027 Crossroads Circle, P.O. Box 1612, Waukesha, WI 53187. Canada publication mail agreement 40010760.

Single-copy prices: \$9.95 in U.S.; \$10.99 in Canada and other foreign countries, payable in U.S. funds, drawn on a U.S. bank. Canadian cover price includes GST. BN 12271 3209 RT Printed in the U.S.A.

©2018 Kalmbach Publishing Co. Any publication, reproduction, or use without express permission in writing of any text, illustration, or photographic content in any manner is prohibited, except for inclusion of brief quotations when credit is given.





Collect All 6 DVDs! • \$19.99 Each!\*

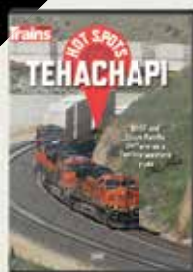
# Railfanning from Your Favorite Chair

From the publishers of *Trains* magazine, the **Hot Spots DVDs** take you to well-known railroad locations across the U.S. Catch all the action from the comfort your own home!

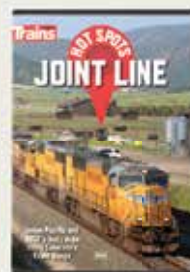


Reserve today at  
[KalmbachHobbyStore.com/HotSpotsDVDs](http://KalmbachHobbyStore.com/HotSpotsDVDs)

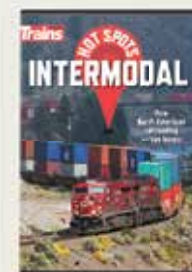
Sales tax where applicable. \*Price does not include shipping. The *Hot Spots* DVDs will arrive in January 2018.  
P31365



#15136  
*Tehachapi*



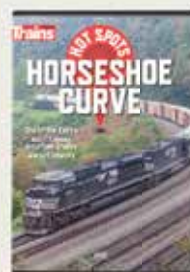
#15137  
*Joint Line*



#15138  
*Intermodal*



#15139  
*Chicago Racetrack*



#15140  
*Altoona/HSC*



#15144  
*Wisconsin*

# THE BEST RAIL GUIDEBOOK JUST GOT BETTER

The extensively updated ***Tourist Trains Guidebook***, **Sixth Edition** describes more than 500 of the most popular train rides and museums in the United States and Canada.

The new user-friendly format organizes attractions by region with a handy site list, map, and photo at the start of each section. This is a must-have guidebook for railfans and anyone interested in a unique travel experience!

THOROUGHLY  
UPDATED



Buy now from your local hobby shop!  
Shop at [KalmbachHobbyStore.com](http://KalmbachHobbyStore.com)

#01212 • \$22.99

P32185

Sales tax where applicable.



# Train-watching 101

Your introduction to train-watching, locomotives,  
how railroads work, and more

BY TRAINS STAFF

Norfolk Southern auto rack train No. 272 passes the viewing platform at Fostoria, Ohio's, new railroad park on Nov. 16, 2013. You can find a lot of great places to watch trains around the country. See a list of a few locations on page 6. Brandon Townley

**R**ailroads move millions of tons of freight and millions of passengers each year. America's railroads got their start nearly 200 years ago and have been instrumental in the development and prosperity of North America. But railroading is more than just a major industry with a long history. For perhaps a quarter-million people, the study of railroading's fascinating aspects is an important hobby that can be enjoyed in many ways.

The modern freight train pictured above reveals several characteristics that draw people to railroads: power, color, geography, history, and photography. For the many "train-watchers," "railroad enthusiasts," or "railfans" across the country, these elements are cornerstones of the railroad hobby.

This freight train is one of the thousands that operate daily throughout the continent, moving about 40 percent of the nation's goods. This train's operator, Norfolk, Va.-based Norfolk Southern is one of the seven

major freight railroads in North America. It operates about 19,500 route-miles of track across 22 states, with a fleet of 4,270 locomotives, and 69,300 freight cars.

This photograph itself represents an important aspect of the railroad hobby. Many train-watchers take photos or videos of the trains they see, and strive to do so as artistically as they can. Others prefer to go trackside and just watch.

No matter what you like — history, locomotives, travel, technology, operations, photography — the railroad hobby has something for every taste. Enjoyed alone or with others, it's an interest that can be immensely fulfilling, and one that can last a lifetime.

## TRAIN-WATCHING BASICS

Among the ways in which people participate in the railroad hobby, the simple act of watching trains is the most popular.

Some railfans thrill to the power of thousands of tons of steel rushing by. Others watch for new locomotive types, or old classics running out their last miles. Many focus

on changing traffic patterns on their hometown railroads: what trains run when, what business has been gained or lost, or what new routes trains follow. A great number seek trains so they can photograph them (see page 7). Most are drawn to multiple aspects of the railroad scene that run beyond the obvious: technology, finance, physics, engineering, business, history, and more.

Train-watching can be as simple as an afternoon next to a busy main line: Just find a spot by the tracks, and sooner or later you'll see a train. Many railfans want to get the most out of their trackside time, however, and they make use of resources to help them find where trains are running.

Maps are a must, from state highway maps to U.S. Geological Survey topographical quadrangle maps, to general-purpose and railroad-related atlases depicting small areas in great detail. Electronic map products enable a person to customize a map. For selected areas, railfan guidebooks are available; these often include maps, locations of major junctions and other rail



**Union Pacific GP40-2 No. 1389 leaves the UP Coast Line at Surf, Calif., and is about to enter the Lompoc Industrial Lead en route to Lompoc, Calif., on Oct. 10, 2017.** William L. Steck

facilities, good photo locations, traffic overviews, and historical summaries.

Other guides present line-by-line, station-by-station descriptions of railroads. These are patterned after the carriers' own employee timetables, sometimes available from TRAINS advertisers, as well as at railroad swap meets and online auctions. Reference books, such as those published by Kalmbach Publishing Co. and others, provide information on such topics as the best train-watching "hot spots," diesel and steam locomotives, and tourist lines. They can be purchased at [www.TrainsMag.com](http://www.TrainsMag.com), and also in hobby shops and bookstores. The TRAINS site offers a wealth of information, daily news stories, rosters, and other resources.

Train-watchers benefit from technology advances. Some fans have stopped carrying maps, magazines, and timetables, instead relying on their smartphones. Map apps with conventional maps and satellite views not only show where the tracks are located, but provide an idea of photo angles. Newer apps designed for all photographers show sun

angles at specific locations based on the date and time of day. Note that some train-watching spots might be out of cell range.

TRAINS magazine offers a monthly column called "Hot Spots," which focuses on train-watching locations, provides railfan news, and offers advice on this avocation.

The railroad hobby takes other forms besides train-watching. Many people enjoy the unique travel possibilities offered by passenger trains. Some try to "collect" as many miles of the railroad network as possible by riding regular and special passenger trains. Those with model railroads like to study bridges, buildings, and other structures. The hobby is limitless.

Railroading's rich past appeals to many people who examine the industry from a historical perspective. In places where railroads have been abandoned, it's interesting to find and follow the old rights-of-way, many of which have been converted to recreational trails. Others collect artifacts like lanterns, timetables, and dining-car china. The past is kept alive by thousands who volunteer their time to preserve locomotives, cars, and structures at museums and on tourist railroads.

## SAFETY FIRST

Railroads have many safety rules and slogans with good reason: They are dangerous places. Trains can't stop quickly or swerve to avoid hitting someone, and tracks are easy to trip on. Keep in mind an old safety rule: "Expect equipment to move on any track, in any direction, at any time." The only legal place to cross a rail line is at a designated grade crossing. Remember, railroads are private property and require permission to enter. Many states have strict trespassing laws and attach stiff penalties for violations. Even though a location may



**A grandfather and granddaughter watch a southbound CSX Transportation manifest train at Linden, Ind.** Justin Sandlin

## Railroad parks

Several communities all over the United States have created safe, comfortable places to enjoy railroad action. Some of the more notable include:

- **Railroad Park, Rochelle, Ill.:** At the crossing of Union Pacific and BNSF Railway main lines. To see a live webcam, visit [www.TrainsMag.com](http://www.TrainsMag.com) and click "Photos & Videos."

- **Horseshoe Curve National Historic Landmark:** Near Altoona, Pa., overlooks Norfolk Southern's triple-tracked main through the "Amphitheater of the Alleghenies." More information is available at [www.railroadcity.com](http://www.railroadcity.com).

- **Manchester, Ga.,** 65 miles southwest of Atlanta, features a covered observation deck that overlooks the CSX yard.

- **Crossroads Park,** at the crossing of two CSX lines in Deshler, Ohio, features a picnic area and space to park a camper. Deshler is about 40 miles southwest of Toledo. Marion, Ohio, also has a restored railroad tower open to the public, overlooking a CSX-Norfolk Southern junction.

- **North Platte, Neb.,** offers the Golden Spike Tower, which overlooks Union Pacific's Bailey Yard, the world's largest railroad yard. For more information, go to [www.goldenspiketower.com](http://www.goldenspiketower.com).

- **Folkston, Ga.,** located at the so-called "funnel" of CSX lines coming from the north heading into Florida.

- **Austell, Ga.,** in suburban western Atlanta, offers a train-watching post at the split of two Norfolk Southern main lines.

- **Flatonia, Texas,** shows off Union Pacific main lines in a location between Houston and San Antonio.

look tempting, remember that railroad police or stationary cameras may be watching you. Use your head near the railroad.

## LISTENING IN

Safe and efficient railroad operations depend on radio communications. Crew members use radios to talk to each other while switching; radio enables dispatchers and train crews to stay in constant contact; "talking" trackside train defect detectors report their findings. The railroads' reliance





**Locomotives are a constant source of fascination: BNSF Railway ES44C4 No. 7993 leads a southbound auto rack train on Union Pacific rails at Woodford, Calif.** Scott A. Hartley

on radio aids train-watching. Thanks to widely available, easy-to-use radio communications receivers (scanners), one can listen in on railroad radio talk and get information on train locations and operations.

A scanner continuously checks, or scans, a group of user-selected frequencies for radio transmissions. When it finds a transmission, it stops to allow the user to hear it; when the transmission ends, it resumes scanning. In many areas, more than one of the 96 frequencies allotted to railroads may be in use; a scanner enables a person to monitor several of them at once.

Scanners come in two basic configurations. Their compact size and battery power enables the user to take portable handheld scanners anywhere. Base scanners run off A.C. house electricity, and many can be mounted in a vehicle and run off the car's battery. Spoken railroad communications are carried out on the VHF high band (160-161 MHz), end-of-train (EOT) monitoring devices transmit data on the UHF band (452-457 MHz), giving the scanner-equipped train-watcher a "chirp" sound that provides notice of an approaching freight train. Regardless of the scanner type, reception range can be vastly increased through use of an external antenna.

A caution: Some states prohibit mobile use of scanners. To learn more, visit your local electronics store. Happy listening!

## RAILROADING'S BIG POWER

Locomotives are railroading's most potent and popular symbols. The major types that have been used in North America are steam (now confined to museums, tourist lines, and the occasional mainline excursion), diesel-electric (the standard of the industry today), and straight electric (always a tiny minority).

The major steam locomotive builders were Baldwin, American (Alco), and Lima. Several railroads also constructed their own locomotives. Steam locomotives burn coal, oil, or (in early days) wood in a firebox attached to the boiler. Hot gases from the fire pass through tubes called flues inside the boiler, which contains water. The gases heat the water, turning it to steam. By opening the throttle, the engineer admits steam to the dry pipe, which takes it to the two valve chests (one on each side). Moving back and forth according to the engineer's setting of the valve gear with the "reverse lever," the valves admit steam to the cylinders so the steam can push the pistons as it expands. The piston rods are linked to main rods, which are connected to side rods, which are attached to the driving wheels. After the steam has done its work, it exhausts through the smokebox and out the smokestack, pulling the hot, smoky gases from the flues with it in the familiar chuff-chuff cadence.

Diesel-electric locomotives have a large diesel engine, or prime mover, which turns an alternator or generator, which produces electricity to traction motors that are geared to the locomotive's axles. Today's large road locomotives use A.C. traction motors, which are lighter and have simpler design and maintenance than the D.C. motors that had been used for several decades. Much of the space inside a diesel locomotive's long hood is occupied by auxiliary items such as radiators, blowers, and dynamic braking equipment, as well as an air compressor, and associated equipment.

North American diesel (and electric) locomotive wheel arrangements are expressed in terms of axles, not wheels. "A" indicates a single powered axle, "B" means two together, "C" is three, etc. Non-powered axles are indicated as numbers. Early

## Rail photography

**FOR MANY**, photography is an important part of the railroad hobby. By taking photos, railfans can make a visual record of what they've seen, where they've been, and the changes that occur over time. Many take pictures simply for documentation; others enjoy mixing their interest in trains with the artistic possibilities of photography. Also, it's fun to show your photos to others, and to see what you can learn from them about train-watching spots and photo techniques.

Many websites have emerged in recent years that enable rail photographers from around the world to share their photos in one place. Railpictures.net and rrpicturearchives.net are designed specifically for train photographers, while photographer-created groups on general photo-sharing websites like Flickr and Facebook are quickly becoming some of the most popular ways to share images among friends.

TRAINS' own website offers the chance to appear in our "Photo of the Day," the biweekly "Trackside with TRAINS" competition, and the "Hot Spots" reader gallery. For a more personal experience, host a digital slideshow and invite your friends. Digital projectors cost a few hundred dollars, but all you need is one friend who has one. Software like ProShow (\$69.95) enables you to easily synchronize your photos with music.

Discover major annual rail photography events, including Winterail in Oregon, Summerail in Ohio, and the Center for Railroad Photography and Art's Conversations conference near Chicago. Each event offers an opportunity to meet other photographers and learn something new.

New point-and-shoot digital cameras start around \$100, and their quality is ever-improving. Digital single-lens-reflex cameras, which start at around \$500 for a camera-lens kit, offer better photos with almost no shutter lag. Videotape goes beyond still photography by adding movement and sound.

Check out a number of phone apps and tools to help make the most of your photography. Tools like SunCalc.net can show you where the sun will be at a certain spot at a specific time of day, helping you plan photos before the train arrives.

To learn more, talk to experienced rail photographers, visit your local camera store or hobby shop, or consult books on photography, both rail-oriented and general. — Justin Franz



The Portland section of Amtrak's *Empire Builder* rolls westward along the Columbia River near Lyle, Wash., on June 25, 2017. Scott A. Hartley

streamlined passenger diesel-electrics commonly had A1A-A1A wheel arrangements. But in recent years, most locomotives had all axles powered, and was either a B-B (two 2-axle trucks) or C-C (two 3-axle trucks). Since 2009, though, General Electric has sold many of its Evolution series freight units with A1A-A1A wheel arrangements to two railroads. Electro-Motive Diesel also has offered an unusual B1-1B variation to its freight product line, but with less sales success.

Two builders dominate the North American mainline freight diesel market: Electro-Motive Diesel (part of Progress Rail, a Caterpillar company) and General Electric. EMD, which previously had been a division of General Motors, also offers its new F125 passenger locomotive. Motive-Power Inc., National Railway Equipment, R.J. Corman, Alstom, Brookville Equipment, and Siemens also produce lines of freight, passenger, and/or switching diesels. Former producers of diesel locomotives include all three big-steam builders (Baldwin, Alco, and Lima), and Fairbanks-Morse.

Except for a small number of western mine railroads, the primary users of electric locomotives are Amtrak and commuter railroads, all in the Northeast. Electric locomotives generally draw power from overhead catenary wires via roof-mounted pantographs. The power is modified for use in the locomotives' traction motors. Electric locomotives share many of the advantages with diesels, but can't operate beyond their power supply.

## RIDING THE RAILROAD

One of the best windows on the railroad world are passenger trains, and you have plenty of options. Amtrak, a government corporation that took over nearly all U.S. intercity passenger trains from private railroads in 1971, today operates a 21,000-mile network that includes 500 stations in 46 states served by more than 300 trains each day. Service ranges from hourly on parts of the busy Boston-Washington Northeast Corridor to three times a week on two long-distance runs. Amtrak carries 31 million riders annually.

Rolling stock varies with geography and length of routes. Tight overhead clearances through Northeast Corridor tunnels dictate the use of single-level cars and on overnight trains operating from New York to Miami, New Orleans, and Chicago. Double-deck Superliners equip other long-distance trains, including Amtrak's unique *Auto Train*, which allows passengers to take their automobiles between Virginia and Florida. Shorter corridors operate with varying equipment, ranging from the Pacific Northwest's big-windowed Talgo trains and 150-mph-capable *Acela Express* trainsets in the Northeast, to rehabilitated mid-20th century passenger cars in North Carolina. Many trains also offer café lounges; overnight trains feature sleeping and dining cars. To learn more, visit [www.amtrak.com](http://www.amtrak.com).

Alaska Railroad trains serve that state; operations and on-board amenities vary by season, with more trains in the summer months. More information: [www.akrr.com](http://www.akrr.com).

VIA Rail Canada is the country's intercity rail passenger network. VIA operates frequent service in Canada's Quebec City-Montreal-Toronto-Windsor (Ont.) corridor, and less-than-daily long-distance trains with sleeping, dining, and dome cars from that region to both Vancouver, B.C., and Halifax, N.S. Other operations serve remote northern areas that sometimes are inaccessible by road. Visit [www.viarail.ca](http://www.viarail.ca).

Independent Canadian passenger rail operators include Ontario Northland Railway (to remote Moosonee, Ont.) and Tshiuetin Rail Transportation, which runs trains between Sept-Îles and Schefferville, Quebec. Canadian National's Algoma Central Railway subsidiary offers seasonal excursion service north of Sault Ste. Marie, Ont., and Rocky Mountaineer hosts luxury daytime summer rail excursions out of Vancouver to the Canadian Rockies.

Commuter trains managed by government agencies radiate from major city centers to nearby suburban areas. Unlike light rail and heavy rail electric transit systems, they operate over standard gauge tracks that are part of the national railroad network. Service into New York and Philadelphia is dominated by electric multiple-unit cars, while diesel-powered trains, often with multi-level coaches operating in push-pull fashion with a locomotive at one end, are common elsewhere. Service levels vary on each line.

No matter how you experience railroads, you can best believe it's different each day all over North America. Happy rails! **I**





## Selected railroad terms

**AAR:** Association of American Railroads. The advocacy group that is the voice of large American railroads. It also facilitates uniform safety and security standards for the industry.

**AIR TEST:** application of a train's air brakes at the start of a run to ensure they are functioning properly.

**BALLAST:** layer of material (usually crushed rock, cinders, or gravel) on top of the roadbed that holds the ties in position and facilitates drainage. Also used to describe any extra material added to a locomotive to bring it up to a desired weight.

**BRIDGE TRAFFIC:** freight received from one railroad to be moved by a second railroad for delivery to a third; also "overhead traffic."

**CENTRALIZED TRAFFIC CONTROL (CTC):** traffic control system whereby train movements are directed through remote control of switches and signals from a central control panel. Some railroads refer to CTC as "Traffic Control System" (TCS).

**CLASS I RAILROADS:** The Association of American Railroads establishes three classes of railroads, each based on annual operating revenues. In 2015, there were seven Class I American railroad companies, each with annual operating revenues of more than \$457.91 million: BNSF Railway, CSX Transportation, Kansas City Southern, Norfolk Southern, Union Pacific, Grand Trunk Corp. (operator of Canadian National lines in the U.S.) and Soo Line Corp. (operator of Canadian Pacific Lines in the U.S.). Class I railroads accounted for 93,628 route-miles, and employed 169,000 people. Smaller railroads are considered Class II or Class III, based on their operating revenues.

**COMMON CARRIER:** a transportation company that offers its services to all customers

in exchange for compensation, as differentiated from a contract carrier, which carries goods exclusively for one shipper.

**DISTRIBUTED POWER UNIT (DPU):** an unmanned locomotive controlled remotely from the lead cab and placed in the middle or at the rear of the train.

**DYNAMIC BRAKING:** an auxiliary system that uses locomotive traction motors as generators, producing a powerful braking effect.

**END-OF-TRAIN DEVICE (EOT):** flashing electronic marker placed on the rear coupler of a train, which allows the crew to remotely monitor air-brake system integrity and air pressure.

**FEDERAL RAILROAD ADMINISTRATION (FRA):** federal agency that is responsible for railroad safety. It is part of the Department of Transportation.

**GEEP:** (pronounced "jeep") nickname for General Motors' GP (General Purpose) diesel locomotives, particularly early models of the 1950s.

**HEAD-END POWER (HEP):** electricity from either a locomotive's main generator or an auxiliary generator, used for heating, lighting, and cooling passenger cars.

**HELPER:** a locomotive added to a train for a portion of its run to provide extra power to climb a grade, or to provide additional braking on downgrades.

**HIGHBALL:** a signal from a crew member to an engineer by hand motion, lantern, or radio to proceed, from early railroading's ball signals that were hoisted high to show "clear."

**INTERCHANGE:** junction of two railroads where cars are transferred between them.

**INTERMODAL:** traffic moving by

more than one mode on its trip from shipper to receiver. The term is most frequently used for container-on-flatcar (COFC) and trailer-on-flatcar (TOFC) traffic. COFC uses containers moving between seagoing ships and rail or between domestic rail points. The containers ride on special truck chassis for delivery or pickup at customers. TOFC, often called "piggyback," involves highway trailers moving by rail aboard specially equipped flatcars. Containers now dominate the railroad intermodal business. The word "intermodal" also is used to identify a facility that serves more than one type of transportation, such as a metropolitan rail passenger, intercity bus, and local bus terminal.

**LIGHT RAIL:** a passenger transit system powered by overhead electric wires, typically with some portion of the route running in city streets; often of lighter construction than a heavy rail system where vehicles operate on a private right-of-way. The modern equivalent of a trolley or interurban system.

**NATIONAL TRANSPORTATION SAFETY BOARD (NTSB):** federal agency that investigates accidents in the aviation, highway, marine, pipeline, and transportation industries. The NTSB makes safety recommendations following its investigations.

**POSITIVE TRAIN CONTROL (PTC):** a system to automatically stop trains prior to a collision, being developed by American railroads and being installed on 60,000 miles of high-density rail lines, including most passenger routes and heavily used freight corridors. In 2008, the U.S. Congress mandated that this system be installed and made operational on all designated lines by 2015. This deadline subsequently was extended to the end of 2018.

**RIGHT-OF-WAY:** the track,

roadbed, and property encompassing the track owned by the railroad.

**SHORT LINE:** a small railroad, typically with less than 100 miles of track. There is no official or legal definition of the term, although Class III railroads are often called short lines.

**SURFACE TRANSPORTATION BOARD (STB):** a federal agency charged with resolving railroad rate and service disputes and reviewing proposed railroad mergers.

**SWITCHER:** a locomotive designed specifically for yard service, which calls for good visibility from the cab and pulling power rather than speed. As older switchers are retired, many railroads rely on larger road freight locomotives for many switching assignments.

**TRACTION MOTOR:** an electric motor that turns a locomotive's wheels, providing traction with the rail and making the vehicle move. There is usually one traction motor geared to each axle.

**UNIT:** commonly, a single locomotive (usually a diesel-electric), characterized by a single frame and a coupler at each end; technically, the smallest indivisible portion of a locomotive consist, which is made up of one or more units coupled together controlled by one engineer.

**UNIT TRAIN:** a train carrying a single bulk commodity, such as coal, grain, or autos from one shipper to one consignee without any switching or classification en route.

**WYE:** an arrangement of tracks forming the letter Y used for turning cars and locomotives.

**YARD:** a system or grouping of tracks connected to, but not part of, a main line; used for switching or storing cars, or making up trains.

**A Norfolk Southern auto rack train passes over Twenty Mile Creek east of North East, Pa., en route to Bellevue, Ohio, on May 23, 2017. Michael D. Harding**





On a two-head signal, a yellow-over-red aspect indicates "approach." This is equivalent to a yellow aspect on a single-head signal and yellow over two reds on a three-head signal.

Brian Solomon

# Reading the lights

Interpreting railroad signals for more productive photography

BY BRIAN SOLOMON



**Eastbound CSX intermodal train Q008 slices through multiple interlockings in Muncie, Ind., in October 2011. Stop signals are interlocked to protect the diamonds from westbound train movements.** Brian Schmidt

**T**he eastward interlocking signals are dark when you arrive at a remote desert siding along Union Pacific's former Southern Pacific main line in central Utah. Traffic is erratic and sparse, and there can be long gaps between movements. You wonder, "Should I wait here for a train, or should I move?"

As you ponder this conundrum, the dark signals light up: red-over-red. This immediately tells you that something is about to happen, and from past experience you know that a train must be relatively close at hand. The signals change again to "approach," yellow-over-red. A train has been lined to the east end of the siding, but no further. A few minutes later you can hear a westward freight, and then it comes into view crawling into the siding.

That's the missing piece of the puzzle. UP's dispatcher in Omaha has set up a meet between the westward freight and a yet-unseen train. The signal displays "approach" because the eastward train will be holding the main line and must wait for the westward train to be completely in the siding. Then it may see a clear signal to continue east.

Signals can often provide vital clues that aid in train-watching and photography.

To make the most of signals it helps to

be fluent in three fields of information. First, you need a general knowledge of railroad signaling practice and the information that signal aspects convey to operating crews. Second, you have to take the time to gain specific understanding of individual installations. Lastly, you must know how to interpret signal indications to make practical use of the information they supply. Reading signals can save time spent waiting around, but also give you that vital bit of information at just the right moment to make a key photograph.

The challenge will be in applying general knowledge to specific trackside situations. I can't supply definitive clear-cut scenarios for every possible situation because of the numerous variations in railroad practice, differences between rule books, and the inevitable exceptions to common practice. Further complicating matters are differences in hardware, and the nuances between individual installations.

No two signaling installations are exactly the same and there are often considerable differences in operational practices. However, understanding the differences in the intended role of signals, combined with knowledge of the ways the individual signals are wired, will make a big difference in how you — the trackside observer — interpret the information they provide.

The best and most effective way to learn

to read an individual signal installation is by studying it — observing how signals change with the approach and passage of trains. There's your first clue: watch for change.

## **SIGNALING BASICS**

Key to this article are the signal aspects (appearance of lights displayed by signal) and their corresponding indications (the instructions conveyed to train crews by the aspect). This story will focus on standard types of lineside color-light signal hardware typically used on North American main lines, and emphasize the role of the most common automatic block and interlocking signal aspects. The peculiarities of some older types of hardware such as semaphores, position lights, and color position lights are largely beyond the scope of this discussion.

Signal aspects are represented by the arrangement of the lights vertically on individual signal heads. The arrangement of lamps on the heads is not relevant when interpreting the aspects displayed. Typical color-light signals may feature one, two, or three heads arranged in a column. The individual signal head is distinguished by a surrounding shield, and each head is in-



tended to display only one light at a time. The number of heads employed depends on the variety of aspects that signal may be required to display. It may also depend on whether or not the signal is an “absolute,” not to be passed without explicit permission, or “permissive,” able to be passed after coming to a stop.

The arrangement of the lamps within a color-light head varies among the different styles of hardware, but despite these differences in most circumstances the aspects displayed are the same. The older style of “searchlight” hardware features a head with single light projected through a housing using an interior mechanical arm that positions colored filters over the lamp to change the color of the light. Common color-light heads may feature lamps arranged vertically, similar to the common highway traffic light, but with the color order reversed, or in a triangular cluster.

To enable an individual signal head to display a greater number of aspects, flashing lights may also be used. A flashing light changes the aspect, and must be interpreted differently than a solid light. Flashing signal lights are characterized by a relatively slow on-off flash rather than a rapid blinking.

When interpreting an aspect, the intended role of the individual signal is far more important than the style of hardware. It helps to know the rules applied to specific aspects as governed by a railroad’s rule book. In general, aspects follow a logical progression, from least restrictive (high green) to most restrictive (unqualified red) as dictated by a standard code of rules, yet there are some significant differences in how individual signals are viewed and interpreted.

Remember that the viewpoint of a casual observer is fundamentally different from that of a train crew. Not only are signal heads aimed for optimal sighting by train crews, which may mean they are harder to see from the ground, but more importantly, color-light signals are often approach lit. A train crew expects to see signals lit, but the ground-level observer may be often faced with situations where the signals are dark and only light up as a train approaches. But this difference must be considered carefully since it provides vital information.

Most signal aspects are based on a simple progression of color lights. In its simplest form, a lone green light is called a “clear” aspect, and indicates that the line ahead is clear and a train may proceed; a lone yellow light, is called an “approach,” and indicates that a train may proceed, but be prepared to stop at the next signal; while a basic red light indicates “stop.” The meaning of red signals can change with the addition of a number plate. The number plate displays the milepost on the signal and is less restrictive than a red signal without a

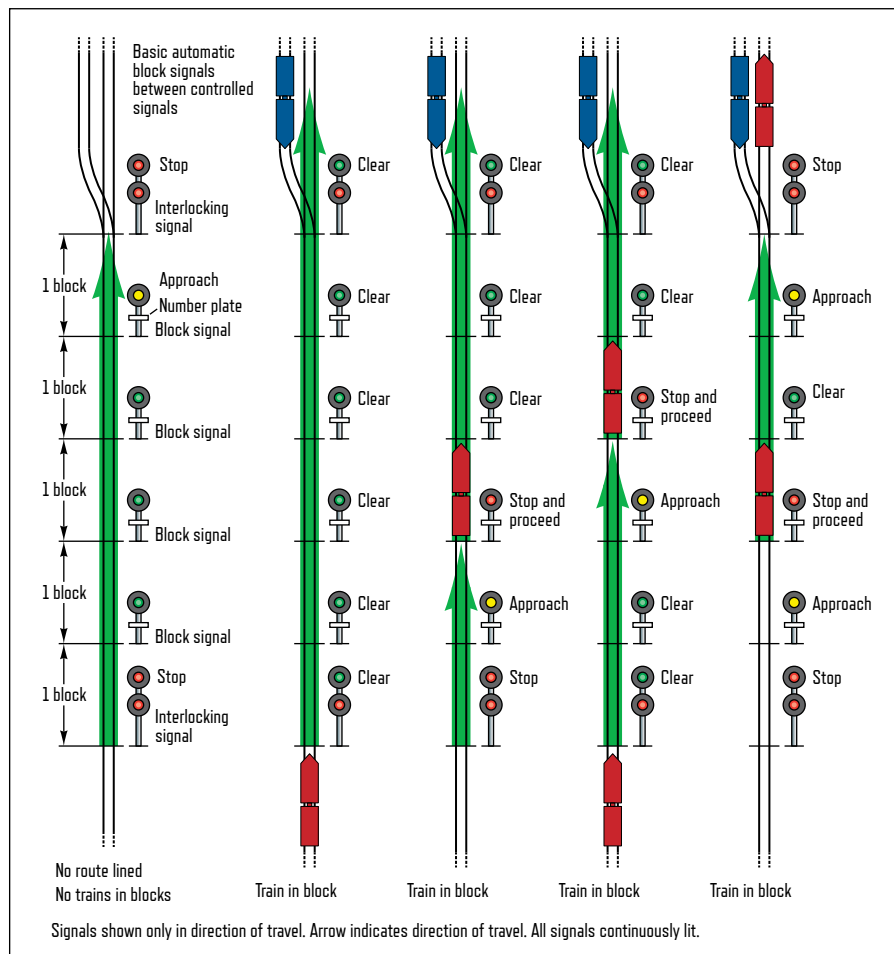


plate. Commonly, signals used in automatic block service will display a qualified red light that indicates “stop and proceed.”

## ABSOLUTE SIGNALS AND PERMISSIVE SIGNALS

For this discussion we are primarily interested in the differences between interlocking signals and automatic block signals, and not in the differences between signals assigned to specialized roles, such as fixed approaches to diamond crossings and switch point indicators.

Lineside hardware may be considered as being either absolute or permissive. The defining difference for the train crew is how the signal displays its most restrictive aspect. Yet for a ground-level observer, an equally important difference is knowing what conditions are present when an individual signal will normally display its most restrictive or least restrictive aspect(s). In other words, is it normally red or green, and if so, why?

An absolute signal is typically a dispatcher-controlled signal. Absolute signals are commonly used in conjunction with an interlocking such as that governs movements at junctions, diamond crossings, the switches for controlled sidings, or for drawbridge protection. These are clearly distinguished by lack of a number plate, among

other characteristics. A chief feature of an absolute signal is that when it displays an unqualified red light, or column of two or three red lights, the aspect is interpreted as full “stop.” That means a train must stop and remain stopped. Unlike “stop and proceed,” this red light must not be passed by a train unless specific permission is authorized by the dispatcher.

By contrast, permissive signals are commonly used as intermediate signals in automatic block territory. They do not require trains to remain stopped when a red aspect is displayed. Permissive signals protect individual track blocks, which are usually located between points with absolute protection, such as an interlocking.

The specifics of different railroads’ rule books vary: an automatic block signal may require a train to stop and then proceed at restricted speed, while in other cases it may only require that a freight train reduce to “restricted speed,” and be prepared to stop. In this regard, some railroads have used qualifying plates that display “P” or “G,” which under circumstances prescribed in the rule book will allow trains to pass these signals at restricted speed without stopping.

Often permissive signals do not actually authorize train movements, and in order to proceed, trains will require some other



**Some railroads use staggered heads to help distinguish two-head intermediate signals from home signals. Although approach-lit signals are dark much of the time, train crews should always see them illuminated, like here on Conrail's ex-Erie line at Hornell, N.Y. Brian Solomon**

form of authority, such as a track warrant issued by the dispatcher. In such instances, a radio scanner can be especially helpful when used in concert with reading the signals to find trains.

The difference between interpreting an absolute signal and an automatic block signal is important to the lineside observer. Both interlocking signals and automatic block signals will display a high green to indicate "clear." But to make use of this information, it is necessary to see the difference. Interlocking signals normally display their most restrictive aspect (stop), and will only display an aspect to proceed (any aspect from a full "clear" to "restricting" depending on the circumstances) when circuits are lined by a dispatcher.

When an interlocking signal displays any aspects other than all red, it is a good sign that a dispatcher has authorized a train to

proceed. By contrast, if a continuously lit intermediate signal displays a "clear," it merely reflects the safe condition of the track circuit in blocks immediately ahead and may not provide a sign that a train movement has been authorized.

### **AUTOMATIC BLOCK AND INTERLOCKING SIGNALS**

A basic automatic block signal system typically uses track circuits to detect the presence of trains on the line and potentially dangerous track conditions, such as open switches and broken rails. In its basic form, an automatic block system functions to facilitate safe movements in order to allow trains to follow each other closely and maximize the use of track space, while preventing rear-end collisions and without requiring an employee to authorize movements between individual signals.

In a system of fixed blocks, each block is typically protected by a permissive automatic block signal as previously described. Length of blocks may vary depending on the nature of operations specific to the line, including maximum train speeds and lengths, braking distances, as well as the location of interlockings, heavy infrastructure (such as bridges and tunnels), and grade crossings.

In a typical two-block system, a signal displaying "clear" indicates that at least the next two blocks are clear.

Advanced circuitry, such as that used in conjunction with centralized traffic control systems, may be wired to allow for following movements between trains in the automatic blocks between the controlled points (that govern the ends of passing sidings or crossovers on multiple track), while preventing opposing movements between those same two points. These differences will affect aspects displayed by continuously lit, lineside automatic block signal hardware, as a train departing a controlled point, or a dispatcher lining the direction of traffic between control points, may result in all the opposing automatic signals between opposite controlled signals displaying red.

Since the aspects displayed by automatic block signals will vary depending upon circumstances, it is necessary to make a study of specific installations to best understand how these signals change with the approach and passage of trains. Yet, any change in the condition of an automatic block signal may offer a clue as to pending train movements — so be alert.

Is the signal protecting a line with single track or multiple track? Is that track signaled for following movements in one direction or both directions? Is this territory controlled by some form of CTC where the dispatcher can set the direction of traffic and authorize train movements on signal indication? If so, is the next signal a dispatcher-controlled signal? Or is the railroad tradition directional double track with operations proceeding in the current of traffic?

Railroad operating documents, such as employee timetables, can be helpful, but rarely offer detailed clues on individual blocks. They also lack details on whether or not signal installations are continuously lit or approach lit; since operating crews should always see signals lit, such details are essentially irrelevant.

Where block signals are continuously lit, an observer needs to see aspects in both directions to get a better understanding of what is happening. If signals in both directions display "clear" aspects simultaneously, the track circuits are not occupied for at least two blocks on either side of the signals, thus it is unlikely that a train is close by. Assuming the next signal is not an absolute



signal, if an automatic signal changes from “clear” to “approach” and then to red, “stop-and-proceed,” this presents a good sign of an approaching train.

However, at an interlocking, when you witness a continuously lit signal change from “stop” to any other aspect, it is a positive sign that a train movement has been planned. When approach-lit interlocking signals suddenly illuminate red, it may indicate a train entering the block, or it might just be a switch being opened in the block, but be alert if these signals change from red to green. The amount of time from when a route is lined to the passage of a train can vary greatly, but routine observations of specific signal installations will provide better understanding of workings and timings.

## SPEED SIGNALS AND ROUTE SIGNALS

Depending on a railroad’s rule book, interlocking signal aspects may provide either route indications or speed indications.

Route signaling indicates when switches diverge from the normal route. For example, a train approaching a junction might receive an “approach diverging” aspect, yellow-over-yellow, and this may indicate “proceed prepared to advance on diverging route at the next signal at prescribed speed through switches.” The next signal, located at the interlocking signal might display “diverging clear,” red-over-green, and indicate “proceed on diverging route at prescribed speed through switches” or the more restricting “diverging approach,” red-over-yellow, indicating “proceed on diverging route not exceeding prescribed speed and be prepared to stop short of next signal.”

At interlockings, route signaling rules do not assign detailed speed instructions to diverging route indications. Since speed is not governed by route signaling, the crew relies on its knowledge of the line to know how fast the train can safely negotiate specific interlockings.

Speed signaling rules assign more detailed speed indications instead of basic routing instructions. Speeds are dictated by the maximum safe speed through switches, and most speed signal indications only limit train speed within defined interlocking limits. The rule will specify if a train can resume normal speed once completely through the interlocking.

The basic speeds are: “normal speed,” deemed the maximum safe line speed; “limited speed,” often defined as 45 mph; “medium speed,” 30 mph; and “slow speed,” which is 15 to 20 mph. In addition, there is a set of conditions known as “restricted speed.”

Speed signals provide a locomotive engineer with the information he or she needs to safely negotiate an interlocking

with minimal delay. The use of track circuits, in combination with interlocking signals allowing trains to follow each other through interlocking routes, results in fairly complex speed indications. These are typically used at large junctions and at major passenger terminals.

A basic rule of thumb: on three-head signals, the top head is used for “normal” speed aspects, the middle head for limited and medium speed aspects, and the bottom head for slow speed and restricting. A high green is “clear.” A steady middle green (with red lights above and below) is “medium clear” (“proceed at medium speed until entire train clears all interlocking switches, then proceed at normal speed”). And a steady low green (with two red lights above) is “slow clear” (“proceed at slow speed until entire train clears all interlocking switches, then proceed at normal speed”). A flashing middle green may be used to indicate “limited clear.”

Multiple-head signals will feature some equivalent aspects to single-head signals. For example a high green on the three-head signal, green-over-red-over-red, is equivalent to both a single green light on a high signal and a green-over-red on a high two-head signal. All three aspects indicate “clear” and provide the same instructions to a train crew.

Where the common high single head signal with a yellow light indicates “approach,” a yellow-over-green aspect (and its equivalent three-head: yellow-over-green-over-red) is named “approach medium,” an indication meaning “proceed approaching the next signal at medium speed.” This aspect may be used prior to an interlocking where a medium speed route has been lined. A similar aspect is “approach limited” that features a yellow-over-flashing-green and warns: “proceed approaching the next signal at limited speed.” This aspect is used where limited speed switches are in place.

A three-head signal displaying a middle yellow light (with red lights above and below) is named “medium approach,” and indicates: “proceed prepared to stop at the next signal — trains exceeding medium speed must begin reduction to medium speed as soon as the medium approach signal is clearly visible.” This indication is equivalent to the “diverging approach” used by route signaling rules, but offers more specific operating information. This may be used in a variety of circumstances, for example, in a situation where a meet is planned at a controlled siding with a medium speed switch at the entrance to the siding, and this aspect advises the crew of the need to travel at medium speed through the switch while being prepared to stop at the far end.

When line-side, knowing how to inter-

Signal aspects	
Searchlight	AAR rule and name
	Rule 281 Clear
	Rule 281A Advance approach medium
	Rule 281B Approach limited
	Rule 281C Limited clear
	Rule 282 Approach medium
	Rule 283 Medium clear
	Rule 283B Medium approach slow
	Rule 284 Approach slow
	Rule 285 Approach
	Rule 286 Medium approach
	Rule 287 Slow clear
	Rule 290 Restricting
	Rule 291 Stop and proceed
	Rule 292 Stop
Only high signal aspects shown; not all shown. Wording of indications may vary.	

pret simple and complex signal aspects can give you a practical clairvoyance of railroad operations by providing a heads-up when meets are planned, when a train may take a diverging route, or simply when to be ready for action. **I**



**This eastbound CSX  
interlocking signal on  
No. 2 track at Fostoria,  
Ohio, displays an  
“approach medium”  
aspect; beyond that is  
an “approach” signal.**

Dale A. DeVene Jr.





# Breaking the code



The seven Class I railroads use different systems to keep track of their trains, and knowing their tricks can yield useful train-watching intel

BY BRIAN SCHMIDT

**T**rain symbols have largely gone unnoticed by fans for decades now. Much like the serial number on the bottom of a company's laptop computer, they serve a vital role in record keeping and accounting, but are still mysterious to those not "in the know." Yet the modern train symbol often follows the same structure as the beloved train numbers of years past. One can still decipher Norfolk Southern train 24M as an eastbound because the final digit is even, just like the train numbers printed in long-forgotten timetables.

Train symbols perform many functions on the modern railroad: they facilitate crew management, timekeeping, assignment of priority, and differentiation of commodities. They provide a formal name

for identification and communications, both audibly and in written records. They also add another level of interest to the world of railroading, something needed as the trains themselves seem more and more homogenous.

Even with such a serious role to perform, modern train symbols can still be, at times, fun. Canadian Pacific operates a local in Manitoba called "PG13," and a BNSF Railway freight from Barstow, Calif., to Galesburg, Ill., is commonly called the "BARGAL."

Each railroad has its own unique system that serves its own needs, yet the railroads within a region can have remarkably similar traits. In the West, BNSF, Kansas City Southern, and Union Pacific all use origin and destination codes. In the East, CSX Transportation and NS both prefer a num-

**CN sand trains U751, right, with run-through NS power, and U752 meet at Ackerville, Wis., in June 2017.** TRAINS: Brian Schmidt

bers-based approach. Ditto CP and Canadian National in the Great White North.

Learning train symbols, usually by monitoring radio transmissions, is one way to enhance the train-watching experience. Freight trains are rarely scheduled, but often operate with a measure of predictability. After a few sessions trackside, and with train symbols in hand, operations become clearer. This approach can serve as a makeshift schedule.

Adding visual cues, such as how trains are blocked, or what types of containers and trailers they carry, can further this goal, especially when specific symbols cannot be obtained for every train.





**BNSF unit oil train U FYNSLC4 13 rolls through Fraser, Colo., on UP trackage rights. The train operates from Fryburg, N.D., to Salt Lake City via Denver.**

## BNSF RAILWAY

BNSF's train symbols are made up of a designating letter, which signifies the type of train, three-character origin and destination codes, a section number, and a date of origination. (Bulk commodity trains use a serial number instead of the date that resets annually. Each loaded unit train that loads at a given location will get a sequentially higher number.)

Take, for example, train H-PASGAL1-22: High-priority merchandise, operating between Pasco, Wash., and Galesburg, Ill., as a first section originating on the 22nd day of the month. Another example would be train Q-PTLCHC1-11: Guaranteed intermodal, operating between Portland, Ore., and Cicero Yard in Chicago as a first section originating on the 11th day of the month.

There are 24 one-letter train designation codes, presented in the table at right, and nine section numbers, digits 1-9, which differ by train type. They are often combined, colloquially, to describe a train. For example, a "Z9" is a high-priority United Parcel Service-type

intermodal train, while an "S6" is a double-stack container train operated for K Line or Sealand shipping companies. With intermodal, vehicle, and manifest trains, a "9" designation is the highest priority. That is not the case for all train types, however. On grain trains, a "9" indicates a shuttle train and does not convey priority over other types of grain moves.

Origin and destination codes are many and varied on BNSF. There are almost 4,000 in use on the railroad. They include major terminals, like Pasco, Wash., and Galesburg, Ill., along with lesser-known ones, such as Bayard, Iowa, and Guernsey, Calif. Some are obvious abbreviations, like "BAR" for Barstow, Calif., and some are less intuitive, like "SXR" for Streator, Ill.

There are origin and destination codes for both online and offline destinations. Some of the offline destinations are generic, like "NSI" for Norfolk Southern Interchange, or more specific, like "LDR" for the railroad's Landers Yard near Chicago.

Additional origin and destination codes exist for coal trains, which tend to operate between specialized facilities that do not see other types of trains. Because of this, there are codes for both mines and power plants. Examples include "BTM" for the famed Black Thunder Mine in Wyoming and "LRM" for Lee Ranch Mine in northern New Mexico.

For offline power plants and other coal consumers, the destination codes are often keyed to the interchange point. For instance, "CNM" is used for DTE Energy trains destined for Monroe, Mich., and interchanged to NS in Chicago, while "CHS" is used for Northern Indiana Public Service Co. trains destined for

Wheatfield, Ind., on NS.

While BNSF's train symbols can be among the easiest to decode the origin and destination on, they are also among the least heard when trackside. Dispatchers prefer to address a train by lead locomotive, rather than by train symbol, which can smooth out the radio conversations.

## BNSF TRAIN TYPE PREFIXES

<b>A</b> Amtrak trains	<b>O</b> Office car specials
<b>B</b> Empty intermodals	<b>P</b> Premium intermodals
<b>C</b> Loaded coal trains	<b>Q</b> Guaranteed intermodals
<b>D</b> Light engine moves	<b>R</b> Long-distance locals
<b>E</b> Empty coal trains	<b>S</b> Intermodals
<b>F</b> Detour trains	<b>T</b> Transfers
<b>G</b> Unit grain trains	<b>U</b> Unit trains
<b>H</b> Priority manifests	<b>V</b> Automotive trains
<b>J</b> Dimensional moves	<b>W</b> Work trains
<b>K</b> Helper crews	<b>X</b> Empty grain trains
<b>L</b> Locals	<b>Y</b> Yard jobs
<b>M</b> Manifests	<b>Z</b> Priority intermodals

## TRAIN SECTION NUMBERS

Intermodal	
<b>1</b>	First section
<b>2</b>	Second section, primary
<b>3</b>	Extra
<b>4</b>	Third section, primary
<b>5</b>	Second section, priority
<b>6</b>	First section, priority
<b>7</b>	Third section, critical
<b>8</b>	Second section, critical
<b>9</b>	First section, critical
Vehicle	
<b>3</b>	Extra
<b>9</b>	Critical arrival
Manifest	
<b>2</b>	Second section
<b>3</b>	Extra
<b>5</b>	Extra
<b>9</b>	Critical arrival



**BNSF manifest train H PUEBEL1 24 departs the Pueblo, Colo., yard for Belen, N.M., on Jan. 25, 2017. Two photos, Chip Sherman**





Southbound CN manifest train M348, left, holds the main at Junction City, Wis., as northbound intermodal train Q119 runs by it on the siding in July 2017. Matt Krause

## CANADIAN NATIONAL

CN train symbols consist of an eight-character code. They are made up of a single letter and three-digit code indicating train type and routing, a single digit indicating the originating division, a single digit indicating section number, and two digits for the date or origination. (Bulk commodity trains use a serial number instead of the date of origin.)

For example, train M3479119 indicates a manifest operating between Kirk Yard in Gary, Ind., and Prince George, British Columbia; originating in the Central Division; as a regular section; on the 19th day of the month. In

common usage, however, including on the radio, the train would be referred to simply as "M347."

A list of CN train symbol series and nine train origination codes by operating unit is included at right.

Common unit train commodities — including coal, grain, potash and sulphur — have their own train series. The U700-series is possibly the most diverse on the railroad, including unit trains or crude oil, aggregates, military equipment, and coke, along with the associated empty equipment moves. Other unit train commodities without their own assigned series fall into this series.

### CN TRAIN SYMBOL SERIES

<b>A400-series</b>	Short-haul manifests
<b>B300-series</b>	Unit potash trains
<b>B700-series</b>	Unit potash trains
<b>C700-series</b>	Coal trains
<b>E200-series</b>	Priority freights, automotive
<b>G800-series</b>	Grain trains
<b>K500-series</b>	Transfers
<b>L500-series</b>	Locals
<b>M300-series</b>	Long-haul manifests
<b>P000-series</b>	Passenger trains
<b>P600-series</b>	Passenger trains
<b>Q100-series</b>	Intermodals
<b>S700-series</b>	Unit sulphur trains
<b>U700-series</b>	Other unit trains

### CN TRAIN ORIGATION CODES

<b>1</b>	Atlantic Region
<b>2</b>	St. Lawrence Region
<b>3</b>	Great Lakes Region
<b>4</b>	Prairie Region
<b>5</b>	Pacific Region
<b>6</b>	Michigan Division
<b>7</b>	Central Division (south of Fulton, Ky.)
<b>8</b>	Wisconsin Division
<b>9</b>	Central Division (north of Fulton, Ky.)

CN uses four train symbol letters without defined numbers series: "F" for foreign road detours and trackage rights trains, "H" for run-through trains originating on CP, "W" for work trains, and "X" for extra trains.

Train crews and dispatchers use train symbols in their regular radio communications, making them easy for railfans to pick up.



CN train M399 rolls through a curve near Scotch Block, Ontario, in November 2016. The train operates between MacMillan Yard in Toronto and a Union Pacific connection at Salem, Ill. The M300-series are long-haul manifest trains on the railroad. Marcus W. Stevens





Intermodal trains 198, left, and 199 meet at Duplainville, Wis., in April 2014. The Chicago-Vancouver corridor trains are morning regulars in southeast Wisconsin. TRAINS: Brian Schmidt

## CANADIAN PACIFIC

CP train symbols are some of the simplest in use. Most trains use a three-train number followed by a two-digit date of origination, with even numbers for eastbound trains and odd numbers for westbounds. For example, train 298-14 represents a train from South Edmonton, Alberta, to Belt Railway of Chicago Clearing Yard that originated on the 14th day of the month. Along with being simple, CP train symbols are also commonly heard in radio transmissions, so they are easy to learn.

The railroad differentiates between nine types of trains, listed at right. Note that the majority of freight trains — intermodal, automotive, and manifest — are lumped together in the 100-, 200-, and 400-series.

Non-scheduled unit trains of various types are listed in the 300-, 600-, and 800-series. Instead of a date of origination, CP unit trains use a three-digit code, which conveys routing information and commodity, however such numbers are not normally used in radio transmissions by train crews or dispatchers.

## CP TRAIN SYMBOL SERIES

<b>100-series</b>	Priority intermodals, automotive
<b>200-series</b>	Intermodals, automotive, manifests
<b>300-series</b>	Grain trains
<b>400-series</b>	Regional freights
<b>500-series</b>	Locals
<b>600-series</b>	Unit trains
<b>700-series</b>	Extras and detours
<b>800-series</b>	Coal trains
<b>900-series</b>	Foreign roads, company services

Crude oil unit trains are assigned to the generic 600-series for all non-coal, non-grain unit trains, which also includes salt, sulphur, ethanol, potash, and phosphates. Note that train No. 609, is a generic symbol for empty crude oil trains originating in Albany, N.Y., and can include trains for multiple destinations in the U.S. and Canada.

Locals use a one-letter prefix to denote the division of operation while yard jobs use a two-letter prefix, marking one exception to the railroad's three-character train symbol rule. For example, a Montreal-area local is F24, while a Montreal-area yard job is FL12.

Passenger trains also use a letter in their CP-assigned train symbols, but they are added after the two numerals. This includes Amtrak and VIA Rail intercity trains, as well as commuter trains, the *Rocky Mountaineer*, and the railroad's own office car trains. For example, the southbound Amtrak *Adirondack* is 68A on CP, and GO Transit commuter trains to Hamilton, Ontario, are in the 90G-series.



Westbound Canadian Pacific train No. 299 passes Weaver, Minn., in October 2014 with two General Electric-built locomotives in charge. The manifest operates between the Belt Railway of Chicago's Clearing Yard and Edmonton, Alberta. STEVE GLISCHINSKI





**Kansas City Southern SD70MAC No. 3936 and an SD70ACe lead northbound unit grain train GHVKC-27 at Gentry, Ark., on the Heavener Subdivision on May 27, 2012. The smallest Class I railroad uses the "G" prefix for its unit grain trains.** Two photos, Dan Kwarciany

## KANSAS CITY SOUTHERN

KCS uses alphanumeric train symbols, similar to the two larger Western railroads. Its symbols consist of a single letter code designating the train type, two-letter origin and destination codes, and a two-digit origination date. For example, train M-KCSH-31 would be a manifest operating between Kansas City, Mo., and Shreveport, La.,

originating on the 31st day of the month.

The railroad recognizes 14 types of trains. The prefixes for each are presented in the table here. The train designations are largely intuitive, such as "A" for automotive, "G" for grain, and "M" for manifest. However, there are multiple designations for coal trains, "C" and "L," and unit aggregate trains operate with "O" symbols.

The "U" symbol is used for unit trains without an assigned prefix.

Some suffix letters are also in use, such as "S" for grain shuttle trains. They appear after the destination code.

There are KCS origin and destination codes for both online and offline terminals. For example, "NH" represents Neosho, Mo.; "PB" represents Pittsburg, Kan.; and "VX" represents Vicksburg, Miss., all online locations. Kansas City is divided between "KC" for Missouri and "KS" for Kansas locations.

Codes also exist for multiple offline locations, such as "NS" for Norfolk Southern interchange trains, and "LA" for Los Angeles, reached via BNSF interchange. Trains to or from Mexico use an "MX" code in their symbol.

KCS is the only Class I railroad in North America that does not host scheduled passenger service. Consequently, there is not a designation for passenger trains in the table.

### KCS TRAIN SYMBOL CODES

<b>A</b> Automotive	<b>M</b> Manifest
<b>C</b> Unit coal	<b>O</b> Unit aggregate
<b>D</b> Military	<b>R</b> Road switcher
<b>G</b> Unit grain	<b>S</b> Special
<b>H</b> Haulage local	<b>U</b> Other unit
<b>I</b> Intermodal	<b>W</b> Work train
<b>L</b> Coal	<b>X</b> Extra manifest



**KCS unit grain train G-KCQRS-26 passes near Westville, Okla., in May 2012.**





Sidney, Ohio-based CSX local J794 rolls west from the city on the former Conrail Indianapolis Line in July 2010. This job, like many on CSX, changes symbols based on the day and shift that the crew goes on duty — J794 is the Saturday-only symbol. Three photos, Brian Schmidt

## CSX TRANSPORTATION

CSX's train symbols consist of a designating letter and a three-digit numerical code, followed by a two-digit origin date, making them among the simplest train symbols in use. Additionally, even-numbered train symbols, as designated by the final digit, are considered to be eastbounds or northbounds, while odd train symbols are considered westbounds or southbounds.

Train symbols that begin with the letter "Q" are the most common across the CSX system. Variations on the Q-series include "L" for alternate schedules, "R" for reroutes, "S" for second sections, and "X" for extras.

The lower-numbered Q-series trains are of higher priority than their higher-numbered counterparts. The railroad's hottest UPS trains carry sub-100 Q-series symbols, such as Q010 between Chicago and North Bergen, N.J.,

and Q007 between Cleveland, Ohio, and East St. Louis, Ill.

Alternate schedules include trains which operate on a different schedule at least one day a week. For example, a daily intermodal train might have a different schedule for its weekend departures because of shorter ramp hours at its originating terminal, thus requiring an "L" symbol.

Rerouted trains generally operate between the same endpoints, but on a different intermediate route because a derailment or scheduled maintenance program has otherwise closed the regular route for an extended time. For example, CSX will reroute its Chicago-Nashville, Tenn., traffic, which normally operates through Evansville, Ind., via Cincinnati due to trackwork on the regular route.

Twelve additional letters are used for other

train types, including passenger, unit, work, and foreign road trains.

Local symbols are based on the division in which they operate, while yard jobs are designated by the shift on which they originate: 100-series for first shift, 200-series for second shift, and 300-series for third shift. Also note that yard-job symbols are reused throughout the system; there are multiple "Y101" trains on duty at the same time.

### CSX TRAIN SYMBOL CODES

<b>E</b>	Empty unit trains
<b>G</b>	Grain trains
<b>K</b>	Various unit trains
<b>L</b>	Alternate Q trains
<b>N</b>	Loaded coal trains
<b>P</b>	Passenger trains
<b>Q</b>	Scheduled freight trains
<b>R</b>	Reroutes
<b>S</b>	Second sections
<b>T</b>	Loaded coal trains
<b>U</b>	Loaded coal trains
<b>V</b>	Grain trains
<b>W</b>	Company service trains
<b>X</b>	Extras, light power moves
<b>Y</b>	Yard jobs
<b>Z</b>	Foreign road trains

### CSX Q-SYMBOL SERIES

<b>Q000-series</b>	Expedited services
<b>Q100-series</b>	Intermodal
<b>Q200-series</b>	Automobiles & parts
<b>Q300-series</b>	East-west manifest
<b>Q400-series</b>	Eastern north-south manifest
<b>Q500-series</b>	Western north-south manifest
<b>Q600-series</b>	Cross-corridor trains
<b>Q700-series</b>	Specialized unit trains



Intermodal train Q110, since renumbered to Q010, rockets through Defiance, Ohio, in March 2011 on its way between Chicago and North Bergen, N.J.



## NORFOLK SOUTHERN

NS uses three-digit train symbols with a two-digit section code and a two-digit origination code. Each series of numbers, designated by the first digit, represents a different type of train. The railroad often uses a letter in place of the last digit, but that does not convey any special meaning beyond the train series. The last numeral in a train symbol designates direction of travel: even numbers are considered eastbounds or northbounds while odd numbers are considered westbounds or southbounds.

For example, both 205 and 21Z are westbound intermodal trains. The first digit signifies an intermodal train, and the last numeral is odd, marking a westbound train.

The railroad recognizes 10 types of trains, detailed in the table at right.

A leading letter on an NS train symbol can signify one of two things: a local, or a second section or other extra. Locals are coded to their respective originating division (and some use two letters for four characters). Second sections also operate with leading letters, which are noted in the table at right. For example, a second section of a manifest train would operate with an "M" prefix, so that eastbound train 18A's second section becomes M8A.

Amtrak trains operating over NS trackage have a special symbol assigned, usually beginning with a numeral "0," while NS's own office car trains often run with a 955 symbol, regardless of their route.



**Westbound intermodal No. 205 passes Otis, Ind., on May 30, 2011. The train can be identified when trackside by its mix of UPS trailers and J.B. Hunt containers.**

For the larger view, look at train 14K, the full symbol being 14KL213. The initial three characters give the train symbol, 14K; the next two characters are a code for where the crew is called, L2 for Bellevue, Ohio, on the Lake Division; the last two characters are the date the crew was called, the 13th day of the month.

When an NS train is recreated en route, the railroad adds 31 to the date code. Thus, the 14KL213 becomes 14KL244.

This is purely academic, however. Dispatchers and train crews use the first three characters on the radio in regular practice.

**NS train 60W is a loaded unit steel coil train that runs from Chicago to Mingo Junction, Ohio, seen leaving Toledo, Ohio, in January 2017.** Michael D. Harding

### NS TRAIN SYMBOL SERIES

<b>000-series</b>	Special trains
<b>100-series</b>	Manifest trains
<b>200-series</b>	Intermodal and automotive trains
<b>300-series</b>	Manifest trains
<b>400-series</b>	Coal and coke trains
<b>500-series</b>	Coal and grain trains
<b>600-series</b>	Coal and unit trains
<b>700-series</b>	Coal trains
<b>800-series</b>	Coal trains
<b>900-series</b>	Company service trains

### NS EXTRA TRAIN PREFIXES

<b>000-series</b>	R	<b>500-series</b>	Y
<b>100-series</b>	M	<b>600-series</b>	Z
<b>200-series</b>	I	<b>700-series</b>	Q
<b>300-series</b>	W	<b>800-series</b>	S
<b>400-series</b>	X	<b>900-series</b>	O







**UP's intermodal train ZDVSC operating between Denver and Salt Lake City rolls out of Echo Canyon and curves through Henefer, Utah. The "Z" symbol is known throughout the railroad, and railfans, as a high-priority move.** Michael D. Harding

## UNION PACIFIC

UP train symbols use a designating letter, which signifies the type of train; two-character origin and destination codes; and a date of origination. Second sections have a "2" prefix on the regular train symbol.

There are 14 train-type letter prefixes, presented in the table at right. UP uses the prefix letters to differentiate between train commodity types, and even between service levels offered for the same commodity. The railroad offers higher priority "Q" manifest schedules on select routes, while "M" manifest trains blanket most of the UP system.

Take, for example, MPRNP-19: Manifest, operating between Proviso Yard near Chicago and North Platte, Neb., originating on the 19th day of the month.

Similarly, there are three levels of intermodal service, designated with "Z" for high-priority, "K" for mid-priority, and "I" for other intermodal service. The railroad's dedicated refrigerated trains, operating between the West Coast and a CSX connection in Chicago, also carry a "Z" symbol, and are the only non-intermodal trains on the system to do so.

Seven train symbol suffixes, which

designate train schedules and other operations information, are noted at right.

Work trains, which use a "W" prefix, also use a suffix letter to designate the type of work train, after the origin and destination codes. Those suffixes are also presented at right. Some duplicate entries in the general pool of suffix letters. For example, a ballast train operating between Roseville and San Jose, Calif., would carry a WRVJSB symbol.

Trains that operate as a turn, such as helper sets or work trains, use the same code for the origin and destination, so a helper set out of Green River, Wyo., would carry an HGRGR symbol.

UP's two-letter origin and destination codes can be less intuitive than the three-letter codes used on BNSF. For example, there are six locations on the UP system that begin with "Al" so some duplication exists. Because of this, Alamosa, Colo., is "AA;" Albina Yard in Portland, Ore., is "AB;" Albert City, Iowa, is "AC;" Alpine, Texas, is "AE;" and Alexandria, La., is "AX."

Like other railroads that use the origin and destination codes, there are varied examples for both on- and offline locations.

Outside the regular alphanumeric train

symbol structure, UP locals use a three-letter, two digit code. For example, the branch line local between West Chicago and Troy Grove, Ill., is LPJ04, and a Van Nuys, Calif.-based local is LOF67.

In regular practice, however, most Union Pacific trains use locomotive numbers in their radio communications. **I**

### UP TRAIN-TYPE PREFIXES

<b>Z</b>	High-priority intermodals
<b>K</b>	Mid-priority intermodals
<b>I</b>	Other intermodals
<b>A</b>	Automotive trains
<b>M</b>	Manifests
<b>Q</b>	Quality manifests
<b>C</b>	Coal trains
<b>G</b>	Grain trains
<b>O</b>	Ore, crude oil trains
<b>U</b>	Other unit trains
<b>S</b>	Special moves
<b>E</b>	Light engines
<b>H</b>	Helper crews
<b>W</b>	Work trains

### TRAIN SYMBOL SUFFIXES

<b>B</b>	Alternate schedules
<b>C</b>	Alternate schedules
<b>D</b>	Alternate schedules
<b>J</b>	Joint operations
<b>P</b>	Perishables
<b>R</b>	Repositions
<b>X</b>	Extras

### WORK TRAIN SUFFIXES

<b>B</b>	Ballast trains
<b>G</b>	Production gangs
<b>O</b>	Other materials
<b>R</b>	Rail (loaded and empty) trains
<b>T</b>	Ties (loaded and empty) trains
<b>W</b>	Derailment cleanup trains
<b>Z</b>	Herzog ballast trains



**UP SD70ACe No. 8347 leads train MGRNP-19 from Green River, Wyo., to North Platte, Neb., at milepost 518 on the Laramie Subdivision at Borie, Wyo., in July 2017.** Chip Sherman



# Must-see museums

Where history lives near hot spots

BY JIM WRINN

A Central Pacific 4-4-0 steams into a Sierra snow shed in this diorama at the California State Railroad Museum. Two photos, TRAINS: Jim Wrinn

## **B&O RAILROAD MUSEUM, BALTIMORE**

Everything about America's first railroad and the historic Mount Claire roundhouse.

## **STEAMTOWN, SCRANTON, PA.**

National Park Service's comprehensive interpretive museum with excursions.

## **RAILROAD MUSEUM OF PA., STRASBURG**

Flagship museum for all things Keystone State plus the once mighty Pennsylvania Railroad.

## **ILLINOIS RAILROAD MUSEUM, UNION**

Exhaustive rolling stock collection across the steam, diesel, and electric venues.

## **RAILROADERS MEMORIAL MUSEUM, ALTOONA, PA.**

Best interpretive museum in the country for telling the story of railroad shop workers.



Illinois Railway Museum in Union, Ill.

## **N.C. TRANSPORTATION MUSEUM, SPENCER**

Largest preserved roundhouse and an extensive rolling stock collection with Southern twang.

## **TENNESSEE VALLEY RAILROAD MUSEUM, CHATTANOOGA, TENN.**

Best operating steam museum with a bridge, tunnel, wye, major station, back shop, turntable, and a fabulous rolling stock collection.

## **LAKE SUPERIOR RAILROAD MUSEUM, DULUTH, MINN.**

Huge rolling stock collection in a historic depot plus an excursion along Lake Superior.

## **MUSEUM OF TRANSPORT, ST. LOUIS, MO.**

Gigantic rolling stock collection with major pieces from across the continent.

## **MUSEUM OF THE AMERICAN RAILROAD, FRISCO, TEXAS**

A Big Boy and the last Santa Fe Alco PA headline this major Southwestern museum.

## **COLORADO RAILROAD MUSEUM, GOLDEN**

Rocky Mountain Railroading comes to life with narrow and standard gauge rolling stock — from Galloping Goose to a chunky 2-8-2.



Nevada State Railroad Museum. David Crosby

## **CALIFORNIA STATE RAILROAD MUSEUM, SACRAMENTO**

Nation's best overall interpretive museum features the last Southern Pacific cab-forward.

## **NEVADA STATE RAILROAD MUSEUM, CARSON CITY**

Impressive collection of early steam in the Silver State plus one of the last McKee cars.

## **WESTERN PACIFIC RAILROAD MUSEUM, PORTOLA, CALIF.**

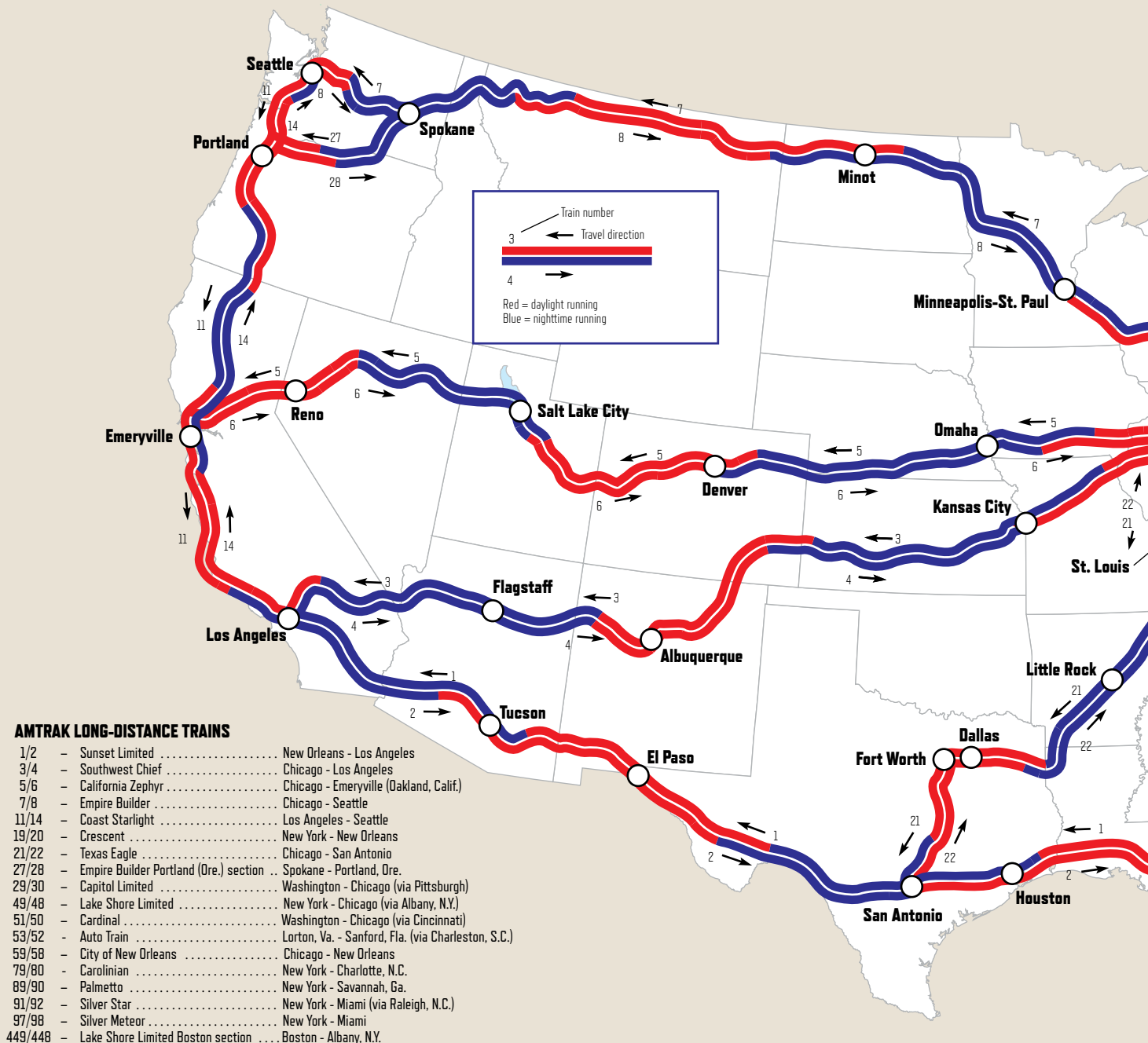
The spirit of the original *California Zephyr* lives on at this former WP locomotive terminal.

## **UNION PACIFIC MUSEUM, COUNCIL BLUFFS, IOWA**

Best interpretive museum for the story of one of America's major railroads from 1862 to today.

# Amtrak day and night

We plot the long-distance routes between sunrise and sunset





**AMTRAK ADVERTISEMENTS** showcase images of passengers looking out windows at breathtaking scenery and gleaming trains winding through spectacular canyons or along scenic rivers. But that's only half the story. Long-distance trains (on routes more than 750 miles) spend about half their running time operating at night. This map shows where Amtrak's long-distance trains — if operating on time — run in daylight and darkness.

The date selected was the Autumnal

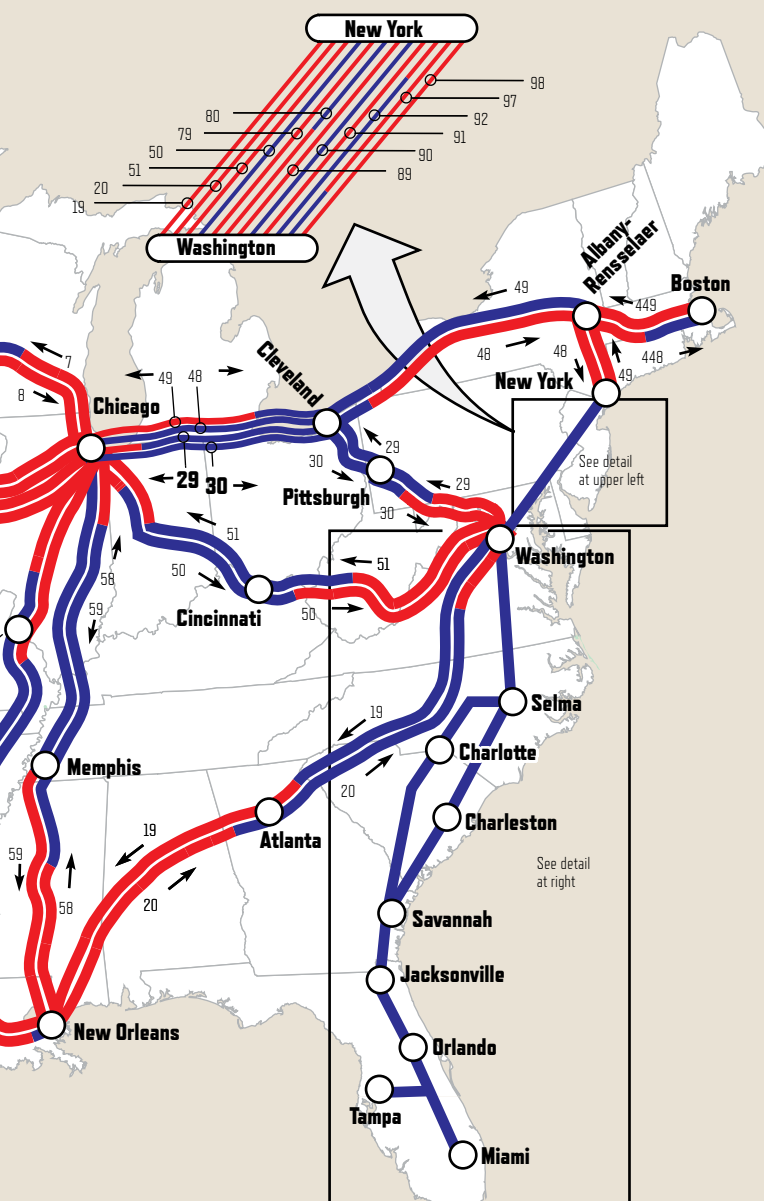
Equinox, Sept. 23, when locations on Earth have 12 hours of daylight and 12 hours of darkness. Once the date was selected, it was necessary to determine sunrise and sunset times for stops along each route, based on published schedules.

Length of daylight, of course, varies with the seasons, with the greatest variation occurring at the Earth's poles. On a northerly train such as the westward *Empire Builder*, sunset on the first day out can differ by up to 4 hours and more than

260 miles between June and December.

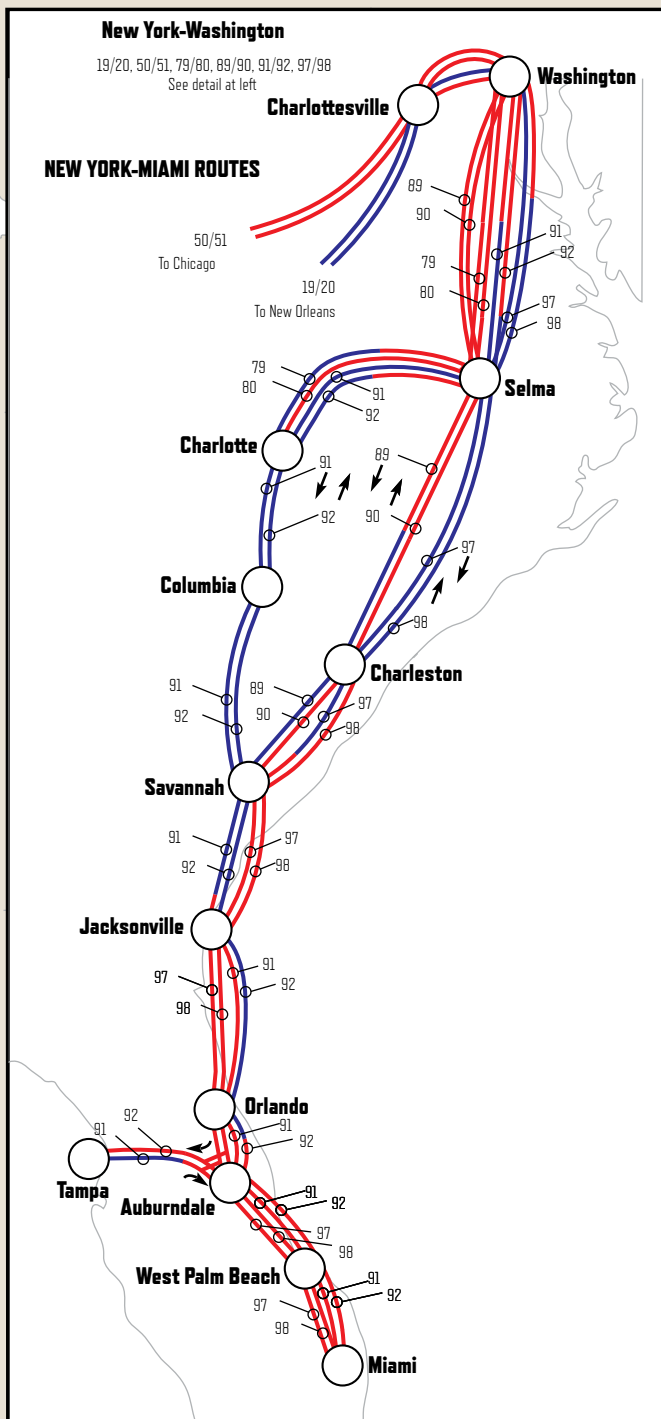
With only one train a day on most routes, many cities, such as Cleveland, Flagstaff, Cincinnati, and Salt Lake City, are only served at night — a marked inconvenience for those weighing a trip by train versus flying or driving.

However, geography and scheduling often coalesce so that trains cross scenic mountain ranges in daylight. And that gives those passengers in the advertisements a reason to smile. — *Curt Richards*



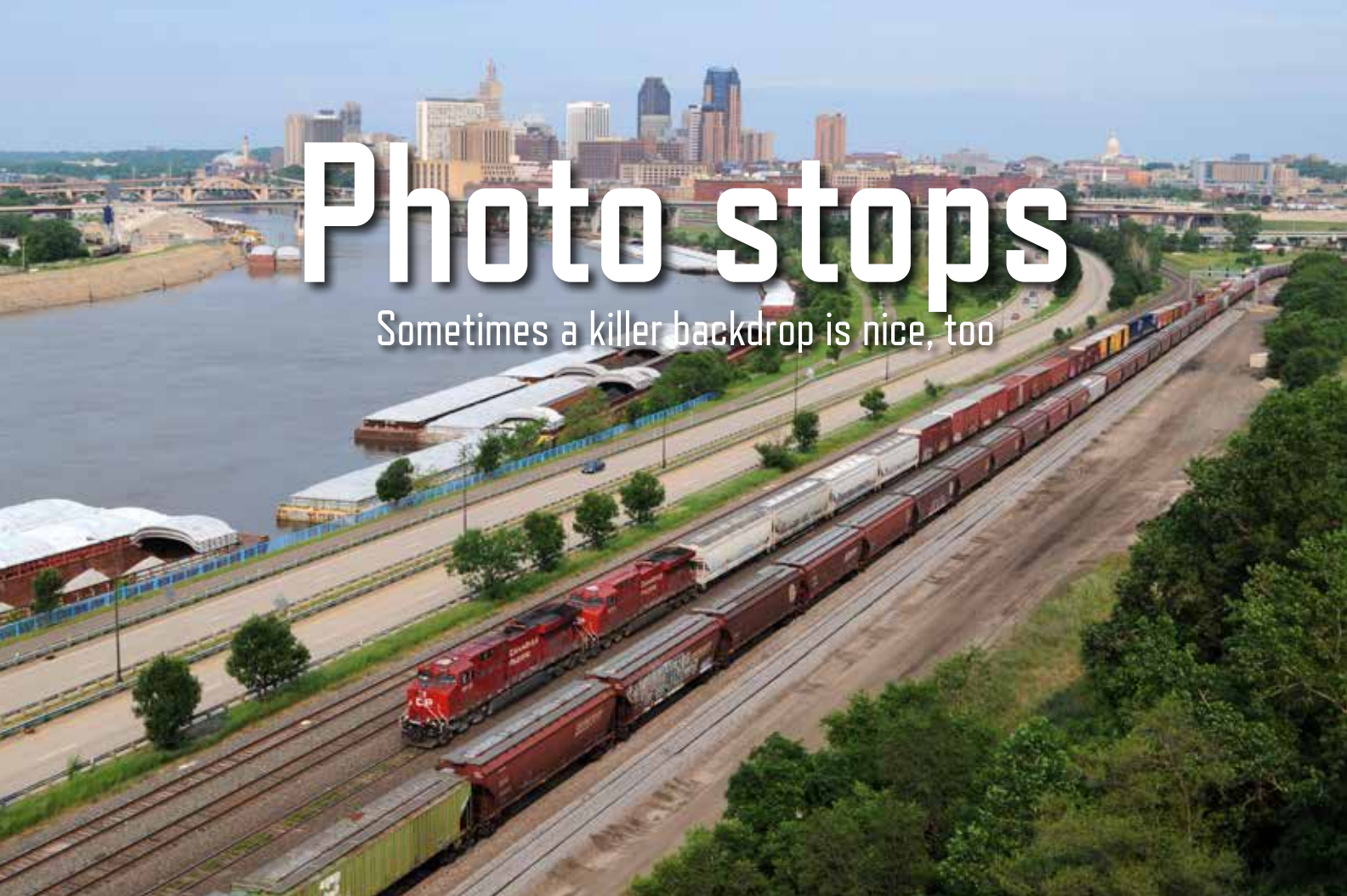
**Trains** MAGAZINE

© 2018 Kalmbach Publishing Co., TRAINS: Bill Metzger and Terri Field  
Auto Train and short-haul trains not included



# Photo stops

Sometimes a killer backdrop is nice, too

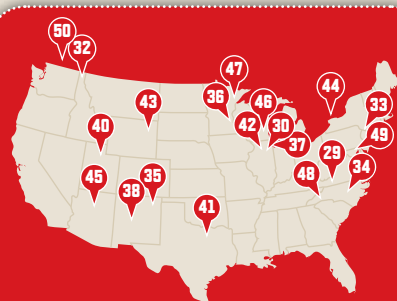


Two trains converge between Dayton's Bluff and the Mississippi River in St. Paul, Minn., in July 2014. TRAINS: Brian Schmidt

**P**hotography and railroads just go together well. If you like the trains, well, that's an obvious subject to shoot. If you like the infrastructure, the people, or the hardware, there are many other places to point your camera within the railroad hobby.

We've curated this list of 20 locations to inspire your photographic eye. They don't all have the highest train counts, but they do have something distinctive, be it classic signals (Raton Pass), towering grain elevators (Saginaw, Texas), a small-town atmosphere (Rochelle, Ill.), or a scenic river valley (Bear Mountain, N.Y., and Kamloops, British Columbia) to work into the view.

If you venture beyond the core hot spot location, such as Rochelle's busy diamond or Sandpoint, Idaho's famous bridge, you'll find a diverse landscape with many more photographic opportunities. It's fun to spend a day at the Rochelle Railroad Park socializing and train-watching, but exploring the surrounding countryside is where camera magic really happens. Endless fields of corn and soybeans, classic Midwest barns, distinctive farm equipment, and whirling wind turbines all offer a rural flair



<b>Roanoke, Va.</b> .....	<b>29</b>
<b>Chicago Racetrack</b> .....	<b>30</b>
<b>Sandpoint, Idaho</b> .....	<b>32</b>
<b>Bear Mountain, N.Y.</b> .....	<b>33</b>
<b>Hamlet, N.C.</b> .....	<b>34</b>
<b>Raton Pass, N.M.</b> .....	<b>35</b>
<b>St. Paul, Minn.</b> .....	<b>36</b>
<b>Chicago Roosevelt Road</b> .....	<b>37</b>
<b>Belen, N.M.</b> .....	<b>38</b>
<b>Salt Lake City</b> .....	<b>40</b>
<b>Saginaw, Texas</b> .....	<b>41</b>
<b>Rochelle, Ill.</b> .....	<b>42</b>
<b>Powder River Basin, Wyo.</b> .....	<b>43</b>
<b>Woodstock, Ontario</b> .....	<b>44</b>
<b>Flagstaff, Ariz.</b> .....	<b>45</b>
<b>Byron Hill, Wis.</b> .....	<b>46</b>
<b>Minnesota Iron Range</b> .....	<b>47</b>
<b>North Carolina Loops</b> .....	<b>48</b>
<b>Perryville, Md.</b> .....	<b>49</b>
<b>Kamloops, British Columbia</b> .....	<b>50</b>

for your photography.

Even the seemingly mundane locations offer great photographic opportunity when train counts are high. The Northeast Corridor and Chicago's Metra are often derided for their homogeneity: each train looks the same as the last. But that's an advantage to photographers. You can practice exciting pan shots and capture motion blurs without fear of failure. If it doesn't turn out the way you'd hoped, well, there's likely another train that looks like that in about 20 minutes anyway.

Other locations are known for their distinctive trains. Minnesota's Iron Range offers short, heavy trains of iron ore, taconite pellets, and limestone in "jennies," or hoppers. Short line Ontario Southland serves up first-general diesel locomotives on its trains out of Woodstock, Ontario, and even dedicated plow trains in the winter. Belen's New Mexico Rail Runner Express commuter rail offers bright, white trains with a giant red bird on their flanks. Meep-meep!

So, with all this in mind, be sure to plan your next trip carefully. You don't want to be out in the New Mexico desert and find out that you've completely filled your last memory card. With these great spots, that's a real possibility. — *Brian Schmidt*





# Roanoke, Va.

BY SAMUEL PHILLIPS

**LOCATION:** Roanoke is one of the east's most popular and historic railroad cities, owing to its long relationship to the Norfolk & Western and Virginian railways. Roanoke is a beautiful city situated in the heart of the Blue Ridge Mountains and is home to a busy Norfolk Southern hub. Here, you'll find the East End Shops and Shaffer's Crossing yard. On the south side is the former Virginian Railway South Yard, where eastbound coal, grain, and ethanol trains enter to await departure. From Roanoke, trains go east to tidewater, south into North Carolina, north into the Shenandoah Valley, and west into the Appalachians. A normal day in Roanoke yields upward of 20-30 trains.

**TRAIN-WATCHING:** Spectacular mountain scenery and locations lie in every direction from Roanoke. A short 20-30 minute drive will get you into the beautiful countryside and quaint towns. Christiansburg Mountain, located roughly 25 minutes west of Roanoke along the former N&W main line to Bluefield, W.Va., is an excellent show. Shawsville is a beautiful town situated on the most difficult part of the ascent and offers several excellent locations to watch and photograph trains. A normal day in Shawsville would yield 15-20 trains.

For high volumes, stick close to downtown Roanoke near the O. Winston Link Museum or near the East End Shops and wye. The nearby town of Salem offers places where you can watch both the Whitethorne and Christiansburg districts, which parallel each other through town.

South of downtown Roanoke is the diamond at South Yard, with the famed Mill Mountain Star looming in the distance. This is where the Winston Salem District (known as the "Pumpkin Vine" for its twisting course) crosses the Altavista District. Trains destined for the Pumpkin Vine coming out of South Yard use manned helpers and pull east, crossing the diamond at J/K before the rear motors (now head end) can get a clear signal to turn south toward Winston Salem, N.C.

East of Roanoke lies the famed Blue Ridge grade through Bonsack, Webster, Blue Ridge, and Villamont. Traffic is hit or miss on this section, as a lot of trains utilize the old Virginian Altavista District in and out of town, due to less severe grades and the traffic using the Hurt Connection at Altavista going to and from Linwood Yard on the former Southern Railway. Trains coming out of Shaffers taking the former Virginian connect at Demuth, just east of Furnace Crossing at the East End Shops, and bypass Blue Ridge.



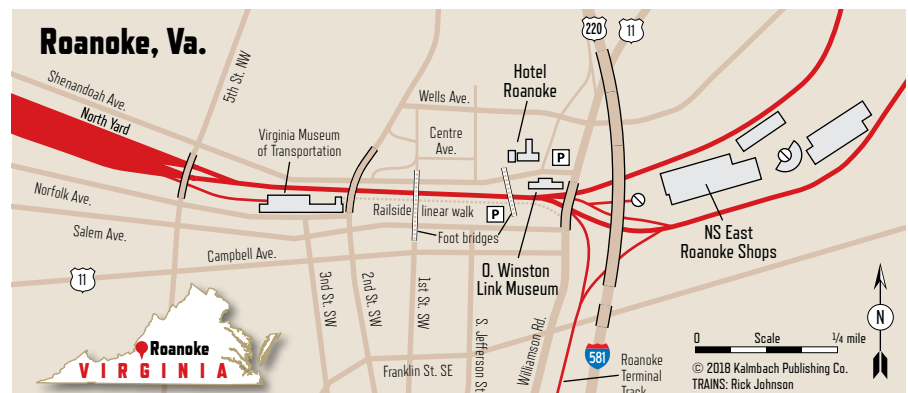
An eastbound Norfolk Southern unit coal train rounds the sweeping curve at Eggleston, Va., west of Roanoke, Va., on the NS Whitethorne District. Jonathan McCoy

North of Roanoke is the beautiful Shenandoah Valley Line, the most scenic of all the routes in and out of the Star City. Sadly, the line hosts trains 15T and 16T, 201 and 202, an occasional northbound hopper train operating as 777 or 747, and that's it. What it lacks in volume, it makes up for in quality with spectacular locations like Solitude or Natural Bridge. Train 15T is almost always a late evening southbound into Roanoke and makes a great chase if one makes the trek to find it.

**RADIO FREQUENCIES:** 161.190, Christiansburg and Whitethorne districts;

161.025, Blue Ridge and Altavista district; 160.440, Valley Line and Winston Salem districts; 161.250, Roanoke Yard operations.

**FOR YOUR FAMILY:** Roanoke is home to the O. Winston Link Museum and the Virginia Museum of Transportation, which are located near each other in downtown and must visits while in town. Looking for a great stay? Hotel Roanoke, which was an N&W property once upon a time, provides great lodging and food. The Blue Ridge Parkway passes along the outskirts of Roanoke and makes for a beautiful and relaxing drive.



Roanoke, Va.





# Chicago's Racetrack

BY HOWARD ANDE



With an outbound train stopped at Highlands, an inbound train uses the center track to hustle back toward Chicago in this shot from the Oak Street Bridge in Hinsdale, Ill., one of the few places providing an overhead view of the Racetrack. Three photos, TRAINS: David Lassen



**LOCATION:** Chicago is still the nation's railroad capital. What puts it on top over cities like Kansas City, Mo., are passenger trains. It's Amtrak's Midwestern hub (eight routes), and hundreds of Metra commuter trains (11 routes) hustle in and out of the city daily. Much of the action takes place in "Chicagoland," as the city and suburbs are known. One could spend months photographing all the lines, so here is a nominee for a logical first destination for seeing high volumes and a variety of trains in a short period: BNSF's triple-track Chicago Subdivision, commonly called "the Racetrack." It begins at the Canal Street wye about a mile south of Union Station and turns west to Aurora. The best train-watching is on weekdays, especially during morning or evening rush hours when Metra runs commuter trains on an almost streetcar-frequent schedule.



**TRAIN-WATCHING:** To avoid Chicagoland's congested streets and highways, ride Metra to stations on the Racetrack. Metra runs 47 eastbound weekday trains and a like number westbound. However, the schedule is significantly less on weekends and holidays. Consult the Metra timetable to determine which stations local and express trains serve. Many of the suburban stations along the route that survive from the Chicago, Burlington & Quincy era have esthetically pleasing architecture. (Western Springs is a perennial favorite.) Go to [metrarail.com](http://metrarail.com) for information about tickets and weekend passes.

Amtrak operates four pairs of trains on the Racetrack. The

westbound and eastbound *California Zephyr* and *Southwest Chief* all converge on the Chicago Subdivision (if they are on time) in mid-afternoon. The two pairs of regional trains, *Carl Sandburg* (Nos. 381/382) and *Illinois Zephyr* (Nos. 380/383), which run between Chicago and Quincy, Ill., put in morning (Nos. 380/381) and evening (Nos. 382/383) appearances. All eight Amtrak trains stop at Naperville, and the four Quincy trains call at La Grange Road as well.

BNSF Railway runs, on average, 50-plus freight trains in a 24-hour period on the Chicago Subdivision, depending on the day of the week, with volume building toward the weekend. BNSF trains include general freight, coal, crude oil and



Buy our special Chicago issue and video at [KalmbachHobbyStore.com/Chicago](http://KalmbachHobbyStore.com/Chicago)





An eastbound BNSF Railway intermodal train races past a waiting manifest freight at the busy Naperville, Ill., Amtrak and Metra station on Oct. 18, 2017.



No fewer than five outbound trains are visible as the last rays of sunlight illuminate Metra's evening rush in this view from the platform at Western Springs, Ill.

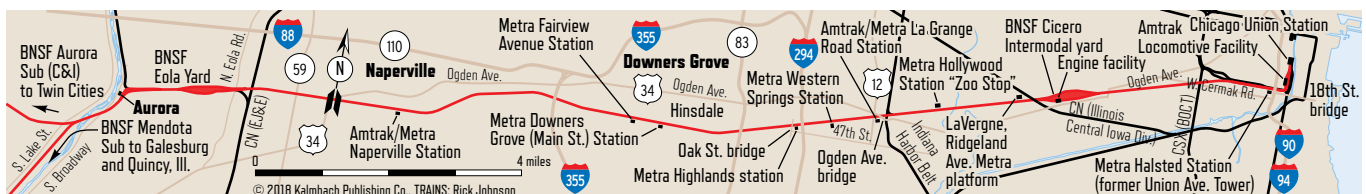
other unit trains, and intermodals. The Chicago Sub splits west of downtown Aurora into the Mendota Subdivision to Galesburg, Ill., and the Aurora Subdivision to La Crosse, Wis., and the Twin Cities. Cicero's former freight yard now is an intermodal facility; Eola, east of Aurora, is a general freight yard.

The Chicago Subdivision goes under Canadian National's former Elgin, Joliet & Eastern at Eola; over the Indiana Harbor Belt in eastern La Grange; under CN's former Illinois Central in Berwyn; and under the Belt Railway in Cicero.

**RADIO FREQUENCIES:** BNSF, 161.100 (Metra and Amtrak); Belt Railway of Chicago, 160.695, 160.500; Canadian National (ex-EJ&E), 161.475; Indiana Harbor Belt, 160.980, 161.070.

**FOR YOUR FAMILY:** The possibilities are almost limitless. World-class museums (Museum of Science & Industry), dining (deep-dish pizza), and venues for the arts (a vibrant theater district), along with famed

sports attractions (Wrigley Field and Soldier Field), make Chicago a vacation destination for people from around the country and world. Many of those venues can be reached via the transit system, the L, which helps define the downtown Loop. An obvious choice of a diversion for your family as you observe the Racetrack is the Brookfield Zoo; BNSF's Hollywood station is also labeled as the "Zoo Stop." The DuPage Children's Museum is just yards from the Naperville station.







# Sandpoint, Idaho

BY TOM DANNEMAN



**A westbound loaded BNSF Railway grain train has just passed through Sandpoint, and is crossing beautiful Lake Pend Oreille at East Algoma, Idaho. This photograph was taken on Feb. 21, 2015, just off of Bottle Bay Road.** Two photos, TRAINS: Tom Danneman



**LOCATION:** Sandpoint, Idaho, is near Lake Pend Oreille (pronounced "POND oh-RAY") in Idaho's Panhandle. Sandpoint features the main line of BNSF Railway's Kootenai River Subdivision, the busy northern transcontinental route, as well as Union Pacific's Spokane Subdivision from Eastport, Idaho. UP trains to and from Eastport use trackage rights on BNSF's Newport Subdivision from North Sandpoint (where UP trackage ends) west to Dover, Idaho; UP dispatches the line.

Amtrak's *Empire Builder* stops nightly in both directions on its journey between Chicago and Portland, Ore./Seattle. Sandpoint Junction, near the depot, is where Montana Rail Link's 4th Subdivision from Missoula, Mont., joins the BNSF main, thus the nickname "the funnel." Montana Rail Link has trackage rights on BNSF to Spokane, Wash. Shortline Pend Oreille Valley operates from Newport, Wash., to Dover, Idaho, and then east on BNSF's Newport Sub to Boyer Yard. The Kootenai River Sub usually hosts more than 40 trains a day.

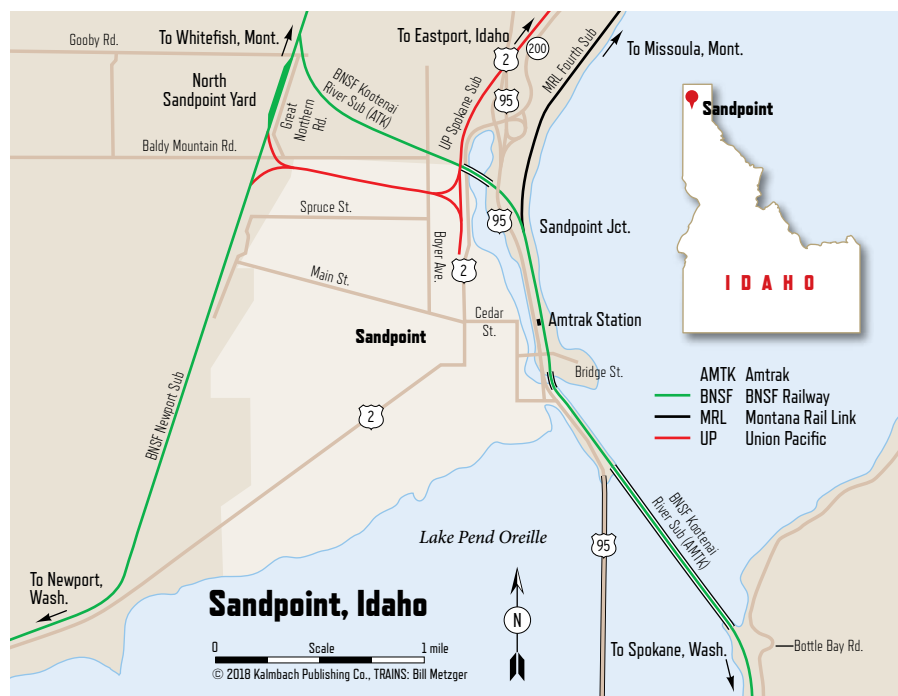


**TRAIN-WATCHING:** The biggest attraction is BNSF's massive bridge over Lake Pend Oreille. Viewing areas for the bridge can be found off of Bottle Bay Road, which can be reached from U.S. Route 95 south of town, or from the sidewalk/bike path

along Route 95 as it leaves town to the south. The BNSF bridge across Sand Creek Slough can be seen from a visitors center off of Route 2/95 just north of downtown. You can see UP

along state Route 200 north of town, or at numerous grade crossings in town.

A cool, steel-and-concrete trestle is visible from Route 2/95 right after Route 200 splits off





toward the east. The Sand Creek Byway construction project is finally complete, and it makes getting through Sandpoint faster than when the highway went directly through downtown, but has made photographing the small bridge over Sand Creek Slough near City Beach difficult in the afternoon.

**YARDS:** Both BNSF and UP have small yards in Sandpoint. Boyer Yard, BNSF's main switching yard, is located near Sandpoint's airport on the city's northwest side. The Pend Oreille Valley interchanges with the BNSF at Boyer. UP's small yard is located along Route 200 on the north end of town just north of the BNSF/UP diamond.

**RADIO FREQUENCIES:** BNSF Boyer West, 161.250; BNSF Boyer East, 160.920; UP Spokane Subdivision, 160.740; MRL 4th Subdivision, 160.950; Pend Oreille Valley, 161.415, 160.305.

**FOR YOUR FAMILY:** Sandpoint is a thriving arts community and a tourist destination. Downtown Sandpoint has fine restaurants and shopping. Schweitzer Mountain Resort, located 11 miles from Sandpoint, is a great place to ski, hike, and mountain-bike.

Lake Pend Oreille offers water sports and, of course, beach time. Sandpoint's City Beach is within sight of BNSF's main line. Silverwood Theme Park, the Northwest's largest, is only 26 miles south of Sandpoint near Athol, and features a 3.2-mile ride behind a 1915 3-foot-gauge Porter steam locomotive formerly belonging to the Eureka-Nevada Railway.



This former Great Northern boxcar, photographed in October 2017, still resides near BNSF's North Sandpoint Yard.



# Bear Mountain, NY

BY MATT DONNELLY

**A Metro-North commuter train passes the famed Bear Mountain Bridge in October 2013, as seen from the Perkins Memorial Observatory.** Matt Donnelly

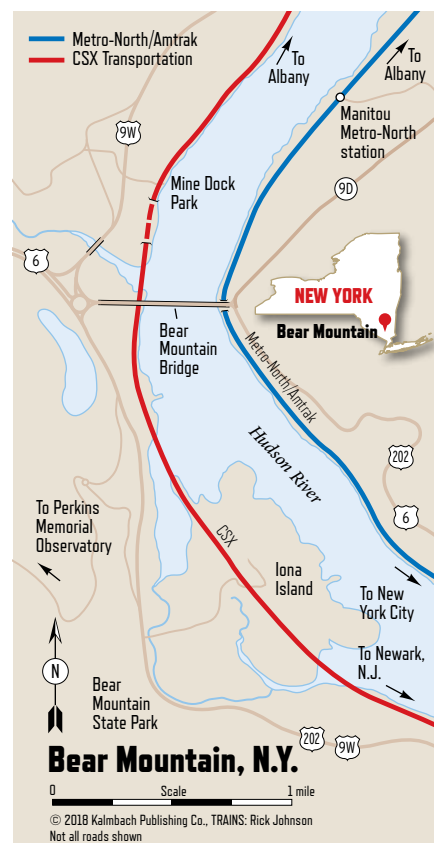
**LOCATION:** Scenic Bear Mountain is located about 45 miles north of New York City along the Hudson River. It offers a host of vantage points along CSX Transportation's River Line and Metro-North Hudson Line. Locations between Cold Spring and Peekskill, including Bear Mountain Bridge, provide public places to watch trains. The area is stunning in fall, but observers find the spectacular scenery enticing year-round.

**TRAIN-WATCHING:** CSX's Albany-Northern New Jersey main line, technically the River Subdivision, runs along the west bank of the Hudson River and offers about 30 freight trains a day. Across the river is the state-owned Metro-North line. It sees more than 60 weekday commuter trains, along with Amtrak's regional *Empire Service* and long-distance *Lake Shore Limited*, which add more than 20 passenger trains on weekdays, and fewer numbers on weekends.

Midday offers some opportunity to see southbound trains from the walkway on Bear Mountain Bridge. In the early afternoon, checkout Mine Dock Park, just north of the bridge on the west shore. In the evenings, spectacular images can be made from both the Bear Mountain Bridge and an overlook on the mountain at Perkins Memorial Observatory, southwest from the bridge. From this location, visitors can see northbound passenger trains approach from as far away as Peekskill, more than 4 miles away. Taking a good telephoto lens or binoculars ensures the best viewing opportunities.

**RADIO FREQUENCIES:** CSX road channel, 160.980; CSX dispatcher, 160.620; Metro-North, 160.950.

**FOR YOUR FAMILY:** Bear Mountain State Park offers a variety of seasonal and year-round activities, including lake and river fishing, swimming, museums, recreation trails, and ice skating. Numerous cultural and historical sites in the Hudson River Valley beckon to visitors.



Bear Mountain, N.Y.



# Hamlet, NC

BY MARCUS NEUBACHER



**A westbound CSX intermodal train crosses the diamond with the Columbia, S.C., line and passes the restored 1900 Hamlet depot, as seen from Raleigh Street. This train, like many others, bypasses Hamlet's yard, which is to the north.** Marcus Neubacher

**LOCATION:** Hamlet, N.C., is a crossroads of CSX Transportation main lines originally operated by the Seaboard Air Line Railroad. Forming this busy junction inside the Hamlet Terminal are lines of CSX's Aberdeen, Andrews, Hamlet, Monroe, and Wilmington subdivisions. The centerpiece of downtown Hamlet's rail scene is the beautiful Victorian Queen Anne passenger station built in 1900 by the Seaboard Air Line.

In the early 2000s, the depot was moved across the tracks from its original location and restored by the North Carolina Department of Transportation. In addition to serving Amtrak's *Silver Star* passenger trains, the depot houses a railroad museum and the Richmond County Chamber of Commerce.

**YARD:** Hamlet Yard, located north of downtown, was built in 1954 as an automated hump yard. Once operating as the "Hub of the Seaboard," the sprawling yard still serves as a major terminal for CSX. In 2017, as a result of service strategy changes, Hamlet Yard's humping operations ceased and the terminal was converted to a flat-switching yard.

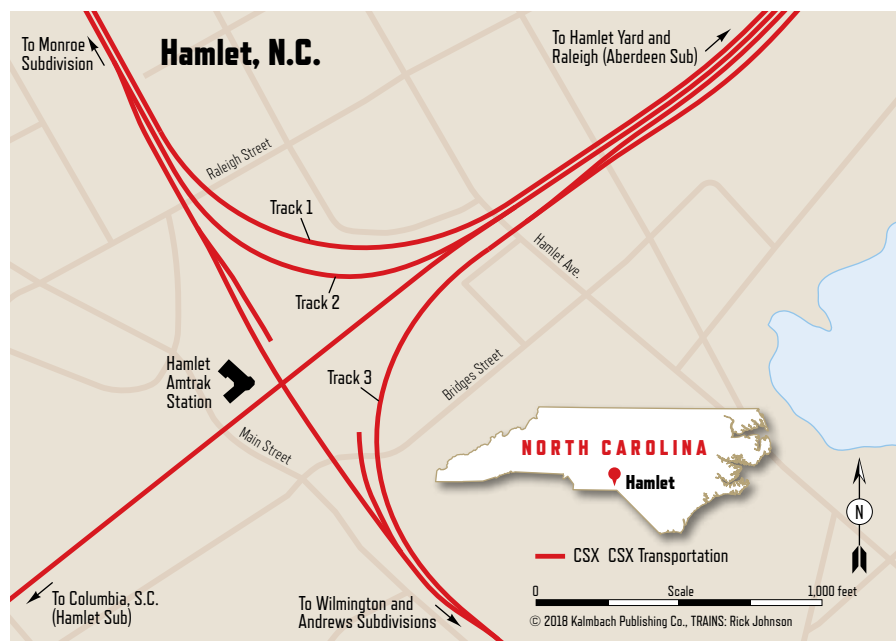
The north-south route past the yard and the station runs from Raleigh, N.C., to Columbia, S.C., and is made up of the Aberdeen and Hamlet subdivisions. The line to the west (railroad south) is the Monroe Subdivision operating to Abbeville, S.C., and on to Atlanta. Just east of town is East Junction, the split

between the Wilmington Subdivision to its namesake city and the Andrews Subdivision to Charleston, S.C. These two lines connect with the former Atlantic Coast Line route between Richmond, Va., and Florida. The busy ex-ACL main line, known as the "A-Line," parallels the low density former SAL main line, known as the "S-Line," and passes through Pembroke, N.C., about 35 miles southeast of Hamlet.

**TRAIN-WATCHING:** Recent changes at the yard and in CSX operations have resulted in the elimination of some trains, significantly changing the character of Hamlet's railroading activity. While operations are still evolving, at deadline, roughly eight to 10 trains were reported to be passing through downtown in a 24-hour period. From the station area, it is possible to observe all train movements except for a pair of road locals that operate on the north side of Hamlet Yard on the Aberdeen Subdivision. Historically, CSX's traffic mix includes mostly general merchandise trains, but also features unit grain, ethanol, aggregate, coal ash, and coal trains as needed.

**RADIO FREQUENCIES:** CSX road, 161.100. Dispatchers, 160.230, 160.410, 160.920, 161.370, 161.520.

**FOR YOUR FAMILY:** The Hamlet Depot and Museums is the starting point for the Seaboard Trail to discover historic downtown buildings. The Hamlet Farmer's Market, open seasonally on Thursday evenings, is located across the street from the depot. The National Railroad Museum and Hall of Fame is at 120 East Spring Street, a short walk from the depot. The Seaboard Station Restaurant at 12 Charlotte Street, also near the depot, features home-cooked meals.







# Raton Pass, NM

BY CHASE GUNNOE



Semaphore signals like these near Colmor, N.M., are a draw for photographers on lightly used Raton Pass, now traversed only by Amtrak's *Southwest Chief*. Two photos, Joel Wendt

**LOCATION:** BNSF Railway's storied Raton Pass route has fallen on hard times. With freight moved to the easier route created by the 1908 opening of the Belen Cutoff, only Amtrak's daily *Southwest Chief* plies the rails that once hosted Santa Fe's world-famous high speed freight, the *Super C*, and countless York Canyon coal trains. While much of the route is considered scenic, railfans are most drawn to the remaining semaphore signals between Springer and Las Vegas, N.M. Signals at three sidings, Colmor, Levy, and Wagon

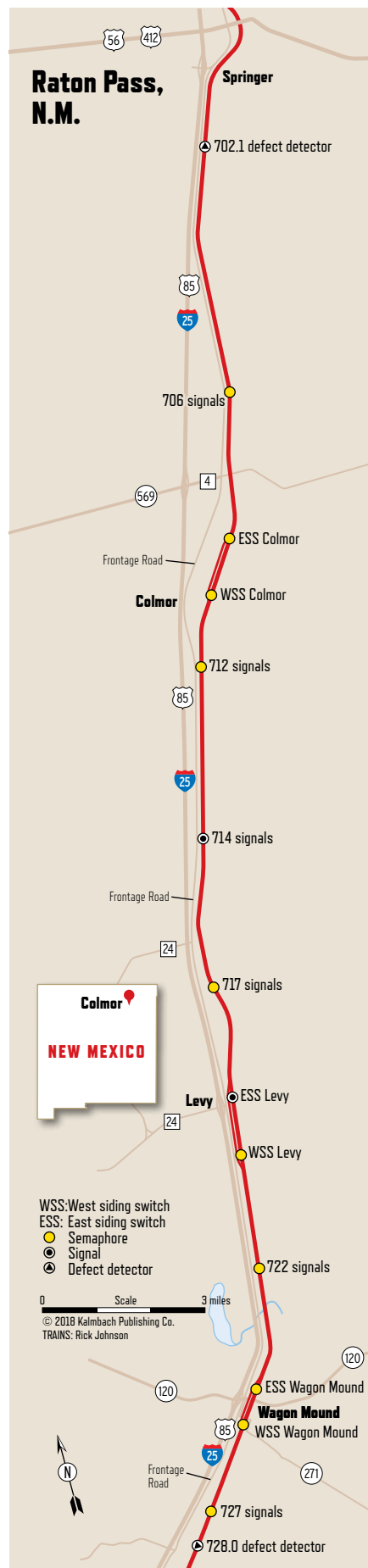
Mound, are particularly accessible and popular with photographers. The line's light use is actually helping preserve this bit of railroading Santa Fe-style, but who knows for how long?

**TRAIN-WATCHING:** The *Southwest Chief* crosses the line in daylight both directions. Slow orders and parallel highways make chasing possible.

**RADIO FREQUENCY:** BNSF road, 160.590.



The westbound *Chief* passes the semaphores at the east end of the Wagon Mound siding.

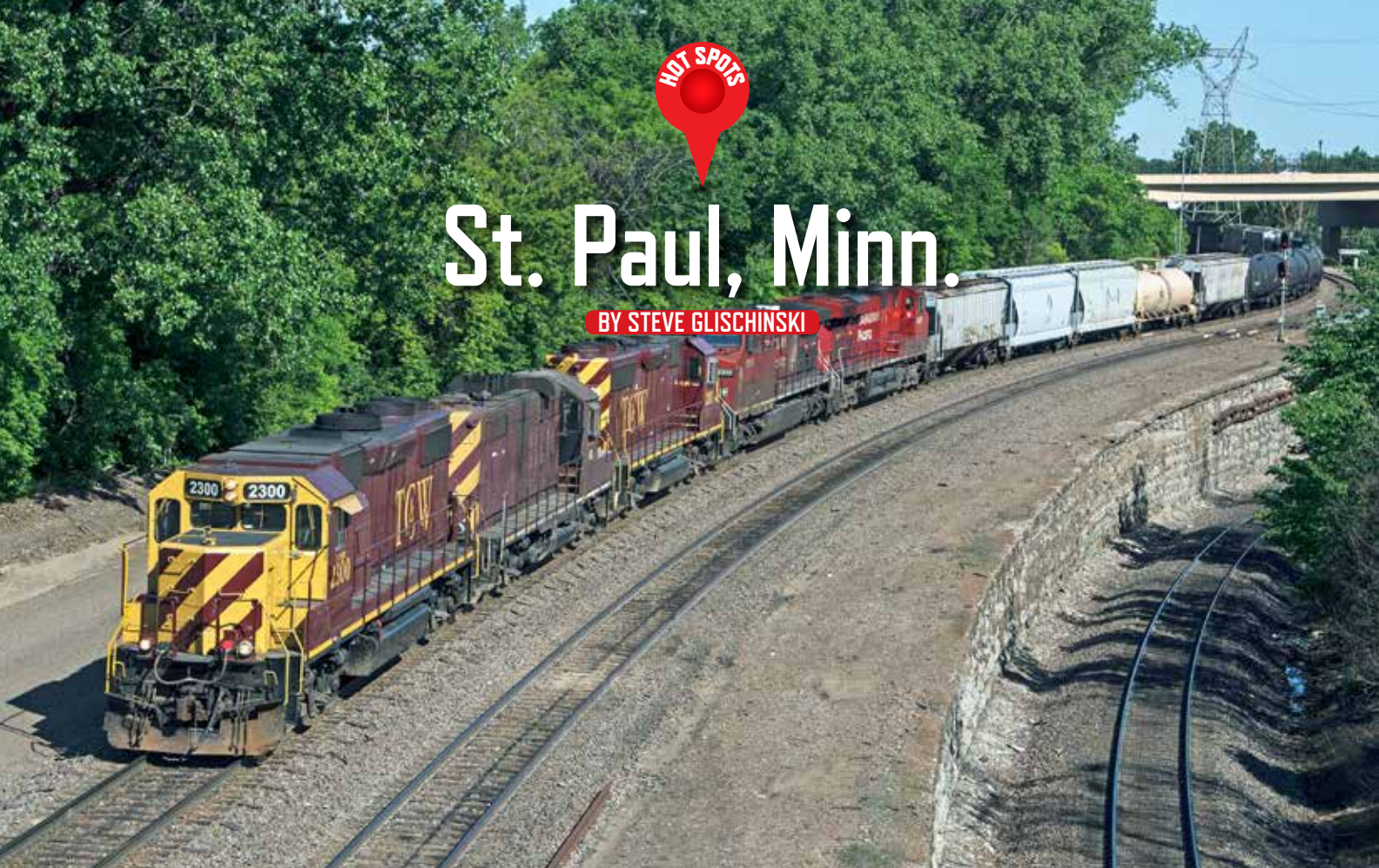


Raton Pass, N.M.

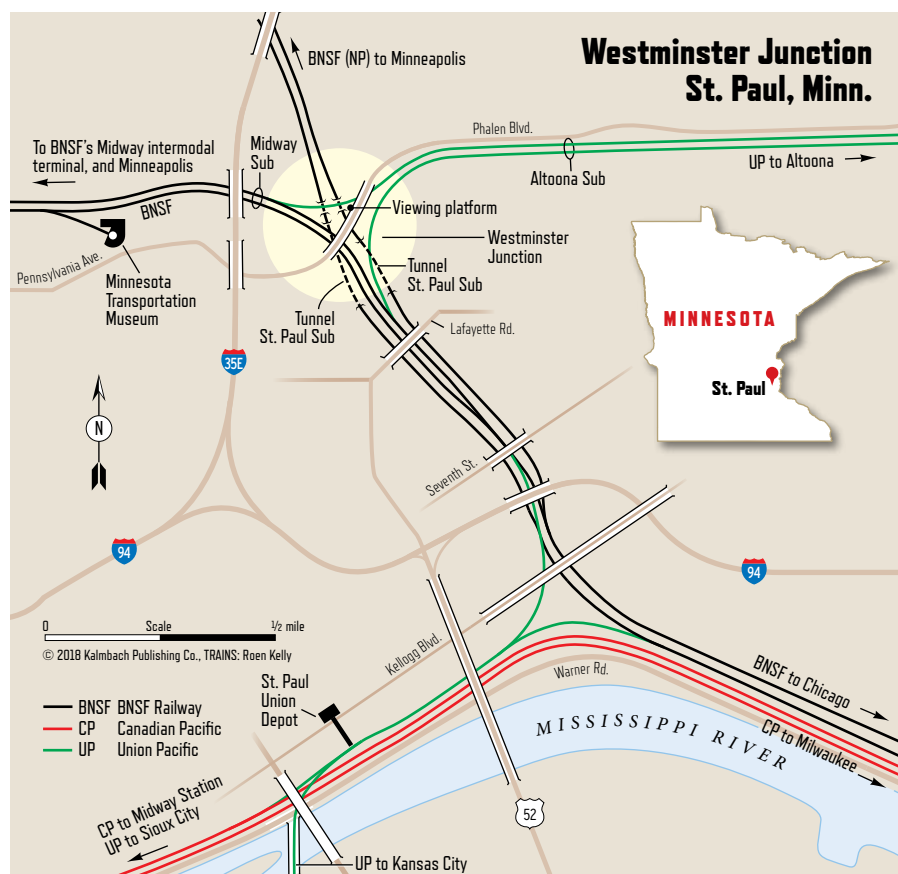


# St. Paul, Minn.

BY STEVE GLISCHINSKI



An eastbound Twin Cities & Western freight approaches the Lafayette Avenue overpass near Westminister Junction in May 2015. The popular hot spot is close to downtown St. Paul and offers a look at many of the Twin Cities' varied rail operations. Steve Glischinski



**LOCATION:** Minnesota's capital, St. Paul, is laced with mainline railroading. Traversing the city are the main lines of three BNSF Railway predecessors: Chicago, Burlington & Quincy; Great Northern, and Northern Pacific. Canadian Pacific's former Milwaukee Road and Soo Line routes, plus Union Pacific's former Chicago & North Western and Omaha Road lines, also pass through.

At Westminister Junction near downtown St. Paul, UP's line from Chicago joins BNSF's Midway Subdivision from Minneapolis. The UP has a wye at the BNSF connection. Tunneling under all these lines is BNSF's St. Paul Subdivision. This is the busiest of the main lines through the junction, with trains of BNSF, Canadian Pacific westbounds to Soo Line Junction, Twin Cities & Western, and UP all using the St. Paul Sub, totaling about 50 trains a day.

The Midway Sub also sees trains of the three Class I railroads, including Canadian Pacific eastbound trains from Minneapolis. BNSF intermodal trains are regulars on the Midway Sub, since the railroad's Midway Intermodal Terminal is just 4 miles west of the junction. Minnesota Commercial has rights through Westminister Junction as well; it uses the Midway Sub from St. Anthony interlocking 6 miles to Westminister, where Minnesota Commercial trains switch to Union Pacific track for the trip to Bayport, Minn., about 20 miles



east of St. Paul. These trains run about once a week. On weekdays, Twin Cities & Western uses the Midway Sub to reach Canadian Pacific's St. Paul Yard. TC&W can use the St. Paul Sub from Union Junction to St. Paul, depending on traffic on the Midway Sub.

Amtrak trains use the Midway Sub from Minneapolis to St. Anthony, where they cross onto Minnesota Commercial trackage to gain access to CP's Merriam Park Sub to St. Paul Union Depot.

**TRAIN-WATCHING:** Phalen Boulevard passes over the top of Westminster Junction and features a viewing platform for train-watchers. The platform looks down at the St. Paul Sub, the UP tracks, and two short BNSF underpasses beneath the UP. Photography from the platform is best in the morning for eastbound trains. In the afternoon, the next bridge over the tracks to the south, Lafayette Road, offers a view of eastbound trains popping out of the tunnel under Westminster Junction on the St. Paul Sub. The brick-lined tunnel, constructed in 1885, is 460 feet long and is the state's only active railroad tunnel. The Midway Sub also runs under this bridge, and trains can be photographed dropping downgrade from Westminster toward downtown St. Paul and the Mississippi River.

Another nice location is the Kellogg Boulevard bridge, east of the junction near the St. Paul Union Depot. In the afternoon, the bridge offers excellent views of westbound trains rounding a big curve with the Mississippi River as a backdrop. Just below, the Union Depot has constructed a "Rail View Picnic Area," with bicycle parking and six picnic tables covered with pergolas, that offers ground-level views of the action. The site is open to the public from sunrise to sunset.

**RADIO FREQUENCIES:** BNSF: 161.250 (East Hump Dispatcher), 160.335 (West Hump Dispatcher), 161.160 (yard); Canadian Pacific: 160.770 (ex-Milwaukee Road), 161.370 (ex-Soo Line), 161.520 (yard); Union Pacific: 160.890, 161.175 (yard); Minnesota Commercial 160.560, 160.740; Twin Cities & Western 161.460.

**FOR YOUR FAMILY:** Downtown St. Paul is home to the Fitzgerald Theatre, from which Minnesota Public Radio's "A Prairie Home Companion" is broadcast nationally. The Minnesota Children's Museum, State Capitol, Science Museum of Minnesota, and Xcel Energy Center, home of the Minnesota Wild National Hockey League team are also here. The Minnesota Transportation Museum, in the former Northern Pacific Jackson Street Roundhouse north of downtown, offers preserved railroad equipment and exhibits. In suburban Bloomington, the Mall of America, the largest indoor mall in the U.S., offers more than 400 stores and an amusement park. Light rail serves the mall.



# Roosevelt Road

BY BRIAN SCHMIDT

**Amtrak's California Zephyr backs into Chicago Union Station to prepare for its afternoon departure as an empty Metra trainset waits to shove into the station.** Aaron J. Border

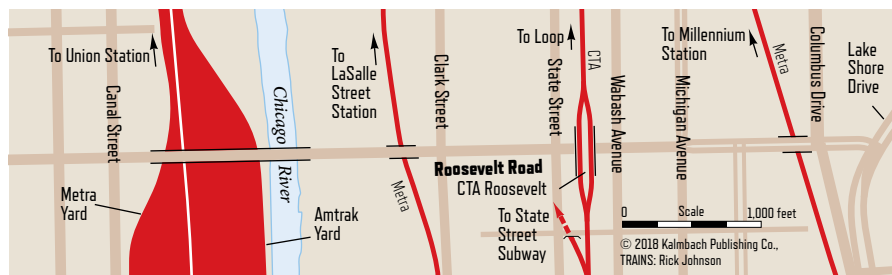
**LOCATION:** Today's Roosevelt Road is a wonderful place to watch passenger trains. Almost 1,000 trains a day from Amtrak, Chicago Transit Authority, Metra, and South Shore cross the busy thoroughfare. The area provides a safe venue for watching and photographing trains in an urban environment.

**TRAIN-WATCHING:** Roosevelt Road offers overhead views of three rail corridors and the Amtrak and Metra yards at Union Station. Rail traffic is constant throughout the day, but it is busiest during the morning and evening weekday commuter rush periods. Current Amtrak, Metra, and South Shore timetables are invaluable here. Fans traveling to Roosevelt Road have many transportation options at their disposal. South Shore, Metra, and the CTA all have stations convenient to Roosevelt Road. The shared Metra Electric District and South Shore station is called Museum Campus/11th Street and is located one block north of Roosevelt. A CTA stop serves the Red, Green, and Orange lines and is located between State Street and Wabash Avenue. Visitors arriving at Union Station or Ogilvie Transportation Center

by Amtrak or Metra can make the short walk down Canal Street; take a 157 bus, which comes within a block of Roosevelt Road; or walk to the Loop and take CTA south. Because of the commercial development, many of the safety concerns once associated with the neighborhood are obsolete. Visitors should always exercise due diligence when in crowded or unfamiliar places, but the Roosevelt Road neighborhood is among Chicago's safest.

**RADIO FREQUENCIES:** Amtrak (and Metra at Union Station) road, 160.305; yard, 160.740; mechanical, 161.265; Metra Electric District (includes South Shore), 161.025; Rock Island District, 161.340; Heritage Corridor (south of 21st Street), 160.440.

**FOR YOUR FAMILY:** Nearby amenities include numerous restaurants and retail establishments stretching along Roosevelt Road from the Dan Ryan Expressway to Michigan Avenue. Also nearby, at the east end of Roosevelt Road on the lakefront, are Grant Park, the Shedd Aquarium, the Field Museum, and Soldier Field.



Roosevelt Road, Chicago



# Belen, NM

BY WILLIAM P. DIVEN



**LOCATION:** Belen, N.M., is the critical midpoint in the BNSF Railway's Chicago-Los Angeles Southern Transcon and a magnet for railfans. On the busiest days, those working at the Belen Operations Center guide nearly 100 trains originating, terminating, or pausing for fuel and inspections.

In 1908 the Belen Cutoff, the long-sought alternative to Raton Pass, transformed Belen from rural way station to transcontinental crossroads nicknamed the Hub City. Four main lines radiate north to Raton and Colorado, east to Texas, west to Arizona, and south to Mexico via El Paso, Texas.



**TRAIN-WATCHING:** Just outside the operations center is Belen Junction, at the north end of the 2-mile-long, eight-main-track Belen Yard. The junction, where BNSF's Gallup Sub and the New Mexico Rail Runner Albuquerque Division meet, is particularly railfan-friendly. The Rail Runner commuter station abuts the Transcon and offers stairs to the Reinken Avenue overpass, with protected sidewalks on both sides. The view, albeit through chain-link fencing, looks north over the junction and south past the operations center into the yard and the westbound fueling pads on

tracks 5-8. Eastbound trains taking tracks 1-4 vanish to fueling pads inaccessible to visitors.

Anchoring the south end of the yard is El Paso Junction, where the El Paso Subdivision runs southward as the Clovis Subdivision veers east. Photo access is limited to public roads, notably the Jarales Road crossing on the Transcon between El Paso Junction and the Rio Grande, and rural crossings on the El Paso line.

A short walk from Reinken Avenue is the Harvey House Museum, with its close-up views of the westbound mains, and cosmetically restored 1932 Santa Fe motorcar M190 in Doodlebug Park, two blocks into downtown. The M190 is open for tours by advance arrangement during museum hours (noon-5 p.m. Tuesday-Friday; 10 a.m.-5 p.m. Saturday). Rail Runner schedules enable travelers based in Santa Fe and Albuquerque to spend time in Belen, although 14 weekday arrivals and departures shrink to eight on Saturdays, six on Sundays, and zero on some holidays.

Traffic varies by season and days of the week, according to BNSF. Volumes bump upward in April-May and July-August and peak from mid-October through November. Intermodal schedules in the Los Angeles and

Chicago areas drive day-to-day traffic, with Fridays through Sundays generally the busiest, when Belen's four lines average 80-95 trains.

The El Paso Sub, the Santa Fe's original 1880 route to El Paso and Deming, N.M., lost part of its identity when the state of New Mexico bought the track from Belen Junction north for Rail Runner operations. The only other moves on the line are Amtrak's *Southwest Chief*; BNSF Albuquerque switch jobs; and the Belen-Albuquerque freight shuttles, known locally as the *Flyer* and the *Belen Bullet*.

The remaining southern leg sees as many as 10 trains a day, including coal for an Arizona power plant, grain to Mexico, vehicles from Mexico, manifest freights, and a local turn to Rincon, junction of the El Paso and now-independent Deming lines. Run-through power from Ferromex often handles international trains.



**RADIO FREQUENCIES:** BNSF Belen Operations Center, 160.860; west yard leads, 161.325; east yard leads, 161.370; mechanical department, 161.520; Clovis Sub, 161.190; El Paso Sub 160.560; Gallup Sub, 160.590; Rail Runner (dispatches BNSF and Amtrak) Belen-Santa Fe, 160.410.





**A BNSF Railway coal train heads west as a train of empty auto racks approaches Belen Junction. The auto rack train will then head to El Paso Junction and the El Paso Subdivision on its way to Mexico.**

Two photos, William P. Diven

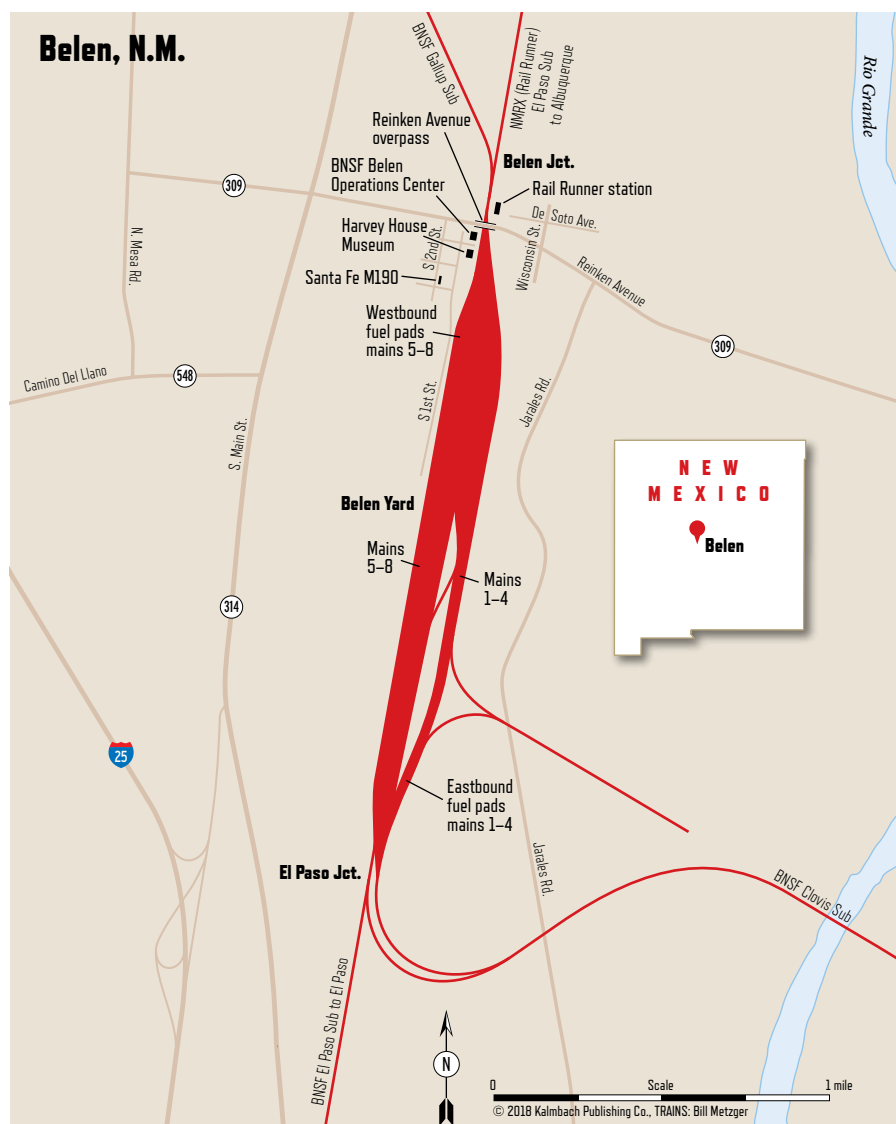
**FOR YOUR FAMILY:** Belen, population about 7,100, remains a railroad town whose MainStreet Partnership anchors its walking tour at the Rail Runner station and nearby Rail Cafe and Hub City Brewing Co. From there the self-guided tour wends through the seven blocks between the BNSF yard and Main Street.

The surrounding area includes wildlife-conservation areas, galleries, balloon rallies, recreational opportunities, farmers' markets, and annual festivals.

The Salinas Pueblo Missions National Monument, east of Belen on U.S. Highway 60, centers on the stone ruins of a 17th century Catholic mission and the state's complicated cultural history. The monument has the added benefit of U.S. 60 crossing the Transcon in the broader midsection of Abo Canyon. The narrow lower section has been fenced with locked gates since construction of a second main eliminated the 4.5-mile bottleneck in 2011.



**A late-afternoon New Mexico Rail Runner Express train awaits duty at Belen Junction as an eastbound stack train led by ES44DC No. 7515 comes off the Gallup Subdivision.**





# Salt Lake City

BY JAMES BELMONT



With the rugged cliffs of the Wasatch in the background, UP's City of Industry, Calif.-to-Chicago stack train pulls into Salt Lake City for a crew change on April 9, 2017. James Belmont

**LOCATION:** Salt Lake City was first settled by the Mormons in 1847, with Union Pacific rails reaching the Salt Lake Valley in 1870. The Denver & Rio Grande Western arrived in 1883, by 1903 the Los Angeles & Salt Lake was completed, and by 1909 the Western Pacific arrived from Oakland, Calif.

Today, the Union Pacific reigns supreme in Utah's capital city, but the Utah Railway, BNSF Railway, Savage Bingham & Garfield, Salt Lake Garfield & Western, Amtrak, and the Utah Transit Authority offer colorful alternatives.

**TRAIN-WATCHING:** Grant Tower, near the heart of the city, is the best place to observe train activity. Union Pacific, Utah Railway, BNSF, and Utah Transit Authority commuter and light rail trains pass through a five-by-five-block area bordered by Third North and Second South streets, and between Fifth West and 10th West streets.

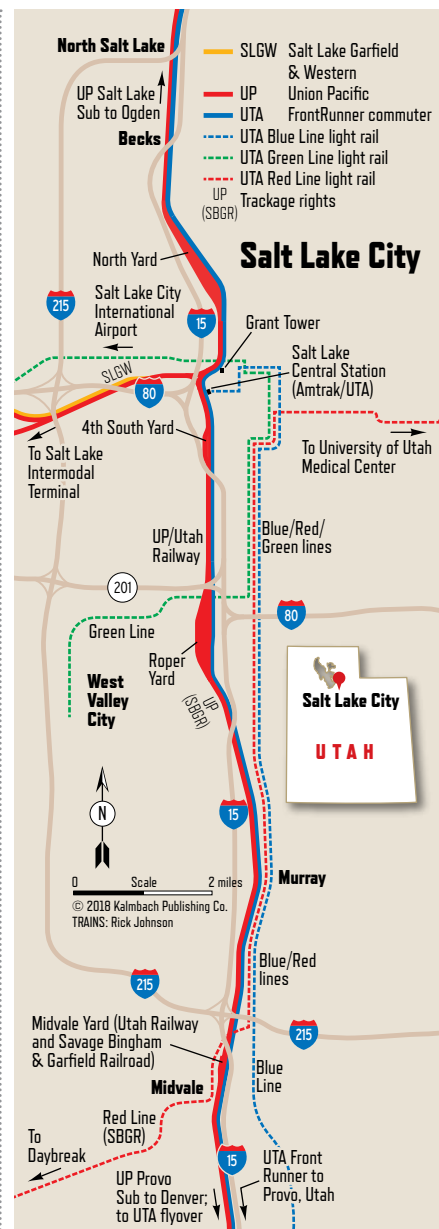
Public roads offer easy access to Grant Tower and its panoramic views of the city and the Wasatch Mountains. In this location, UTA's FrontRunner commuter rail trains have their own right-of-way. Union Pacific's Salt Lake Sub runs

north to Ogden; the Provo Sub heads south; and the Lynndyl and Shafter subdivisions head west to Los Angeles and Oakland, Calif.

**YARDS:** Union Pacific has three freight yards in Salt Lake City: North Yard at Sixth North Street, the former D&RGW Roper Yard at 21st South Street, and the Fourth South Street yard downtown. The Salt Lake City Intermodal Terminal is about 5 miles west of downtown along Interstate 80 at 56th West Street.

The Salt Lake Garfield & Western's modest yard and shop can be found at 12th West and North Temple streets. The Utah Railway and the Savage Bingham & Garfield share Midvale Yard at 73rd South Street near Interstate 15. UTA has its Warm Springs Maintenance Facility at Ninth North and Fifth West streets, adjacent to UP's North Yard.

**RADIO FREQUENCIES:** UP Salt Lake Subdivision (including Utah Railway, Savage Bingham & Garfield, and Amtrak), 160.965; UP Provo and Lynndyl subdivisions, 160.740; UP North Yard, 160.680; UP Roper Yard, 161.490.



**FOR YOUR FAMILY:** The former D&RGW depot at Third South and Rio Grande streets hosts the Utah State Historical Society archives and the Rio Grande Café, offering some of the best Mexican food in the city. The grand hall waiting room of the Union Pacific depot on South Temple and Fourth West streets is open to the public. Ride UTA's light rail vehicles down the middle of city streets within the free fare zone downtown.





# Saginaw, Texas

BY HAYLEY ENOCH



Gleaming BNSF SD70ACe No. 9220 leads a southbound freight past the landmark grain elevators of Saginaw, Texas. Steve Schmollinger



**LOCATION:** The Saginaw, Texas, grain towers, just north of Fort Worth, make for an imposing industrial backdrop for the BNSF Railway and Union Pacific tracks sitting at their base, parallel to state Route 287.

Three busy main lines cross the city. BNSF's Wichita Falls Subdivision, once a Fort Worth & Denver line, extends from Fort Worth to Amarillo; its ex-Santa Fe Fort Worth Subdivision connects Gainesville to the north with Temple to the south. UP's former Rock Island Duncan Subdivision originates in Wichita, Kan., and crosses BNSF in Saginaw to enter Fort Worth. Together, the three lines account for about 40 train movements a day.

Saginaw is the focal point in an area saturated with railroad infrastructure: BNSF's corporate headquarters is about 2 miles to the northeast, and the railroad operates Saginaw Yard and North Yard just south of the grain elevators. The Alliance Intermodal Facility is less than 10 miles north, too.

General Electric's locomotive manufacturing facility is also nearby, and the company has used footage of trains running through Saginaw in promotional materials.



**TRAIN-WATCHING:** Among the three main lines, visitors are virtually certain to see multiple trains each hour. Late morning through afternoon is best for photography at the diamond, owing to the easy access provided by the Chamber of Commerce lot at 301 S. Saginaw Blvd. There, visitors will find a former Southern Pacific station, moved more than 100 miles from Kosse, Texas, and a string of preserved railcars. The depot and its grounds frequently play host to train-watching

and railroad history events, such as the North Texas Chapter of the National Railway Historical Society's 24-hour train-watching marathon at Saginaw on Memorial Day Weekend.

More industrious photographers can venture to the nearby Bailey Boswell Road, McLeroy Boulevard, and Industrial Avenue grade crossings for different views. Railroad special agents patrol the area for trespassers, so do not venture onto railroad property.

Occasionally, one can catch a glimpse of the industrial locomotives that serve local industries and normally toil out of sight. Foreign power appears frequently on all three main lines, and Kansas City Southern trackage-rights trains ply BNSF tracks. Be sure to watch for new GE locomotive deliveries on BNSF trains.

If freight traffic lags, Amtrak's daily *Heartland Flyer* passes about noon southbound and again at about 5:45 p.m. northbound, but does not have a scheduled stop in town. The train operates with a unique consist, including a former F40PH cab car and refurbished former Santa Fe hi-level cars from the *El Capitan*.

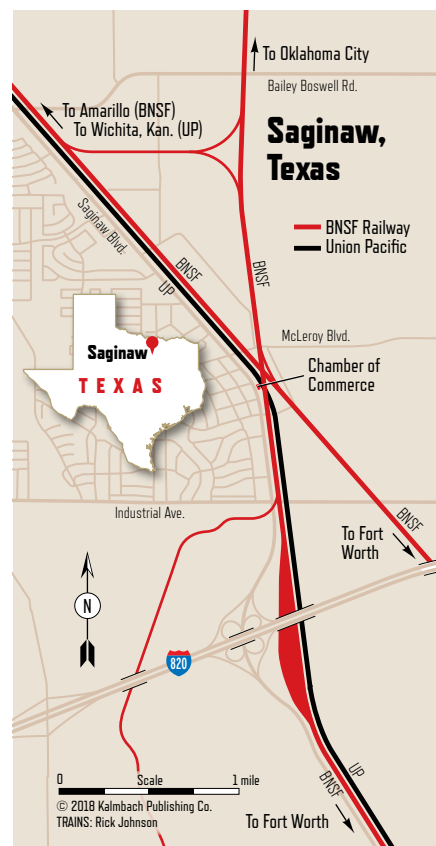


**RADIO FREQUENCIES:** BNSF Fort Worth Sub, 160.650; BNSF Wichita Falls Sub, 160.920; BNSF yards, 161.235; UP Duncan Sub, 160.740.



**FOR YOUR FAMILY:** Just to the north, visit the Texas Motor Speedway, home of NASCAR and IndyCar events. To the west is the Fort Worth Nature Center & Refuge, a 3,000-acre site with more than 20 miles of recreational trails and its own bison herd.

Farther afield, head to Trinity Park in Fort Worth for outdoor recreation and vantage



points to photograph downtown Fort Worth and the Fort Worth & Western Railroad's trestle over the Trinity River. Or ride on the 2-foot-gauge Forest Park Miniature Railroad. Younger kids might also enjoy a visit to the Fort Worth Zoo or the Fort Worth Museum of Science and History, both within a mile of the park.



# Rochelle, Ill.

BY BRIAN SCHMIDT



**A westbound Union Pacific freight rolls by the Rochelle Railroad Park pavilion on a busy day for railfans. The park was begun in 1998 by the city.** TRAINS: Brian Schmidt

**LOCATION:** Rochelle, Ill., is known as the Hub City for good reason. Main lines of BNSF Railway and Union Pacific cross on the west side of town. Because of this, and the heavy rail traffic they bring, the city of Rochelle started the Rochelle Railroad Park in 1998. As many as 100 trains a day pass through the city of 9,500 residents every 24 hours.

**TRAIN-WATCHING:** The best train-watching spot is, of course, the Rochelle Railroad Park. The park is open 24 hours a day and provides a safe, elevated vantage point. Restrooms, grills, and free Wi-Fi are available to visitors. Train-watchers without a radio scanner can tune their car radios to 106.9 FM to pick up the park's scanner feed. For more information, go to [www.rochellerrailroadpark.org](http://www.rochellerrailroadpark.org).

BNSF's traffic is largely intermodal and automotive to and from Minneapolis, Seattle, and Portland, Ore. The line, known as the Aurora Subdivision, was originally Chicago, Burlington & Quincy, which became Burlington Northern in 1970 and BNSF in 1995. BNSF has a local based in Rochelle; the locomotive, usually a GP38-2, is kept near Main Street downtown.

UP traffic is largely coal and intermodal on the Geneva Subdivision, which UP acquired in its merger with the Chicago & North Western in 1995. Normal operations are reversed from

other lines with trains running on the lefthand track in a given direction.

Many UP trains originate or terminate at the Global Ill intermodal yard west of town. In fact, some westbound trains originating at the yard will not even be seen in town. A number of

shuttle trains operate throughout the day, moving containers between Global Ill and other intermodal facilities in the Chicago area.

The city also has its own short line, known as the City of Rochelle Railroad, which runs on the east side of town along South Caron Road. It is municipally owned, and operated by the Burlington Junction Railway. Parked locomotives are not accessible from public property, but when operating, the railroad runs along the side of the road.

TRAINS magazine's Rochelle webcam is mounted on the roof of the park shelter with a westward view of the diamond crossing. Registered users watch the rail action at Rochelle for free any time from a computer by going to [www.TrainsMag.com](http://www.TrainsMag.com).

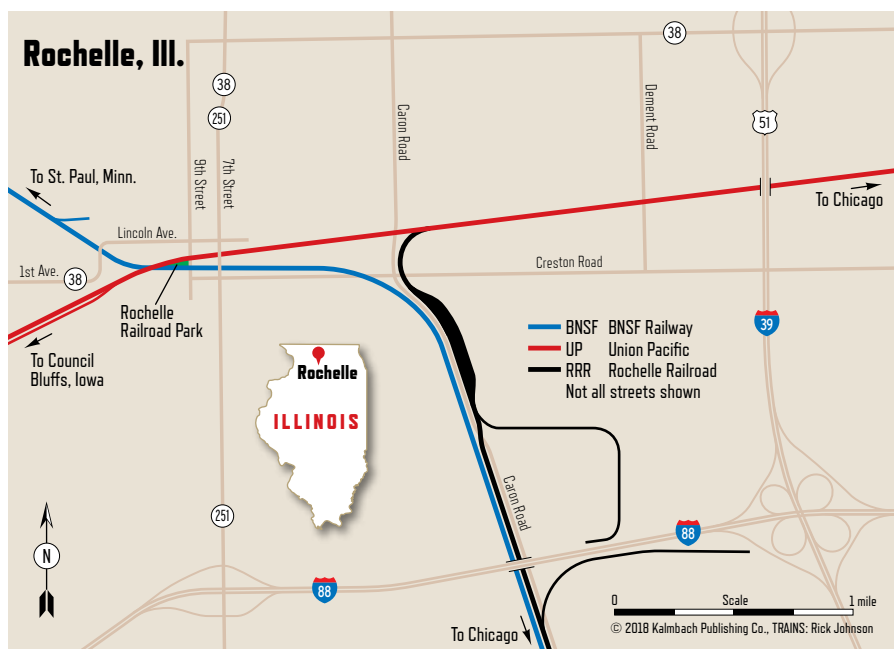
Note that Rochelle now has a quiet zone in effect for railroad horns. This means visitors, and webcam followers, will not regularly hear trains blow for crossings in town.



**RADIO FREQUENCIES:** BNSF Aurora Sub, 161.160; BNSF yard, 160.875; UP Geneva Sub, 161.040; UP yard 161.175; Rochelle Railroad, 160.950



**FOR YOUR FAMILY:** Rochelle has locally owned restaurants located downtown that are worth visiting. The city also hosts Rochelle Railroad Days annually each June.





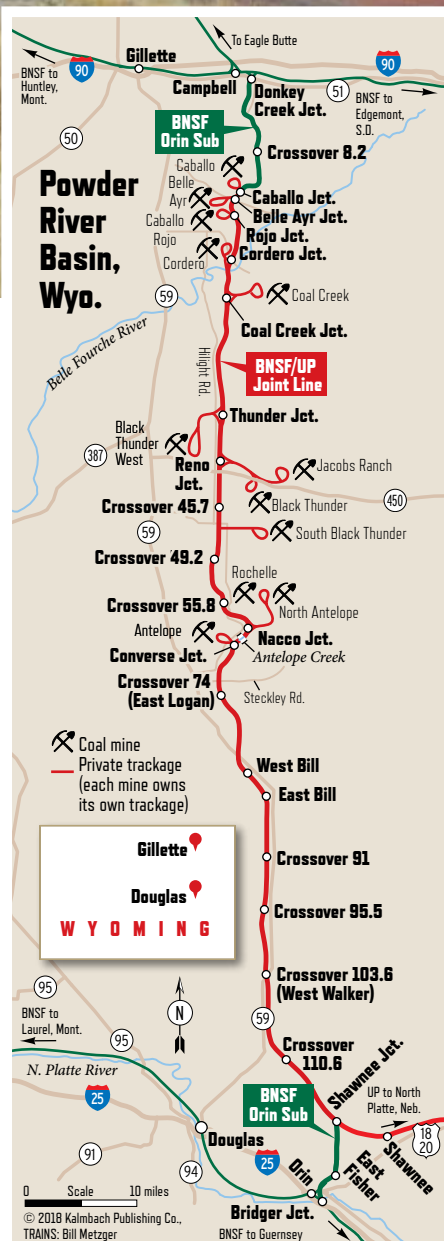


# Powder River Basin, Wyo.

BY MATT VAN HATTEM



**BNSF and UP distributed power on three loaded coal trains pass on an S-curve under the Lawver Road overpass, south of Gillette, Wyo., in October 2017.** TRAINS: Brian Schmidt



**LOCATION:** You know you're in Wyoming mining country by the puffs of diesel smoke hanging in the air — not only from trains, but also from the giant dump trucks that haul staggering amounts of coal and “overburden” (dirt above the coal seam). To serve this round-the-clock operation, 80-100 trains a day traverse BNSF's multiple-track, 127-mile Orin Subdivision. (Union Pacific half-owns the middle 103 miles.) While traffic is down from its peak just a few years ago, there are still sufficient trains to keep any visiting railfan busy.

This is railroading on a scale unseen anywhere else in the U.S. But seeing it for yourself takes some effort, given the remote location. A handful of regional flights call at the small airport in Gillette, Wyo., on Interstate 90 at the coal line's north end, though many visitors fly to Denver or Billings, Mont., then drive more than 3 hours to the coal line.

**TRAIN-WATCHING:** Once you're there, State Highway 59 is your link between the coal line's anchor towns (and sources for food, gas, and lodging): Gillette, to the north, and Douglas, on Interstate 25 near the south end, which boasts a rail museum and BNSF's secondary route to Laurel, Mont. Highway 59 follows the coal line for about 30 miles through Bill, a Union Pacific crew change point. Farther north, Hilight Road parallels the line between

Reno Junction and Coal Creek Junction.

East-west roads found at various points along the Orin Sub will take you to the tracks, and many of them have bridges that provide some of the best vantage points for viewing the action. Bring along a DeLorme atlas of Wyoming or a GPS device to help you navigate the area, but don't be surprised if the road you want to take has a mining company gate across it. Be sure to respect private property, both of the mining companies and unmarked land, in the area.

The line's operational highlight is a 21-mile stretch of four-track main line over Logan Hill between Bill and Nacco Junction. The Steckley Road overpass, at the summit of the hill (a 1-percent climb each way), is a great place to watch the action as headlight after headlight comes into view.

**RADIO FREQUENCIES:** BNSF Orin Sub: Bridger Junction to Orin Junction, 161.265; Orin Junction to milepost 20.6, 161.100; milepost 20.6 to Donkey Creek Junction, 161.385; UP Bill Yard, 160.455.

**FOR YOUR FAMILY:** Across the road from UP's yard in Bill, the Oak Tree Inn provides lodging for train crews and the general public, while adjacent Penny's Diner serves up meals 24 hours a day (or get a to-go bag if you're in a hurry).

Powder River Basin, Wyo.



# Woodstock, Ontario

BY MICHAEL D. HARDING



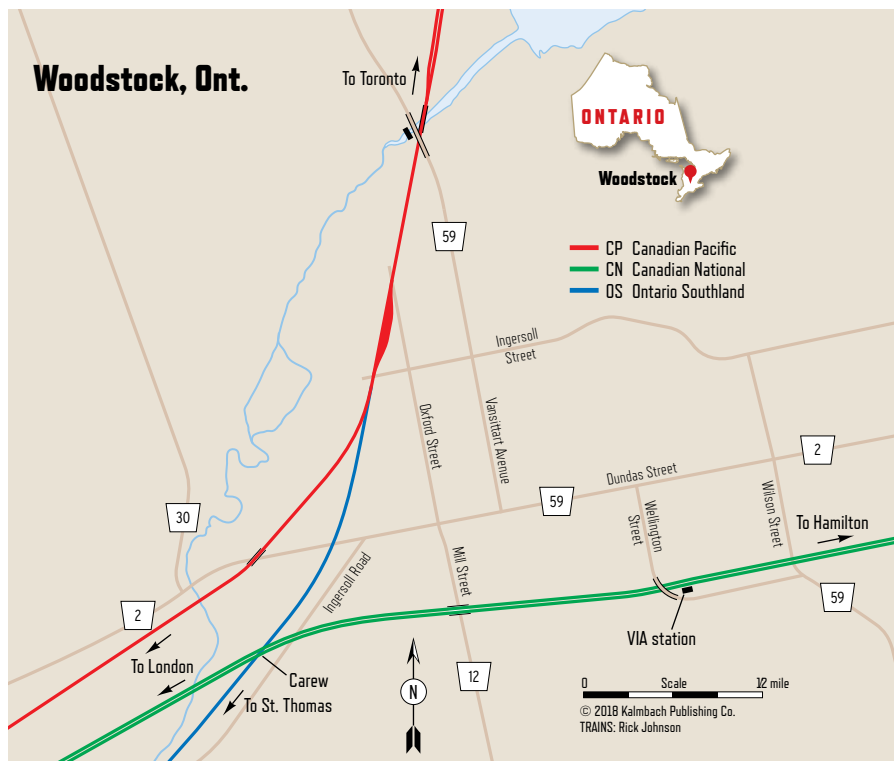
CP train No. 147 crosses the Thames River as seen from the Vansittart Avenue bridge sidewalk on Sept. 1, 2017. Michael D. Harding

**LOCATION:** Woodstock is a city of 38,000 in southwestern Ontario, located between Hamilton and London. The community promotes itself as “The Friendly City” and is known as the Dairy Capital of Canada. Both Canadian National and Canadian Pacific own track through town, and the Ontario Southland Railway enters on a branch to interchange with CP. VIA Rail Canada passenger trains call on the Woodstock station located on the CN main line.

**TRAIN-WATCHING:** The busiest line through Woodstock is the CN main line from Toronto to London with about 25 trains daily, about 15 freight and 10 VIA passenger trains. The VIA trains operate in the busy Toronto-Windsor corridor. The station is located on the south side of downtown. Wellington Street curves up and over the CN main from the parking-lot side of the depot and has sidewalks on both sides of the bridge crossing the tracks. Between the station and the overpass, there are a variety of safe train-watching vantage points in the immediate area.

The next-busiest line through Woodstock is the CP main line with 10 trains daily. Vansittart Avenue crosses both the railroad and the river on a high bridge that features sidewalks on both sides for safe viewing. Tecumseh Street drops down to track level from the north end of the bridge and follows alongside the CP main to a small yard that also serves as an interchange point with Ontario Southland.

The short line makes its entry into town from the southwest, following the road from



Ingersoll. It crosses the CN on a diamond at Carew, readily visible from the Ingersoll Road crossing west of the VIA station.

**RADIO FREQUENCIES:** CP, 161.325; CN road, 161.415; CN dispatcher, 161.205; Ontario Southland, 160.575.

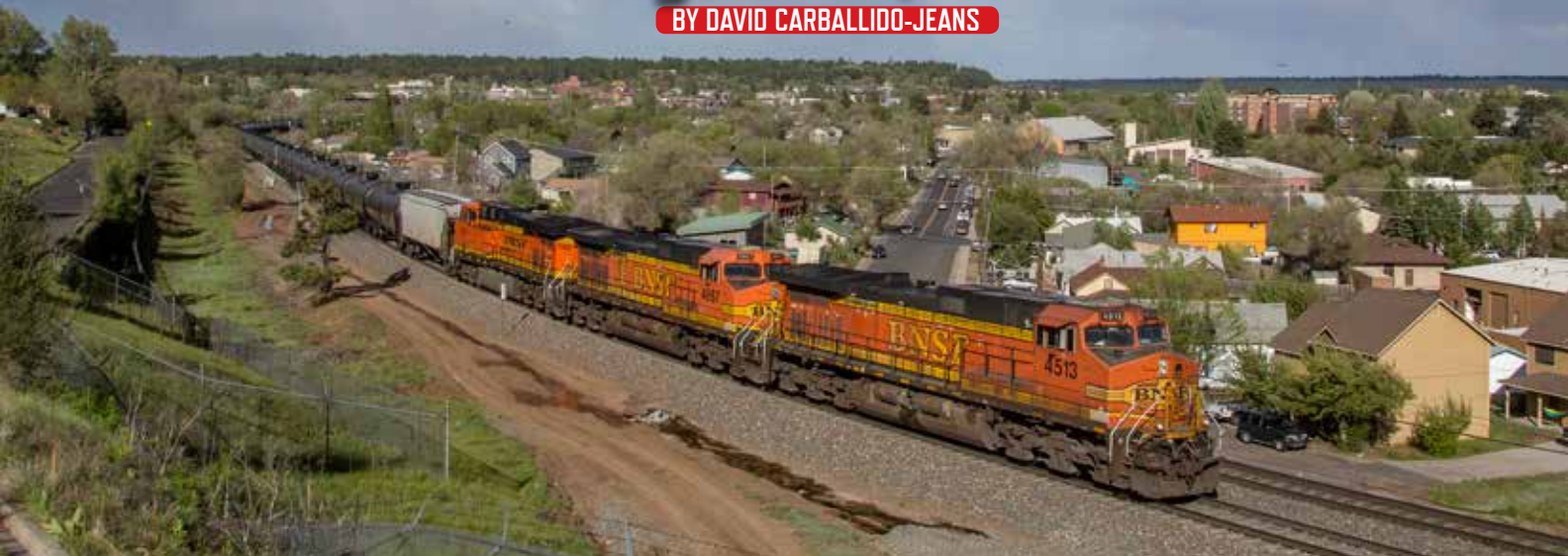
**FOR YOUR FAMILY:** The Woodstock area features all the amenities of a small city, including a museum, art gallery, and a historic shopping district with specialty stores and boutiques. London, with all of its cultural, sports, and entertainment attractions, is less than 30 miles west.





# Flagstaff, Ariz.

BY DAVID CARBALLIDO-JEANS



A westbound ethanol train grinds up the eastern slope of the Arizona Divide through downtown Flagstaff in May 2017. David Carballido-Jeans



**LOCATION:** Arizona is not solely a wide-open desert landscape. Along the Arizona Divide, a college town exists, surrounded by Ponderosa Pine trees: Flagstaff. At an altitude of 6,900 feet, Flagstaff is a popular train-watching destination to see the BNSF Railway's Southern Transcon line from Los Angeles to Chicago. The line sees a parade of intermodal, manifest, grain, and ethanol trains. Amtrak's *Southwest Chief* makes daily stops at the Flagstaff depot. In Flagstaff, trains are working hard up the grade toward the summit of the Arizona Divide at 7,359 feet. With nearly 70 trains within a 24-hour period, one will be busy capturing these heavy trains grinding up the mountain.



**TRAIN-WATCHING:** Flagstaff offers many opportunities for railroad photography. Downtown provides a scenic backdrop with the 1926 Flagstaff depot. One can

snap photos from either the platform of the train station, which gives the option of scenes with the classic Santa Fe-style station signs, or near the old loading docks on the south side of the tracks. Toward the east side of town, one can shoot from the Walnut Canyon Road overpass. As part of old U.S. Route 66, this location provides a great view of westbound trains grinding up the grade through the Ponderosa Pines, while having Mount Elden towering in the background for eastbound photos.

On the west side of town, there's a photo opportunity at the top of Mars Hill. Following Mars Hill Road to the Lowell Observatory gives way to a lookout point of downtown Flagstaff. There, one can see trains snake their way into town, passing the depot, and being able to capture the downtown skyline. Below Mars Hill, off of Lower Coconino Street, railfans can photograph trains passing the signals of West Flagstaff and capture the downtown skyline.

Farther west of town, off of Railroad Springs Boulevard, there are hiking trails that follow the tracks where visitors can photograph trains just a couple of miles away from the summit of the Arizona Divide. Be sure to not stray onto railroad property, however.

A defect detector at Angell, about 20 miles east of Flagstaff, warns visitors of approaching westbound trains.



**RADIO FREQUENCY:** BNSF road, 160.935.



**FOR YOUR FAMILY:** Along with the attraction of the train-watching, the town also provides activities for the family. At Mars Hill, one can go to the Lowell Observatory, where Pluto was discovered. The visitor center at the train station provides information and other suggested activities. Williams, home of the Grand Canyon Railway, is 30 miles away.



Flagstaff, Ariz.





# Byron Hill, Wis.

BY DREW HALVERSON



A northbound Canadian National manifest freight, caked in snow, glides down Wisconsin's Byron Hill at County Highway B. Drew Halverson



**LOCATION:** Nestled among hillside dairy farms, cornfields, and rock quarries, Byron Hill, Wis., sees more than 20 trains per day on Canadian National's Waukesha Subdivision. Positioned halfway between Fond du Lac and Lomira, Wis., the main line is paralleled by two vital roadways, state Route 175 and Interstate 41. Branching off of those arteries are a handful of east-west roads that provide access to impressive photo locations. With grades peaking at 0.99 percent, this stretch of rail is unlike anything in the region.



**TRAIN-WATCHING:** On Byron Hill expect to see heavy freight trains (sometimes equipped with helper power) traversing one of the steepest grades in the state, on a twisting right-of-way, and surrounded by pastoral Midwestern scenery. Southbound trains start the climb at Valley, the north end of

two main tracks just outside of Shops Yard. Northbound trains cruise downhill, making them difficult to follow. Choose one spot and just watch the action unfold. You may even see two trains meet. During the afternoons look for the Quad Local on its run to and from the Quad Graphics plant in Lomira, Wis. This train usually features Geeps decked out in the following predecessor paint schemes: Illinois Central, Elgin, Joliet & Eastern; Grand Trunk Western, and other, older CN liveries.

Two striking photo locations that showcase Byron Hill are on county roads. First, county Highway F in the town of Byron has an overpass that provides a great view of the sweeping curves, daunting climb, and scenery. Second, closer to the bottom, the tracks cross county Highway B near a horse farm. This photo location is ideal for late evening train-watching and photographing.

Most Canadian National trains are manifest freights and priority intermodal moves, but unit sand, oil, and potash trains make frequent appearances. Some of the unit sand trains feature run-through motive power from BNSF Railway, Kansas City Southern, Norfolk Southern, and others.

CN's Shops Yard is only a short drive from Byron Hill. Travel north on I-41 to exit 101, which will take you east on Winnebago Street. Follow this road for about 1 mile, and you'll end up in the neighborhoods next to the vast, secluded yard.

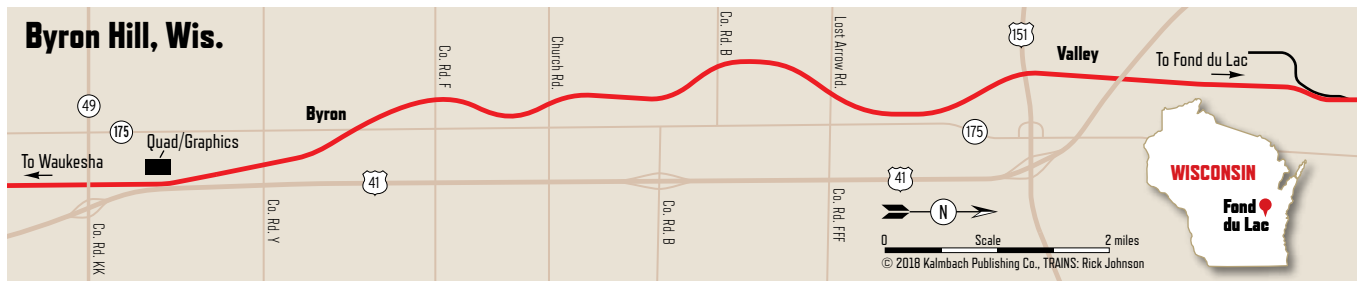


**RADIO FREQUENCIES:** CN Waukesha Sub, 161.295; CN yard, 160.260.



**FOR YOUR FAMILY:** Kettle Moraine State Forest, about 15 minutes east, offers numerous outdoor activities.

Byron Hill, Wis.







# Minnesota's Iron Range

BY DAVID SCHAUER



**LOCATION:** Canadian National's Thunderbird corridor is located in northeastern Minnesota, 60 miles north of Duluth in the heart of the Mesabi Iron Range. Known for heavy and frequent iron ore trains, the main stem of this corridor runs 10 miles on the Missabe Subdivision from United Taconite's Thunderbird North mine located near Eveleth to the Fairlane processing plant at Forbes. In addition to the Missabe Subdivision, this area includes the Iron Range, Keenan, Minntac, and Rainy subdivisions.

The Iron Range Sub connects with the corridor at Iron Junction and handles all ore trains operating to and from the Lake Superior port city of Two Harbors. Crossing the corridor at Shelton Junction is the Rainy Sub, CN's former Duluth, Winnipeg & Pacific main line between the Canadian border at Ranier and Duluth. Branching off at Wolf is the Minntac Sub, serving U.S. Steel's large iron ore processing plant at Mountain Iron. Lastly, the Keenan Sub heads west at Keenan to Emmert (near Hibbing) and includes Keenan Yard, CN's primary base of operation on the Iron Range.



**TRAIN-WATCHING:** Trains of unprocessed ore, called "T-Birds," operate the length of the corridor from Thunderbird mine to Fairlane and provide 12 movements per day. These trains and their frequency is what gives this corridor its name. In addition to the T-Bird moves are trains of processed ore from the large Minntac mine (10-12 movements per day, counting loaded and empty trains), one round-trip train per day from the Minorca mine located north of Virginia, and up to two loaded trains from the

Fairlane plant. In addition, each mine receives at least one train of limestone daily, with the Minorca and Fairlane plants receiving stone only in the warmer months while Minntac receives shipments year-round. A local job based at Keenan runs through the corridor daily handling freight traffic to the mines and other customers. Freight from Two Harbors off the Iron Range Subdivision is handled by a local three or four times per week. BNSF Railway has a small presence here through its operation of a weekly switch job from Kelly Lake (Hibbing) to the Minorca mine using trackage rights over CN.

Rounding out the activity in the area are CN "core" trains that use both the Missabe and Rainy subdivisions. These trains include general freight and intermodal plus unit trains of oil, sand, coke, grain, and potash that move between Canada and Chicago. As a general operating practice CN runs most southbound core traffic down the Rainy Sub while northbound trains utilize the Missabe Sub, depending on traffic flow and congestion. Expect to see more than 20 core trains through the area on a daily basis.

There are ample public roads throughout the corridor area, so safely observing and photographing operations is not a problem.

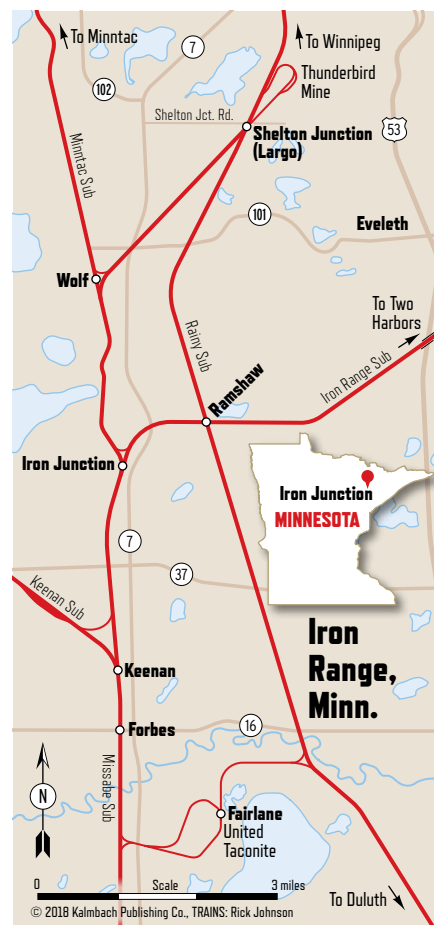


**RADIO FREQUENCIES:** CN Missabe, Minntac, and Keenan subdivisions, 160.350; Iron Range Subdivision, 160.800; Rainy Subdivision, 160.860; yard, 160.230.



**FOR YOUR FAMILY:** Minnesota Discovery Center at Chisholm has many activities for all ages, and the U.S. Hockey Hall of Fame is located close by in Eveleth.

Loaded and empty "T-Bird" raw ore trains meet just north of the state Route 37 overpass located between Iron Junction and Keenan on May 16, 2013. David Schauer



Iron Range, Minn.





# Old Fort Loops, NC

BY JIM WRINN



As seen from High Fill, a westbound Norfolk Southern train starts its winding path up the Blue Ridge near Asheville, N.C. Grady McKinley



**LOCATION:** The loops near Old Fort, N.C., provide a unique way for Norfolk Southern trains to move from the Piedmont to the Blue Ridge Mountains with 13 miles of steep (2.2 percent) winding track to cover 3 air miles. In those 13 miles are seven tunnels, and enough curves, cuts and fills, and bridges to astound and embarrass any model railroader. Think of this railroad as a giant spiral staircase.



**TRAIN-WATCHING:** Sadly, the loops are not as busy as they used to be, with only two scheduled freights in each direction. Extra unit coal trains and locals fill in the missing pieces. Andrews Geyser and High Fill are great places to watch. Mill Creek Road is the primary way in, and Point Lookout Trail on an abandoned section of U.S. Route 70 leads to four tunnels with great viewing opportunities.

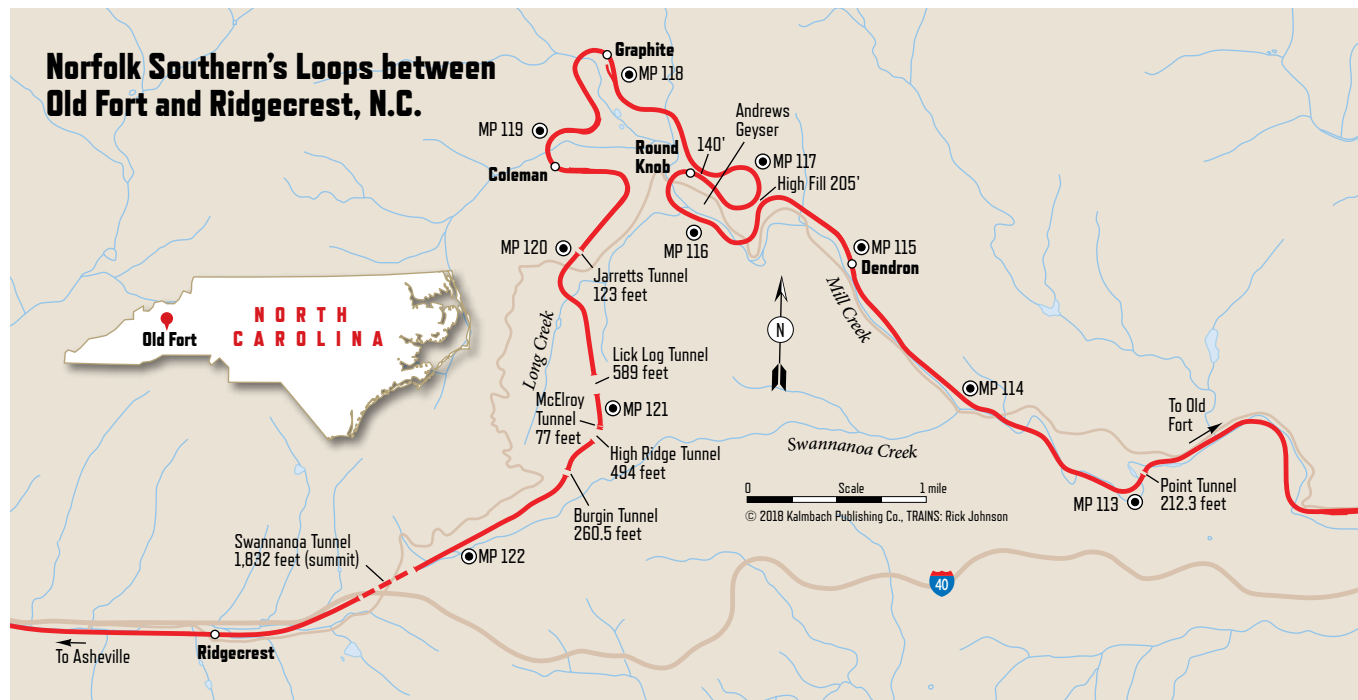


**RADIO FREQUENCIES:** Norfolk Southern road, 160.950; NS dispatcher, 160.245 and 160.830.



**FOR YOUR FAMILY:** The largest private residence in America, Biltmore Estate, is 40 miles to the west in Asheville, a hub for outdoor activities that include hiking, rafting, cave exploration, fishing, and boating.

## Norfolk Southern's Loops between Old Fort and Ridgecrest, N.C.







# Perryville, Md.

BY BRIAN SCHMIDT

**LOCATION:** Perryville, Md., is a welcome hot spot along Amtrak's largely inaccessible Northeast Corridor. Just across the Susquehanna River lies Havre de Grace, a larger community, but one without passenger service. Together they anchor the north end of MARC's commuter service that stretches south to Baltimore and Washington, D.C. Both of the major Eastern Class I freight railroads have trackage through the area, too.

**TRAIN-WATCHING:** Amtrak's Northeast Corridor is the star here with its massive 1906 Susquehanna River bridge that connects the two communities. Good views are afforded at public piers in both Perryville, north of the tracks, and Havre de Grace, south of the tracks. The south side pier offers more of a broadside view while the north side pier provides fantastic evening glint shots. More than 100 trains cross the bridge on weekdays, including Amtrak intercity and MARC commuter trains, and Norfolk Southern freights that largely operate at night. MARC stops in Perryville on weekdays only, inside the wye connection with NS.

Norfolk Southern's Port Road Secondary runs west from Perryville to Harrisburg, Pa., carrying the railroad's traffic for Baltimore; Wilmington, Del.; and the lower Delmarva. That includes intermodal trains 24M and 23W between Baltimore and Chicago, and crude oil unit trains for the refinery in Delaware City, Del. Some lucky visitors are known to catch such freight moves in daylight on weekends when passenger traffic is reduced. Otherwise, NS trains at Perryville are largely a nocturnal affair.

Farther north is CSX Transportation's Philadelphia Subdivision, running between northern New Jersey and Washington, D.C. The former Baltimore & Ohio route sees about 10 trains daily. A boat launch between the CSX and U.S. 40 bridges provides good views of the eastern portion of the CSX bridge, which traverses undeveloped Garrett Island in the river. Aiken siding is located on the north bank of the river and meeting trains provide a good clue to their presence on the radio. Grade crossings on both sides of the river provide warning of approaching trains.

The land east of the river and south of the Northeast Corridor is part of the Perry Point VA Medical Center and access is restricted.

**RADIO FREQUENCIES:** Amtrak Northeast Corridor, 160.920; CSX

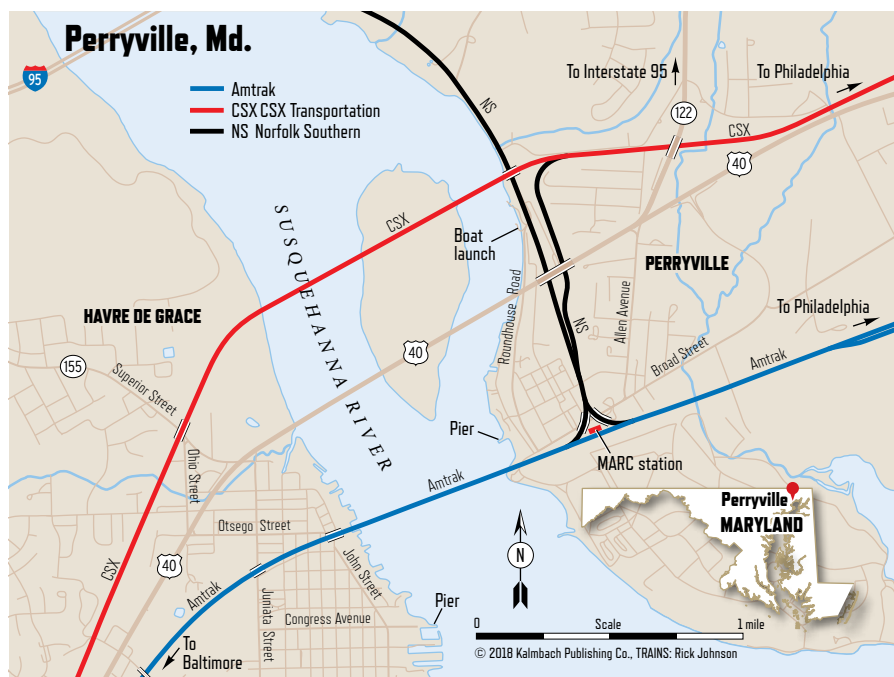


**Amtrak Northeast Regional trains pass at Perryville, Md., in June 2016. Acela Express and MARC commuter trains also appear here, along with NS freights.** TRAINS: Brian Schmidt

Philadelphia Sub, 160.230; NS Port Road Secondary, 161.070.

**FOR YOUR FAMILY:** Nearby Susquehanna State Park offers outdoor

activities. The Havre de Grace Maritime Museum shares the area's rich maritime history. The Susquehanna Museum at the Lock House relates the history of the Susquehanna and Tidewater Canal.



Perryville, Md.





# Kamloops, British Columbia

BY LEO DE GROOT



A westbound Canadian National intermodal train clings to the rugged north shore of Kamloops Lake on July 21, 2015. Drew Halverson



**LOCATION:** Kamloops derives its name from the Shuswap First Nations term for “meeting of the waters.” Its location in the interior of British Columbia hosts both Canadian Pacific and Canadian National as they pass through on their westward paths across Canada to the Pacific Ocean. The railroads part ways on the prairies and only reunite in this city after about 1,200 miles of separation. In between, they cross separate passes through the Rocky Mountains, the CP over Kicking Horse Pass at 5,340 feet, and the CN over Yellowhead Pass at 3,710 feet. From Kamloops west their main lines

remain together to the Pacific, generally resting on opposite sides of the same rivers.



**TRAIN-WATCHING:** One can expect to see 30-32 CN freights daily, including general freights, intermodal, coal, grain, potash, and sulphur trains. CP serves up a similar number, with the majority being coal, intermodal, and potash. Visitors can also take in two passenger operations: VIA Rail Canada and the luxury Rocky Mountaineer excursion route.

VIA Rail operates the famed *Canadian* through Kamloops over CN's route. The train runs on a

triweekly basis in each direction between April and October, and twice weekly in other months. Rocky Mountaineer trains appear daily between late April and the end of September. Rocky Mountaineer trains can be viewed at the old Canadian Northern Railway station near the CP yard, and as they cross the South Thompson River bridge to and from the CN main line. Another local treasure is the Kamloops Heritage Railway, which operates an ex-CN 2-8-0.

Both CN and CP maintain yards in Kamloops. The CN yard is larger, but not as easy to view. It is located outside city limits to the north. However, the VIA station within the yard is public property and you can see CN trains cross the North Thompson bridge on their way out of the city. The CP yard is located in downtown Kamloops and can be seen from city streets. For CP fans, watch trains downtown at the pedestrian overpass over the yard lead on Third Avenue. Interchange traffic occurs five days a week between the two railroads, in both yards.

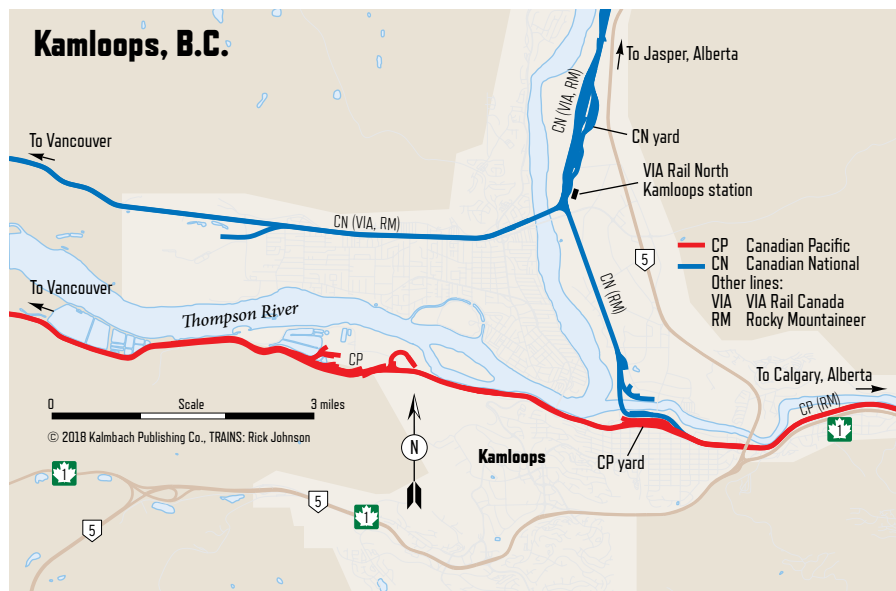
East of Kamloops, CP runs along the scenic South Thompson River. To the north, CN runs along the North Thompson River. To the west, after the rivers merge in Kamloops, the two railroads run on opposite sides of Kamloops Lake and then of the Thompson River.



## RADIO FREQUENCIES:

CN Ashcroft and Clearwater subdivisions, 161.415; CN dispatcher, 160.665; CN yard, 160.935; CP Shuswap Subdivision, 161.325; CP Thompson Subdivision, 161.535; CP dispatcher, 160.425.

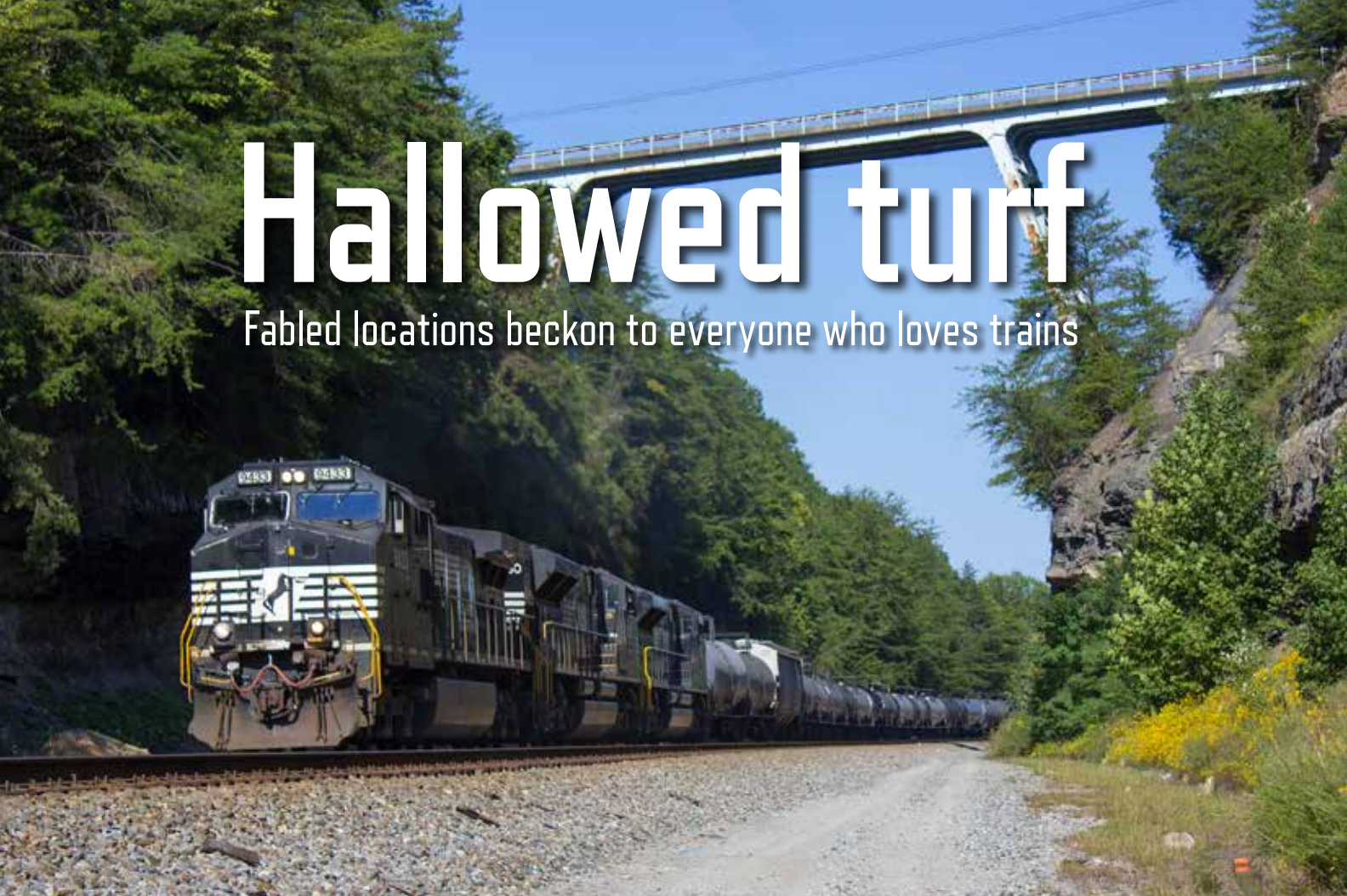
## Kamloops, B.C.





# Hallowed turf

Fabled locations beckon to everyone who loves trains



Deep in the heart of Kentucky, a southbound Norfolk Southern freight heads down the famous route between Cincinnati and Chattanooga, Tenn., called the “Rathole” for its many narrow tunnels. The route has since been upgraded with deep cuts like this. Adam Wells

**S**ome places must be visited to be appreciated. You can read about them all your life. You can study pictures. Tie yourself in knots binge-watching YouTube videos. But in the end the only way to relive the stress and pressure of wondering what they’re like is to go there to see and understand why people in love with trains have made pilgrimages there for decades.

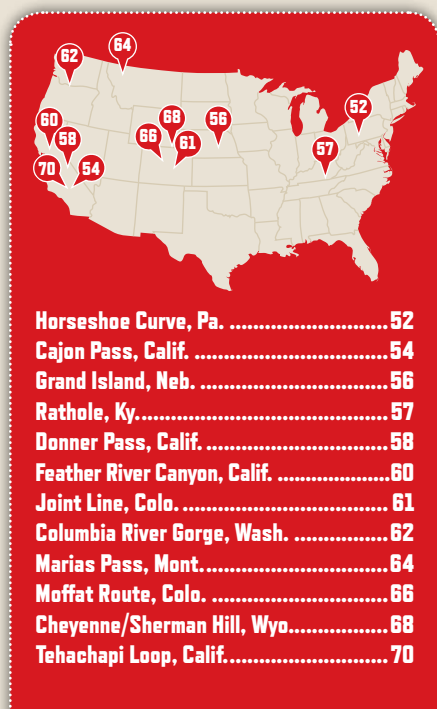
Nothing over the years has diminished their appeal. Not the transition from steam to diesel. Not the end of privately operated passenger trains. And not the mergers that have changed the face of railroading and erased household names. These sacred places, these hallowed places are where railroading earned its reputation as a dramatic spectator sport.

They’re must-see locations that everyone wants to visit at least once in his or her lifetime. The places that were once icons of their respective railroad companies, synonyms for railroading’s gritty environment.

You may be surprised at how some of these locations have become tourist attractions in their own rights. They’re home to

both formal and informal viewing areas. They draw visitors from across the continent as well as from around the world. And others retain their rough-hewn nature, demanding hikes through dense forests to claim the prime spots.

Join us for this suggestion of 12



important places that earned a special place of honor in railroad history as well as in the hearts and minds of the industry’s legion of followers.

By visiting these hot spots, you’ll find yourself following in the footsteps of legendary railroad photographers like Kindig and Kratville, Steinheimer and Benson, Flanary and Lustig, and scores of others. You’ll come to discover what led them here, and what keeps bringing people back generation after generation. And once you’ve been to a few of these places, you’ll begin to understand why they were early favorites and how they’ve endured the test of time.

You’ll be glad you visited these prime pieces of real estate where railroad history was made. You’ll see how great mountains are conquered, where railroads share a common valley or even common tracks, where junctions offer diverging routes (or conversely, a common route), where bridges keep trains moving over and under each other, and where tunnels are the best solution to problems of gravity and geography.

When you visit these places, know you’ll be walking on sacred ground. You’re on hallowed turf. Be sure to bring a camera and get ready for lots of memories. — Jim Wrinn





# Horseshoe Curve

BY DAN CUPPER



A downhill mixed freight passes the iconic spot on Horseshoe Curve where a park allows visitors to go trackside. A veteran of the hill, a former Pennsylvania Railroad Geep, rests in a place of honor, a salute to the past and the future at this iconic eastern hot spot. TRAINS: Jim Wrinn

**LOCATION:** Altoona, Pa., was once the heart of the Pennsylvania Railroad, with a force of 16,000 workers laboring in a 218-acre shop complex, designing, building, testing, and repairing thousands of locomotives and tens of thousands of freight and passenger cars. Today, Norfolk Southern employs about 1,000 in its Juniata Shops, now a diesel locomotive heavy-repair facility that lies adjacent to NS's busy Northeast-Chicago main line with 50 to 60 trains a day. Part of the former shop complex now houses the interactive Altoona Railroaders Memorial Museum in downtown Altoona, home to PRR Class K4s 4-6-2 steam locomotive No. 1361, GG1 electric unit No. 4913 (both built in Altoona), and a collection of mostly PRR passenger and freight rolling stock.

A highlight among the latter is heavy-duty 32-wheel FD2 flatcar No. 470245, sometimes called "The Queen Mary" because of its 124-foot length, with its depressed center section now serving as a stage for concerts and other

public events. It, too, was designed and built in Altoona, and upon its completion in 1952 PRR touted it as "the world's largest freight car."

The city lies some 230 miles west of Philadelphia, at the base of the railroad's 1.8-percent climb over the Alleghenies, which includes the widely known Horseshoe Curve at milepost 242. Twelve miles west of town, and 1,100 feet higher, is the mountaintop community of Gallitzin, where the main line crests the 2,200-foot summit in two tunnels. The peak marks the dividing line between the railroad's East Slope and West Slope grades, and also serves as the Eastern Continental Divide, separating streams and rivers flowing east to the Atlantic from those flowing southwest to the Gulf of Mexico.

**TRAIN-WATCHING:** Train traffic runs throughout the day and night, with the number of movements being greater west of Altoona because of helper units returning light

down the mountain. A mixture of double-stack, truck-train, merchandise, oil, grain, and coal trains provides a good variety, plus Amtrak's daily New York-Pittsburgh *Pennsylvanian*.

In Altoona, an open overhead pedestrian bridge near the museum gives good views east of the Amtrak train/bus station. Other public viewing spots are, from east to west, the Eighth Street Bridge near the Juniata Shops, which overlooks Rose Yard; nearby Sixth Street (Juniata), with its view of a turntable and locomotives being cycled through the shops; the Seventh and Sixth Street (Altoona) bridges; a parking area behind Station Mall downtown; and the 17th and 24th street bridges. The now-closed Alto Tower stands just west of the 17th Street Bridge.

Chestnut Avenue skirts the northwest side of the shops, and diesel units in various stages of repair or rebuilding can be seen here; they are best photographed from a hillside parking lot above the street.



West of downtown is the brickyard grade crossing, the only one within miles of Altoona, where South 10th Street meets Porta Road.

Best known, of course, is the trackside park at Horseshoe Curve National Historic Landmark, 5 miles west of town, where a visitor center commemorates the engineering achievement that was opened in 1854. A continuous parade of freights, helpers, and the *Pennsylvanian* keep the site a busy one. A joint ticket gives admission to both the Curve and the Altoona museum, which administers the Curve park and visitor center.

At the summit in Gallitzin, the Jackson Street Bridge gives unobstructed views of the west portal of the double-track Allegheny Tunnel (and the Tunnels Museum). The nearby single-track New Portage Tunnel, used primarily for eastbound traffic, is not accessible, but trains approaching from the west can be seen from South Main Street and Portage Street.

In addition, lying 3 miles farther west is a trackside park at Cresson. Across the street, the Station Inn, a bed and breakfast, faces the main line with scanner available to listen in on railroad radio chatter.

Another attraction near Gallitzin and Cresson is the Allegheny Portage Railroad National Historic Site, in which the National Park Service tells the story of a PRR predecessor that used a series of 10 inclined planes to conquer Allegheny Mountain. A reconstructed enginehouse and short length of double track accompany a visitor center and the restored Lemon House inn.

Also in Cresson, the R.J. Corman Railroad's Pennsylvania Lines interchange with NS. In nearby Hollidaysburg, the Everett Railroad short line provides local freight and, in season, steam passenger service, the latter using restored 1923 Alco 2-6-0 Mogul locomotive No. 11. Other rail operations within an hour's drive of Altoona are the Bellefonte Railroad Historical Society excursions, Buffalo & Pittsburgh, Nittany & Bald Eagle, the Johnstown Division of Lehigh Valley Rail Management, and the Rockhill Trolley Museum, situated adjacent to the dormant East Broad Top Railroad.

**RADIO FREQUENCIES:** Everett Railroad, 160.365; NS road channel, 160.800; R.J. Corman Pennsylvania Lines, 160.845.

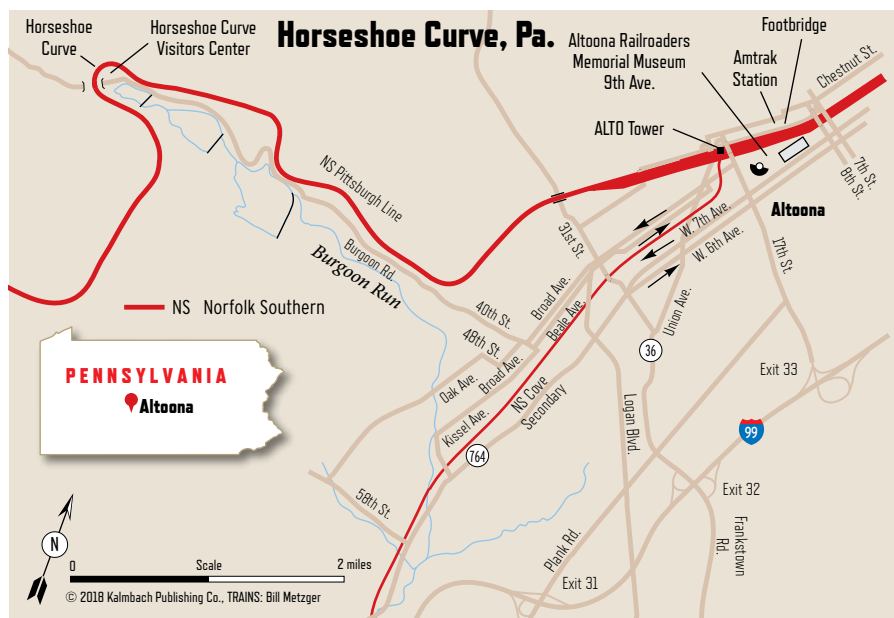
**FOR YOUR FAMILY:** DelGrosso's Park and Lakemont Park are two popular amusement parks, the latter boasting "Leap the Dips," constructed in 1902 and now the oldest operating roller coaster in the world. The minor-league Altoona Curve baseball team plays at Peoples Natural Gas Field. Dating from 1950, two area Meadows Ice Cream stores make frozen custard in machines that are descendants of those designed and built by a former PRR Altoona Shops worker. Factory outlets are operated at Benzel's Pretzel Bakery and the Boyer Candy Co. of Mallow Cup fame.



West of downtown Altoona is the fabled brickyard grade crossing, the only one within miles of the city, where South 10th Street meets Porta Road. This train is eastbound, dropping downgrade into Altoona after a trip around Horseshoe Curve. Two photos, Dan Cupper



One of the hallmarks of Horseshoe Curve operations are manned helper units across the mountain. These two helpers at Gallitzin, Pa., are returning to Altoona for another train.







# Cajon Pass

BY DAVID LUSTIG



**An eastbound BNSF Railway intermodal train climbs Cajon Pass. The route belongs to BNSF, but Union Pacific exercises healthy trackage rights, and its former Southern Pacific line to Palmdale, Calif., also traverses the pass.** Three photos, Elrond Lawrence



**LOCATION:** California's Cajon Pass is a magnificent piece of West Coast mountain railroading. As an important double- and triple-tracked artery for BNSF Railway and Union Pacific, not to mention Amtrak's *Southwest Chief*, the route brings tonnage. In a 24-hour period, you can count as many as 80-90 trains going to and from Southern California and its ocean ports. As international intermodal traffic continues to grow, railroad planners have expanded Cajon's capacity appropriately.

The original line over Cajon Pass is between Victorville on the north and San Bernardino on the south. Originally part of the Santa Fe and now BNSF, UP has trackage rights over the pass. In 1967, Southern Pacific, wanting easier access to the San Gabriel Valley, constructed its own line from Palmdale in the Mojave Desert on the west to Colton on the east.

If you are traveling here for the first time, visiting Summit is a trek that must be made. But don't tarry long. Today, as then, there is so much more in the immediate area with photo opportunities and just plain awe-inspiring views of trains grinding their way uphill and in dynamic braking on their way down. Many of the best spots are on public roads.

There are two principle ways to approach Cajon. Interstate 15 splits the mountains on a north-south route. The best place to get your bearings, regardless of what direction you're traveling is the state Highway 138 exit, also known as the Cajon Junction exit. Everything you need is here including lodging, food, and



**The diversity of images available from the Hill 582 area is evident from this westbound dropping beneath a signal bridge. California Highway 138 is the key to visiting Cajon. Whether you take it east or west off I-15, you'll find busy tracks in either direction.**

gas. Highway 138 is the key to Summit, a half-dozen miles of windy road to the east. If you're coming from the Tehachapi Mountains, head to Palmdale and pick up Highway 138. You'll see the Palmdale Cutoff in the distance and eventually, run right into Interstate 15.

Besides heading east from Cajon Junction, consider going west about 1 mile. Highway 138 intersects the BNSF and UP in an easy-to-photograph area that includes a geological

formation known as the Mormon Rocks.

One warning, however: A part of the original U.S. Route 66 is south of Highway 138. There are photographic possibilities there, but it is frequently visited by a less-than-ideal clientele. Consider going in that area with your personal safety in mind.

The Cajon Pass railroads skirt U.S. Forestry lands. When chasing trains here you should consider a Forest Service Adventure Pass,





**Union Pacific and BNSF Railway trains pass on the west slope of Cajon Pass, as viewed from the popular Hill 582 railfan hangout.** TRAINS: Brian Schmidt

which provides access to certain areas for recreational purposes.

Weather conditions vary with the seasons. The Cajon area can easily reach into triple digits in the summer and biting cold with occasional snow in the winter. Be prepared for high winds. Also be aware of the snakes and other wildlife in the area. Finally, bring snacks and drinks. The weather can be a great companion on Cajon Pass, and sometimes your worst enemy. But whatever the climate, the Cajon Pass area is a trip well worth taking.

**RADIO FREQUENCIES:** BNSF, 161.190; UP, 160.320. To listen to talking defect detectors, set your scanner to the following frequencies: UP, 160.515; BNSF, 161.190 for the western slope and 161.650 for the eastern slope.

**FOR YOUR FAMILY:** What can I say that you don't already know: Southern California beckons nearby with the original Disneyland, Knott's Berry Farm, Hollywood, Beverly Hills, beaches, palm trees, the Pacific Ocean, and sadly, Los Angeles' infamous heavy traffic that makes it tough to travel 30 miles in less than 2 hours. So if you do deposit your family at a theme park or another attraction, be ready to do some serious hard driving if you're planning on visiting Cajon and coming back to pick them up on the same day.



**Highway 138 provides an excellent venue from which to watch trains, such as this UP freight descending the pass.**





# Grand Island, Neb.

BY JIM WRINN



A BNSF Railway distributed power unit pushes a westbound empty hopper train past the 1911 Burlington Route depot in Grand Island, Neb. Once a busy interchange location between UP and Burlington, today it's a flyover for BNSF across UP's busy east-west main line.



**LOCATION:** Along U.S. Highway 30 west of Omaha lies a linear theme park for rail enthusiasts known as the Union Pacific main line. For the most part, the road and the tracks run parallel to each other across much of this part of the state. The general rule is that you'll see a headlight on the horizon about every 5 minutes. So be ready to pull off the road often. We could point you in the direction of so many towns on this route, but this one, about 2 hours west of Omaha, is special because it is the place where the BNSF Railway's busy main line from the Powder River Basin coal fields crosses the busy UP main line on an overpass. Can you say two busy mainline railroads for the price of one? Here it is!



**TRAIN-WATCHING:** BNSF's overpass crosses just to the west of the UP yard here, and a public crossing at the intersection of Vine and Oak provides a convenient vantage point. In a 24-hour period, you could expect to see 80 to 90 moves on both railroads. In addition to BNSF and UP trains, Nebraska Central shortline trains also use the UP yard. Just to the northwest of the flyover off North Plumb Street is the former Burlington Route depot, which has been remade for other uses. It still makes a good prop for photos, even though the trains are much higher on a fill that serves as an approach for the flyover.



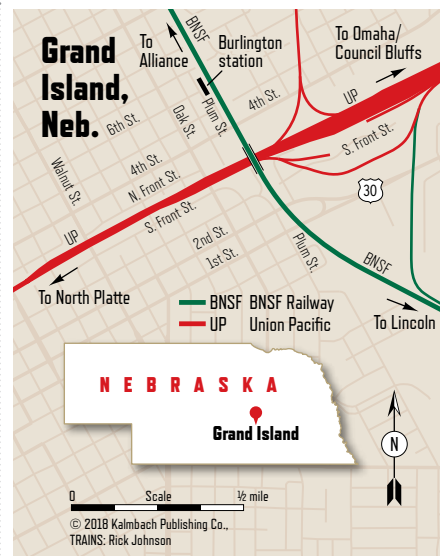
**RADIO FREQUENCIES:** Union Pacific Columbus and Kearny subdivisions, 160.470 and 160.740; BNSF Railway, 160.695; Nebraska Central, 161.220 and 161.265.



A UP coal train rolls east while a BNSF hopper train returns to Wyoming's coal fields at Grand Island, Neb., a great place to watch trains. Two photos, TRAINS: Jim Wrinn



**FOR YOUR FAMILY:** Forty miles to the west at Kearney is the Great Platte River Road Archway (a museum literally straddling I-80 for 310 feet), which tells the story of western expansion, including a segment on the railroad's role. About 150 miles to the west is North Platte, home of the world's largest freight yard and the Golden Spike Tower, which provides a bird's-eye view of the action below, and Cody Park, home to an impressive display of the Union Pacific steam and diesel locomotive giants. Additionally, bird-watching during spring migration is a popular activity in this area from late February through April. Check out the crane and heron populations as they head back north.







# Kentucky's 'Rathole'

BY E.M. BELL

**LOCATION:** Situated in the Daniel Boone National Forrest, just a few miles south of Somerset, Ky., the storied Norfolk Southern "Rathole" (officially the Cincinnati, New Orleans & Texas Pacific, or CNO&TP) passes through a remote part of Southern Kentucky that is often overlooked by visitors. Those wanting to explore the area between Burnside and KD Tower will find narrow, winding state roads, gravel fire roads, high bridges over the tracks, deep cuts, and stunning scenery. This part of the Rathole is fairly new, part of the re-route needed to avoid the newly created (in 1963) Lake Cumberland, and also bypassing the tunnel at Sloans Valley and three other tunnels located on the steep grade at Alpine, Ky. This area is hard to find, but well worth the effort. Pack a cooler, forget about cellphone service, and enjoy the show. This area hosts a lot of wildlife, including rattlesnakes, so be aware of your surroundings.

**TRAIN-WATCHING:** This part of the Rathole sees the most traffic, with everything coming from Danville, Ky.; Cincinnati; and Knoxville, Tenn. Train counts can reach 70 moves a day during the busiest periods, and never less than 50 trains a day. Southbound trains leaving the crew change point at Burnside face a long, twisting 1-percent grade as they climb out of the Cumberland River Valley, while northbound trains run track speeds of up to 50 mph. The sun is generally favorable for southbound trains, but the right-of-way twists and turns enough to make northbound photo opportunities in the morning and late afternoon.

From north to south, there are several vantage points. The first of four bridges over the line is located at Garlands Bend off U.S. Route 27; simply follow Garland Road until you reach the view. This location is best for southbound trains, and the light is good most of the day.

One of the most popular locations is Cave Springs Bridge (over 150 feet above the tracks). Follow state Route 757 south and turn right on Cave Springs Road. This location offers a spectacular view with vistas that reach over a mile to the north. This is the steepest part of the hill, and trains are usually down to a crawl. You have an almost unlimited amount of photo ops here — both wide-angle and telephoto lenses work. Northbound shots are also possible here in the late afternoon and evenings.

Following state Route 757 even farther south into the heart of the National Forrest, you will find the bridge at Deep Hollow. The



**Action on Norfolk Southern's "Rathole" through central Kentucky can provide as many as 70 trains per day but no fewer than 50. A prime location that often goes overlooked is the area south of Burnside, Ky., a crew change point, where deep cuts rule.** Adam Wells

southbound shot here is best, but if you are willing to wait, the late afternoon northbound angle featuring the massive cut is a must have. For another unique location, look for Fire Service Road FD-850, which turns to the left just beyond the deep hollow bridge. This gravel

road (not recommended for low ground clearance vehicles) will take you under the bridge and into the cut. This location is only good for southbound trains, and the light is only good for a couple of hours after sunrise. Anytime after that, the shadows of the deep cut are an obstacle.

Continuing farther south on state Route 757, look for Dead Ox Hollow Road on the left, and follow that to Fire Service Road 856-C1. The fire service road will take you back to a road crossing, and if you continue about a mile past that, you will find yourself in the middle of Dead Ox Hollow next to the tracks. There are unlimited photo opportunities here. Just be careful and watch for snakes.

**RADIO FREQUENCY:** NS road, 160.950.

**FOR YOUR FAMILY:** Southern Kentucky is full of outdoor activities the whole family can enjoy. The Big South Fork Scenic Railroad in Stearns, Ky., offers a 3-hour ride into the history of the coal-mining heritage of southern Kentucky, coupled with the appeal of a train ride on the storied Kentucky & Tennessee short line is not to be missed.



Rathole, Ky.





# Donner Pass

BY DICK DORN



Climbing westbound toward the summit of Donner Pass, Union Pacific train ZG2LT negotiates curves at Andover, Calif., on Sept. 1, 2012. This part of the Roseville Subdivision was the legendary home to Southern Pacific's cab-forward steam locomotives.



**LOCATION:** Part of the original transcontinental railroad, Donner Pass is located between Roseville, Calif., and Reno, Nev. Union Pacific operates the former Southern Pacific line through the Sierra Nevada mountains. Amtrak's *California Zephyr* passes during the daylight hours, with stops at Truckee and Colfax. Reaching the summit requires a climb of just under 7,000 feet for eastbounds out of Roseville, or 2,400 feet for westbounds from Reno. UP runs about 15 to 20 freight trains in a 24-hour period, many with DPUs placed mid-train or at the rear. Donner sees heavy snows in the winter with flangers and spreaders making frequent and dramatic appearances.



**TRAIN-WATCHING:** Interstate 80 is your route across the pass. UP's J.R. Davis Yard is located in Roseville; Overland Route manifest trains originate here and intermodal trains out of the San Francisco Bay Area change crews. A few miles east at Rocklin, the double-track line splits, with the newer No. 2 track taking a less steep route versus the original Central Pacific line's steeper profile. Normally, eastbound trains use the No. 2 track and westbounds the No. 1. The lines come together for less than a mile at Newcastle and go through an easily accessible double-track



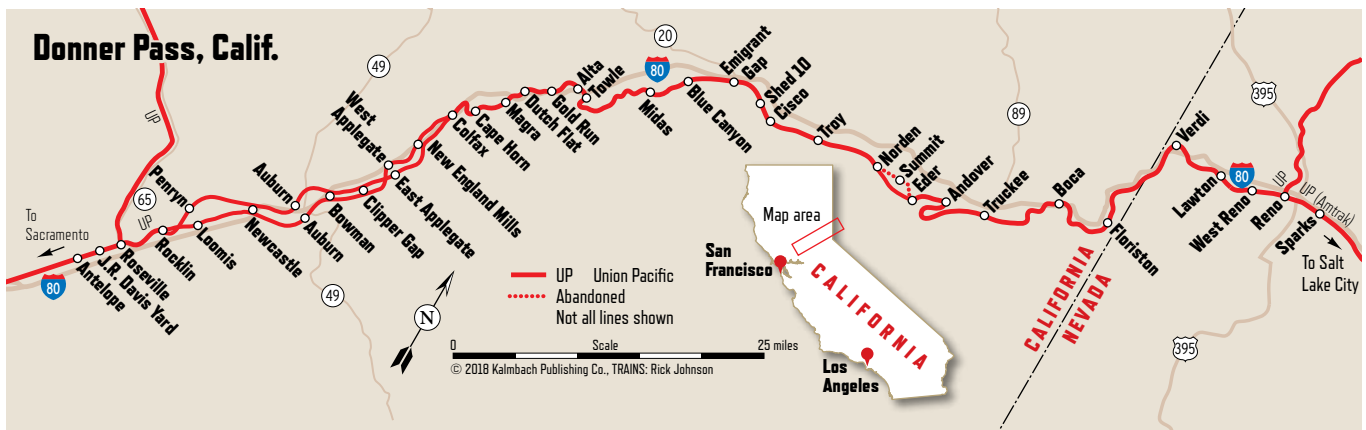
**Amtrak's Reno Fun Train rolls through a spectacular winter wonderland at Soda Springs, Calif., on March 6, 2016. On a regular basis, the *California Zephyr* between Chicago and Emeryville, Calif., makes regular daytime appearances on Donner Pass.** Dick Dorn

tunnel just east of where the tracks cross over I-80. They come together again at Colfax and stay side by side to Reno. Between Roseville and Colfax there are numerous places to reach the railroad using a good map or GPS.

Access to the railroad is limited east of Colfax, but you can get there at Gold Run,

Dutch Flat, and Alta. As you travel east on I-80, stop at Emigrant Gap; a scenic pull-off on the westbound lanes has an excellent view of the tracks below. Further east, take the Highway 20 exit; from here you can walk east along the railroad for tunnel and other scenic shots. At the Eagle Lakes and Cisco exits, walk up the





**Union Pacific eastbound train KMNOA gets a shove from SD70M No. 5414 at Yuba Pass, Calif., on the Donner Pass Route. While train frequency is not the highest on Donner Pass, what it lacks in volume it makes up for in spectacular scenery.** Two photos, Jake Miille

dirt road to the tracks for classic Donner railroading in spectacular mountain scenery.

Take the Norden/Soda Springs exit and explore the area around the summit. Shots here include the snow sheds at Norden. Soda Springs is the only open grade crossing during the winter months between Alta and Truckee. To shoot here, find a safe place to park and watch for snow removal equipment on both the railroad and road. At the summit of Donner Pass Road, you can park and walk through the summit tunnel built by Chinese laborers in the

1860s and on out through the snow sheds. Bring a flashlight. Park across the road from Donner Ski Ranch and look east under the road that crosses the entrance to the tunnel. Take Donner Pass Road farther east past Donner Lake to Truckee. Historic downtown Truckee offers more places to shoot the action.

**RADIO FREQUENCIES:** Union Pacific dispatcher 57, Roseville to Rocklin, 160.875; dispatcher 74, Rocklin to Sparks, 160.320.



**FOR YOUR FAMILY:** Near Truckee is Donner State Park, with a memorial to the ill-fated Donner Party, and Donner Lake, with fishing, swimming, and hiking. Historic downtown Truckee is also of interest. Lake Tahoe is just a half-hour drive from Truckee for recreational activities, as is Reno for night life. If you're into winter sports, there are four ski resorts at the Donner Summit area, and between Truckee and Tahoe are the Squaw Valley, Northstar, and Alpine Meadows resorts. These three resorts also offer summer activities.



# Feather River Canyon

BY DICK DORN



**Union Pacific westbound train MNPRV (Merchandise-North Platte-Roseville) rolls through California's spectacular Feather River Canyon on June 11, 2013. This particular location is known as Serpentine Canyon. Nearby is famous Keddie Wye, well worth a stop.** Dick Dorn

**LOCATION:** This is Union Pacific's Canyon Subdivision between Oroville and Portola, Calif. This is the Western Pacific line completed in 1910 between Salt Lake City and Oakland. Construction of Oroville Dam in the 1960s resulted in a new 22.9-mile line from Oroville to Intake. Trains follow the North Fork of the Feather River from Intake almost to Keddie in the most scenic section. Traffic consists of westbound UP grain and coal trains and usually a single westbound manifest train from North Platte to Roseville. There is also a six-day-a-week local between Portola and Oroville, going down one day and back the next. West of Keddie, the route hosts BNSF's Highline trains to and from the Pacific Northwest. There are usually about four or five UP trains and five or six BNSF trains per day.

**TRAIN-WATCHING:** California Route 70 follows the line from Oroville to Portola. No gas is available in the 77 miles from Oroville to Quincy. Leaving Oroville, you can see the tracks on the hillside below Table Mountain. In spring, the hills are green, temperatures are seasonable, and it is a good time to hike up to the tracks. At West James, the tracks cross under the highway, and at East James you can see the large bridge over Lake Oroville, with the railroad under the highway. The railroad is then out of sight for many miles;

use the numerous pull-outs to view the tracks far below and the siding at Poe. Next stop is the iconic location where the highway crosses high above the river and railroad bridge. Explore the area for safe parking places to shoot the bridges.

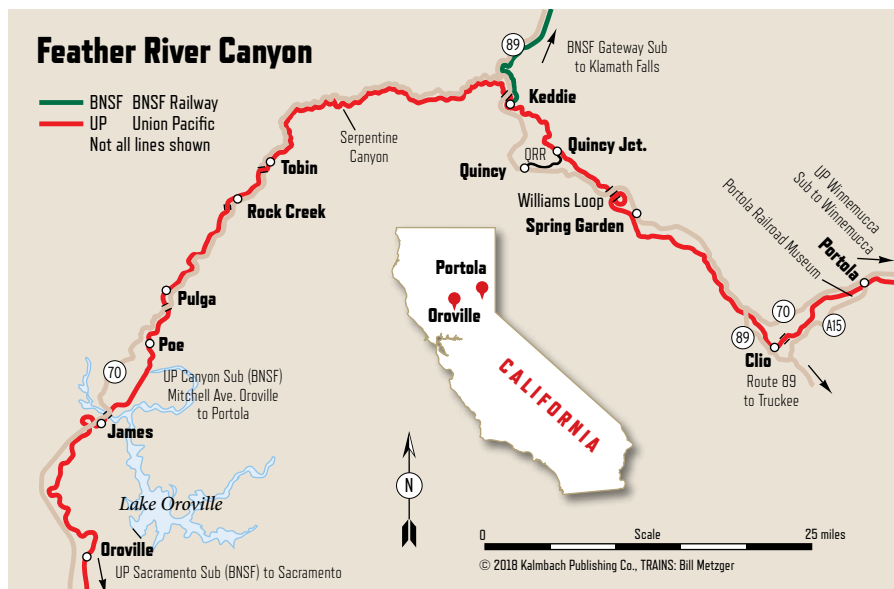
From here east, the tracks are on the opposite side of the river. At Rock Creek, you

cross the river again and can drive under the railroad bridge up a dirt road to get above track level. Tobin is next; this time the railroad bridge crosses above the highway bridge. About 10 miles farther east is Serpentine Canyon with sheer rock walls and the river below. Next stop is the Keddie Wye area. To shoot the wye on the bridge, drive just past and pull off and walk back. The track on the left is the BNSF Highline that comes from Klamath Falls, Ore. On the right is the UP main line to Portola.

Heading east after passing through Quincy — the only town for gas and supplies — you come to Williams Loop as the highway crosses over the tracks. Pull off to the right and take the dirt road into the center of the loop. Finally, to reach Clio Viaduct, take Highway 70 east to Highway 89 south, and go about 5 miles to Portola-McLeers Road. Turn east to Portola. In 2 miles, you will see the viaduct across the valley on the left. Continue on this road into Portola.

**RADIO FREQUENCIES:** Union Pacific dispatcher 57, 160.875. BNSF channel is 161.100.

**FOR YOUR FAMILY:** The Western Pacific Railroad Museum is open daily during the spring, summer, and fall with train rides and rent-a-locomotive available. In the Graeagle area is golfing, swimming, and fishing. Take the Gold Lakes Highway to Gold Lakes for a scenic drive, fishing, boating, and hiking.

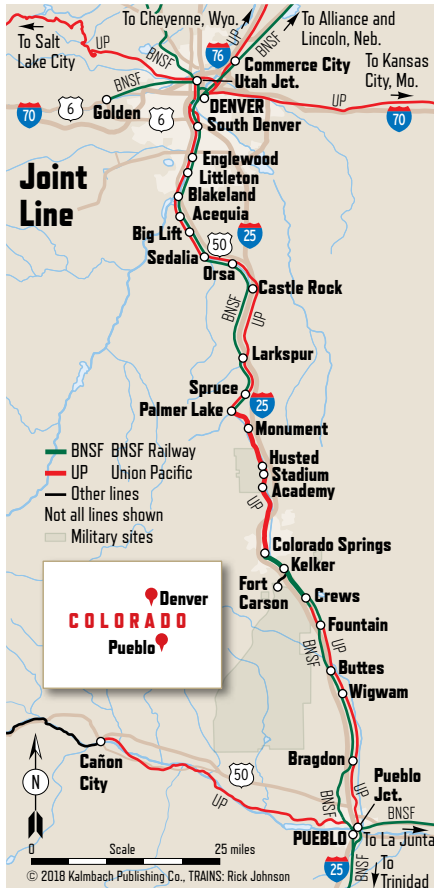






# Colorado's Joint Line

BY LARRY GREEN



Having navigated the paired track that starts in Denver, a southbound Union Pacific unit coal train reaches Palmer Lake, Colo., where the Joint Line follows a single route through Colorado Springs and then continues on to Pueblo, Colo. Joe Blackwell

**LOCATION:** The legendary Joint Line runs just to the east of the Front Range of the Rockies between Denver and Pueblo, Colo. BNSF Railway and Union Pacific operate directional running as far south as Palmer Lake on tracks of predecessors Santa Fe and Rio Grande, respectively. Southbound trains use the western track, and northbound trains use the eastern track. South of Palmer Lake, the two railroads share a common main line to Crews, just north of Pueblo. The result is one of the most interesting main lines in the Western U.S.

**TRAIN-WATCHING:** Once away from the chaos and traffic of suburban Denver, the Joint Line follows U.S. Route 85 and state Route 105 to Castle Rock, itself a unique background prop for northbound trains. Tracks are within sight of Interstate 25 as far

south as Larkspur, where South Spruce Mountain Road follows the mains into Palmer Lake. South of here, the tracks run through the U.S. Air Force Academy grounds and into suburbia once at Colorado Springs. Between the Springs and Pueblo, numerous exits off I-25 offer opportunities to safely watch the action.

Pueblo offers numerous overhead bridges for train-watching, including the East 4th Street and East 8th Street bridges for Union Pacific's Colorado Springs Subdivision. On the north side of the city is the West 18th Street bridge, which allows good views of the main, the former hump yard leads, and the upper part of the BNSF Pueblo Yard. Another good location here is Pueblo Junction, located southeast of downtown. It can be reached by taking Gruma Drive off South Santa Fe Avenue. PJ, as it is known locally, is the railroad crossroads of Southern Colorado. Five

subdivisions come together, including BNSF's Pikes Peak, Pueblo, and Spanish Peaks subs, and UP's Colorado Springs and Tennessee Pass subs. With few exceptions, all movements in and out of the city must pass through PJ. Traffic sees in excess of 35 movements every 24 hours and it is not unusual to see trains waiting their turn.

**RADIO FREQUENCIES:** BNSF road: 160.650, Pikes Peak and Pueblo subs; 161.100, Spanish Peaks Sub. BNSF yard: 160.560 and 160.935. UP road: 160.920, Colorado Springs Sub; 161.490, Tennessee Pass and Walsenburg subs; 161.455, Pueblo Terminal. UP yard: 160.755 and 161.415.

**FOR YOUR FAMILY:** Pikes Peak (with its famed cog railway to the summit), Garden of the Gods, and the U.S. Air Force Academy are unique venues. Pueblo offers a year-round kayak course, an extensive trail system, and Pueblo Mountain Park.



Buy our special Colorado issue and video at  
[KalmbachHobbyStore.com/Colorado](http://KalmbachHobbyStore.com/Colorado)





# Columbia River Gorge

BY SCOTT A. HARTLEY

Columbia River Gorge, Wash.



A westbound BNSF crude oil unit train emerges from Tunnel 11 at Lyle, Wash., on June 23, 2017. The railroad's Fallbridge Subdivision features 13 tunnels, all close to Washington Route 14 and the Columbia River. Three photos, Scott A. Hartley



**LOCATION:** The Columbia River Gorge provides a breathtaking state boundary between Washington and Oregon. It offers visitors more than 80 miles of beautiful scenery and provides countless photo opportunities. The gorge generally is described as the portion of the 1,243-mile-long river from the eastern outskirts of the city of Portland, Ore., out to Biggs, Ore., and Maryhill, Wash. Interstate 84 and U.S. 30 provide ready access to the gorge on the Oregon side. Washington Route 14 runs close to the river on the north bank. Highway bridges at Cascade Locks, Hood River, The Dalles, and Biggs enable drivers to cross the river.



**TRAIN-WATCHING:** For rail enthusiasts, the big attractions are two high-density rail routes: BNSF Railway's Fallbridge Subdivision, originally the Spokane, Portland & Seattle main line, running along the north bank of the Columbia in Washington. On the Oregon side of the river is Union Pacific's Portland Subdivision, long ago part of the Oregon Railway & Navigation Co. Both see continuous action around the clock. BNSF also owns the Oregon Trunk Subdivision, a line that leaves the main at Wishram, Wash., crosses the river on a long bridge with a lift span near the Oregon shore. The "OT" runs south through

rugged territory to Bend, Ore.; UP has trackage rights on the line.

UP and BNSF both are single-track routes, with Centralized Traffic Control and numerous sidings to handle the parades of trains. UP trains to and from both the Midwest and Canada use the tracks through the gorge. Heavy unit trains of minerals and grain from Canada often run with Canadian Pacific locomotives mixed with UP power. Midwestern traffic is a steady flow of merchandise freight and double-stack containers. A four-axle EMD handles a UP weekday local operating out of The Dalles.

Amtrak's *Empire Builder* Portland section runs over BNSF, and the four-car Superliner train nimbly keeps on schedule among the host railroad's constant freight movements. BNSF uses the water-level Fallbridge Sub for numerous heavy unit coal trains of crude oil, grain, and coal, so westbound traffic predominates here. These trains' empty cars often return east via different BNSF routes to the north. BNSF also runs large numbers of double-stack intermodal trains and automobile cars. Trains of municipal waste, which also is carried in double-stacked containers, can be seen running to and from disposition areas in eastern Washington. BNSF operates a local out of its Wishram yard, covering the Fallbridge Sub in both directions.



Passengers on Amtrak's eastbound *Empire Builder* Portland section enjoy their river view near Home Valley, Wash., July 2, 2017.

A photographer can choose from dramatically different background scenery. The gorge's ecosystem ranges from "temperate rain forest" with fir, maple, and hemlock trees at the western end to "dry grassland" as one moves east.

Interstate 84 enables a photographer to keep ahead of trains on the UP in Oregon. Attempting to chase BNSF using curvy two-lane Washington Route 14 is not advisable. Fortunately, train traffic density usually is sufficiently heavy to justify finding a good location and waiting for the next train. Meets





A pair of Union Pacific SD70Ms leads a westbound merchandise train along the Oregon side of the Columbia River at The Dalles Dam on June 26, 2017. UP's Portland Subdivision carries traffic to and from the American Midwest and Canada.

also are frequent, which can provide opportunities to get more than one chance to photograph an interesting train. Route 14 often runs a few feet away from the BNSF tracks, but much of the railroad is built immediately along the river bank, leaving the photographer on the "dark side" of trains. Happily, the line twists and turns sufficiently to provide many good photo locations, even on the north side of the tracks. Snow-topped Mount Hood, elevation 11,250 feet, is easy to work in as a background for UP and BNSF eastbound trains at several locations.

Do you like tunnels? Two of Union Pacific's three tunnels are visible from I-84, but safety considerations will discourage photography. BNSF's 13 tunnels offer far more opportunities.

Five bores are concentrated several miles west of the small city of White Salmon, Wash., and are visible from Route 14. Five more are near Lyle, Wash. The Chamberlain Lake Rest Area along Route 14 is built above Tunnel No. 8, and Tunnels Nos. 7 and 9 can be photographed from the scenic overlook.



**RADIO FREQUENCIES:** BNSF Fallbridge Subdivision, 161.415; BNSF Oregon Trunk Subdivision, 161.100; Union Pacific Portland Subdivision, 160.515 (west of The Dalles) and 160.410 (east of The Dalles).



**FOR YOUR FAMILY:** More than 2 million tourists visit the Columbia River

Gorge annually. Strong winds that are common in the gorge make the region a popular windsurfing and kiteboarding destination. Paddle boarding, fishing, boating, skiing, and ski boarding make the Columbia River a year-round vacation area. Other attractions are 602-foot-high Multnomah Falls, The Dalles and Bonneville dams, and numerous wineries and vineyards. Lodging ranges from outdoor camping to vacation rental homes to upscale hotels. Restaurants and brew pubs abound in the tourist towns of Cascade Locks, Hood River, and The Dalles.

The Mount Hood Railroad is a 21-mile short line based at Hood River, Ore., and offers regular tourist trains.







# Marias Pass

BY JUSTIN FRANZ



Amtrak's daily *Empire Builder* crosses the Two Medicine Bridge near East Glacier Park, Mont., on May 10, 2015. The mountains of Glacier National Park loom in the distance. The bridge is one of the most popular photo spots on the railroad. Three photos, Justin Franz



**LOCATION:** Although Marias Pass is among the lowest railroad crossings of the Continental Divide in the United States at 5,213 feet, there is nothing small about BNSF Railway's route through northwest Montana. Built by James J. Hill's Great Northern Railway in the 1890s, the line across Marias Pass remains a critical transcontinental route to the Pacific Northwest as well as a spectacular place to enjoy mountain railroading. Northwest Montana is also home to one of the nation's crown jewels, Glacier National Park, making it the perfect place to combine railfanning with a family vacation.



**TRAIN-WATCHING:** A great place to start exploring Marias Pass is Whitefish, located in the heart of the Flathead Valley. The ski town of about 7,300 people features a yard and is a crew change point. Anchoring the downtown is the 1927 GN depot built in an Alpine style similar to the historic Glacier National Park lodges.

Moving east, the railroad goes through the towns of Columbia Falls (where BNSF interchanges with shortline Mission Mountain Railroad), Coram, and West Glacier (known as Belton to the railroad). The latter is the most popular entrance to the park and is where some of the best trackside scenery begins. East of West Glacier, U.S. Route 2 and the



A westbound BNSF grain train rounds the curve near Browning, Mont., past a snow fence on June 21, 2016. East of East Glacier Park, the railroad crosses the Blackfeet Indian Reservation, a region dominated by rolling hills and open grasslands.

railroad twist and turn along the southern boundary of Glacier National Park. Dozens of spectacular photo locations can be found along the road all the way to Marias Pass. At Summit, 67 miles east of Whitefish, trains begin to descend the grade and roll toward the wide

open plains. The area around East Glacier Park provides great vantage points to see eastbound trains emerge from the mountains and cross the epic Two Medicine River Bridge.

Like any mainline railroad, the number of trains per day can vary. On average, Marias



Pass sees 25 to 30 trains during a 24-hour period. The line also features Amtrak's *Empire Builder*, which operates between Chicago and Portland/Seattle.

Watco's Mission Mountain Railroad operates two independent segments, between Kalispell and Columbia Falls and between Stryker and Eureka. The southern portion out of Columbia Falls is busier, and on most weekdays it's easy to find a local working at the mill or out on the line.

Photographing Marias Pass' stunning scenery doesn't come easy. The area along Glacier National Park is remote, and most people will find their phones useless. Places to buy food, supplies, and gas are few, especially between West Glacier and East Glacier Park. Lastly, the area is home to the largest grizzly bear population in the continental U.S., and sightings are common. Anyone planning to stray far from their vehicle should carry a can of bear spray and know how to use it.

However, some of the best-known photo locations can be seen right from U.S. Route 2. A mile east of West Glacier, a spectacular shot of the railroad can be found as it runs along the Middle Fork of the Flathead River and into Tunnel 4, one of a dozen tunnels and snow sheds on the route. The light is best for westbounds in the afternoon. Just east of Essex, U.S. Route 2 also provides a spectacular view of the Goat Lick Trestle, perhaps one of the most famous spots on the entire route (page 94). The Goat Lick Trestle is best shot in the morning. Further east, there are a number of great vantage points between East Glacier Park and Browning to shoot trains with the Rocky Mountains looming in the distance. Again, morning eastbounds offer the best photographic opportunities.

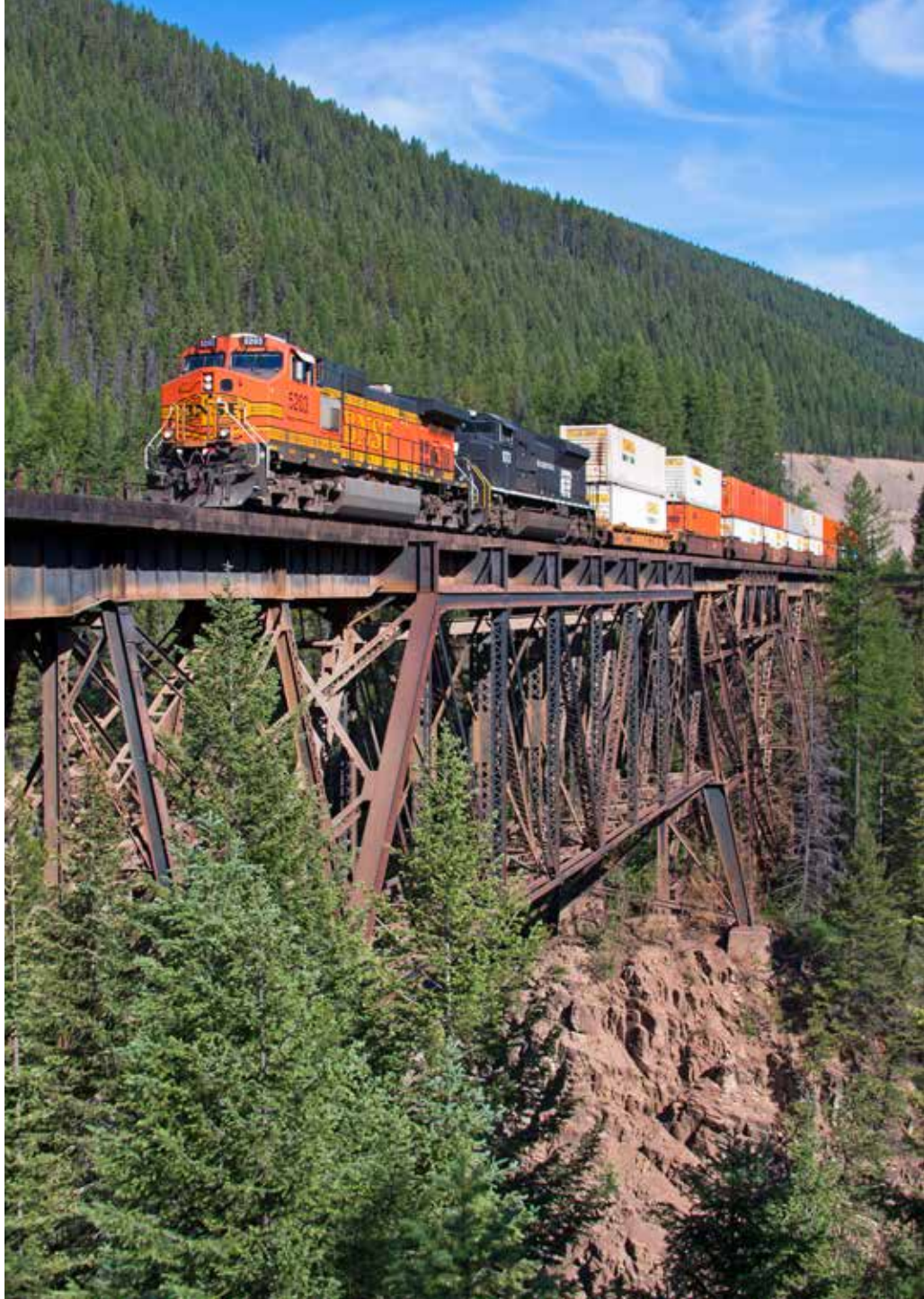


**RADIO FREQUENCIES:** BNSF road, 161.250; BNSF yard, 161.415; Mission Mountain, 160.785.

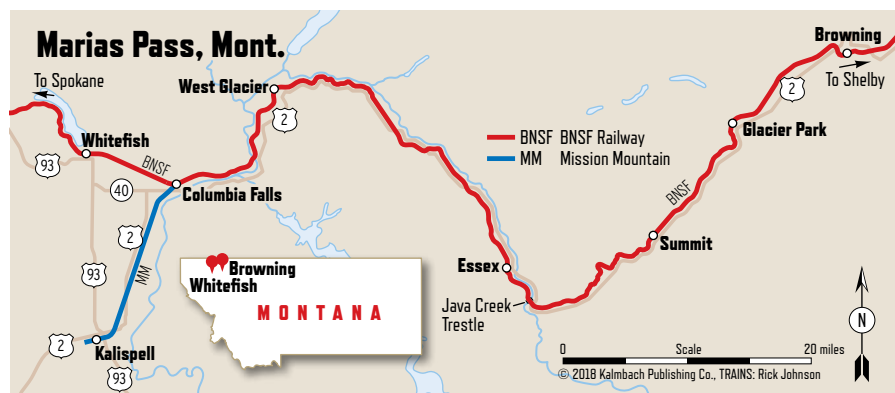


**FOR YOUR FAMILY:** Inside Glacier National Park's 1 million acres of mountains, lakes, and forests are 700 miles of hiking trails and one of the most spectacular drives anywhere, the legendary Going-to-the-Sun Road. Glacier Park and the nearby Flathead National Forest also offer great camping, which will keep you close to the tracks. Be sure to take time to check out the lodges (many filled with railroad-commissioned promotional art featuring the splendor of the parks) and chalets inside Glacier Park that were built by the Great Northern Railway in the 1910s, including the Glacier Park Lodge, the Many Glacier Hotel, and the Belton Chalet in West Glacier.

A great way to conclude a day of exploring the park or railfanning is to unwind in Whitefish, which has great restaurants, breweries, and bars. While Northwest Montana is beautiful anytime of year, July through early October is probably the best time to visit because most of Glacier National Park is open.



A BNSF Railway intermodal train crosses the Middle Fork of the Flathead River near Java, just east of Essex, Mont., on June 19, 2016. Norfolk Southern's heritage units, including No. 1073 seen here, have made a number of visits to Marias Pass in recent years.







# Moffat Route

BY MIKE DANNEMAN



Amtrak's westbound *California Zephyr* threads 75-foot Tunnel 29 east of Pinecliffe, Colo., on the morning of May 25, 2017. The route due west of Denver was the dream of entrepreneur David Halliday Moffat Jr., the man who dared to cross the Rockies. Three photos, Mike Danneman



**LOCATION:** A direct mainline railroad connecting Denver to the west was the audacious dream of entrepreneur David Halliday Moffat Jr. He was not content to see a narrow gauge railroad plod its way up some obscure canyon, but chose to route his broad gauge (Colorado parlance for standard gauge) Denver, Northwestern & Pacific across the Rockies. After Moffat died in 1911, survival of the line was assured with construction of Moffat Tunnel in 1928 and a connection to the Rio Grande to reach Salt Lake City. In the 1988 merger with Southern Pacific, the Rio Grande became part of SP's Central Corridor, and in 1996, Union Pacific took over, with traffic diverted to the north.



**TRAIN-WATCHING:** After a train departs Denver's North Yard, it turns west at Utah Junction, and traverses Denver and Arvada suburbs. West of Leyden at Mile 14.5 is a classic view of a train climbing out of the plains with downtown Denver in the distance. This location is just off of state Highway 72, which follows the railroad into the Front Range.

The next siding is Rocky, where the railroad heads south toward a mesa and the famous Big 10 Curve. The curve, named for its curvature in degrees, can be seen where state Highway 93 crosses the main line at East Rocky. But for a better view, hike to the loop on open space land, accessed from Highway 72. Then, a great place to watch trains ascending or descending the



With the warm, pastel colors of sunset settling in over Denver, three new Union Pacific EMD SD70ACe-T4s (and three dead units) lead MNYRO out of Leyden, Colo., on June 14, 2017. On the rear is a DPU pushing the train up the 2-percent grade.

steep 2-percent grade is from the Blue Mountain Road grade crossing, as well as on the other side of Coal Creek Canyon at Tunnel 1.

The railroad beyond Tunnel 1 can be seen only from the grade crossing at Plainview Road, as it climbs through Tunnel Nos. 2-8 through the inaccessible and unique Flatiron Rock formations.

Highway 72 west takes you to the next access point at Crescent and the Gross Reservoir Road grade crossing. The railroad passes through nine more tunnels, climbing through the mostly remote South Draw on the way to Crescent. Back to Highway 72, the railroad and road are together again at Pinecliffe (Cliff on the railroad), where just





Working through Crescent, Colo., Union Pacific train MNRYO (North Yard-Denver to Roper Yard-Salt Lake City manifest) passes snow-covered trees on the morning of March 10, 2013. In the background is the 340-foot-high Gross Reservoir Dam.

east of town, the tracks are near the level of South Boulder Creek near Tunnel 29.

West of Pinecliffe, Highway 72 ends at state Highway 119, where heading south will take you to Rollinsville. There, take Road 16 (East Portal Road) to follow the railroad through Tolland to the east portal of the Moffat Tunnel. While the railroad uses the 6.21-mile Moffat Tunnel to access the West Slope, there's no way to follow the tracks west from here. The only way to drive to the other side of the Continental Divide from here is to drive south to Interstate 70 and use Berthoud Pass to Winter Park, or drive north and drive through Rocky Mountain National Park to Granby. For this reason, I recommend doing either the Front Range or the West Slope on separate days.

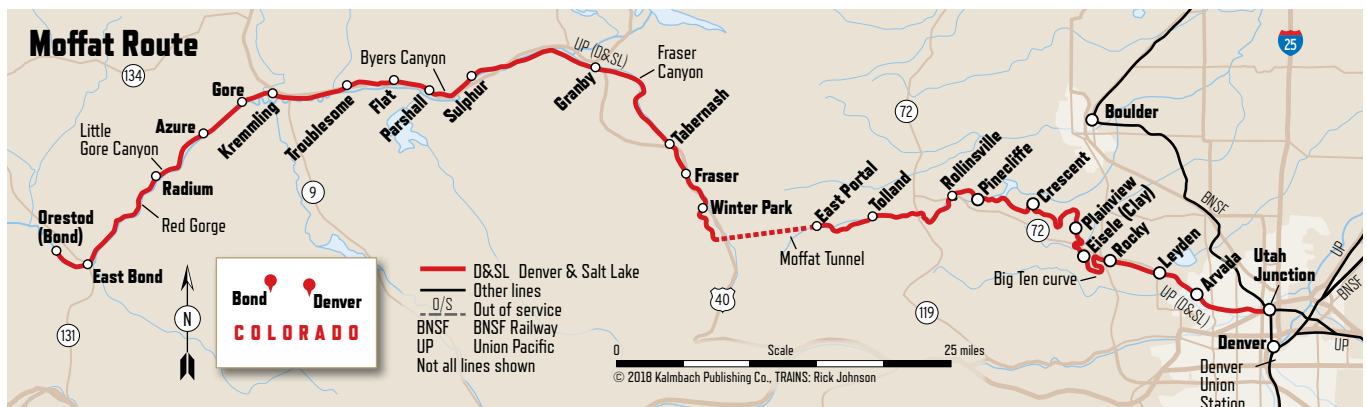
Westbound trains pop out of the Moffat Tunnel and pass the Winter Park resort. Trackage then meanders down Winter Park Hill through Fraser to Tabernash which can be followed using U.S. Highway 40. Winter Park is the destination of the *Ski Train* during the winter months. West of Granby is Hot Sulphur Springs, where the railroad and Highway 40 negotiate rugged Byers Canyon west of town. Highway 40 follows the main line past Troublesome to Kremmling.

A mile or so south of Kremmling on state Highway 9, Trough Road heads west, and even though it is dirt, it is a county-maintained thoroughfare. This road will lead you to a spectacular overlook in Gore Canyon, and a bit farther west, Little Gore Canyon. This canyon

can't be seen from the road, but has plenty of hikable access points when the weather's good. Keep following Trough Road west and you'll see the railroad several times along the Colorado River before reaching state Highway 131 at State Bridge. To the west are the Craig Branch junction, the cutoff main line at Orestod, and the crew change point at Bond. The Moffat Tunnel Subdivision continues west of Orestod all the way to Phippsburg, while west of Bond on the main line is the Glenwood Springs Subdivision.



**FOR YOUR FAMILY:** Rocky Mountain National Park, rafting, skiing, and other outdoor activities make this part of Colorado a natural family vacation destination.







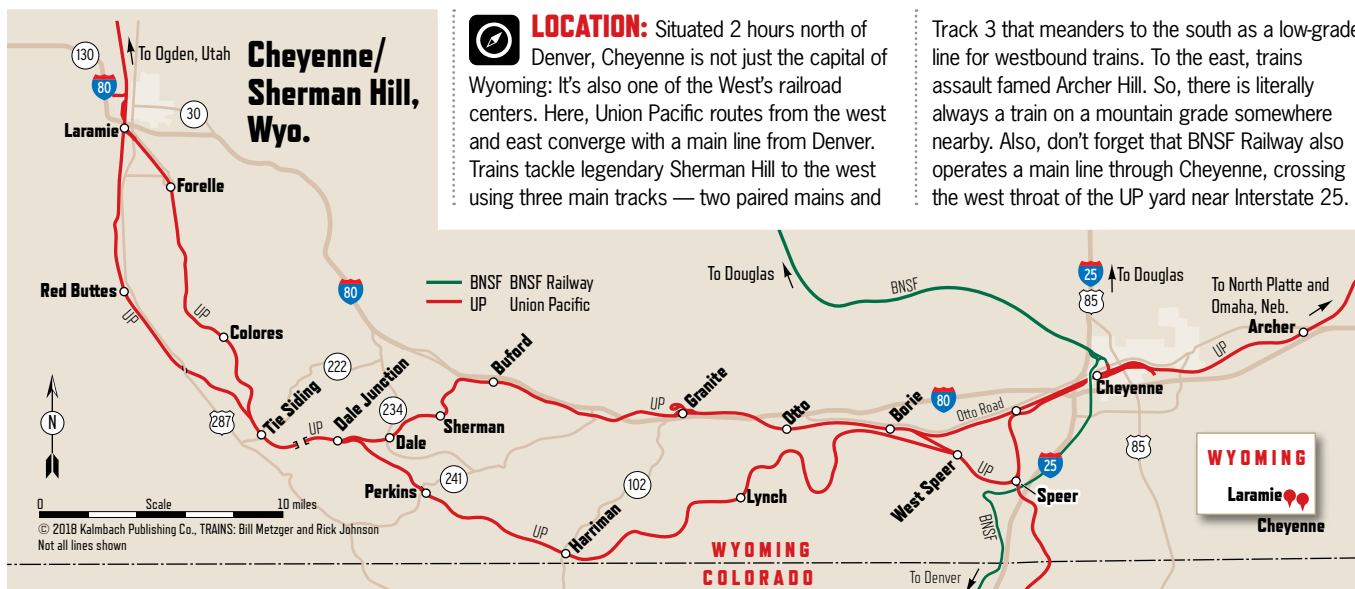
# Cheyenne and Sherman Hill

BY JIM WRINN



It's July 2016 and an eastbound stack train descends Sherman Hill at Borie, where Amtrak once had a station. Here, trains can go east into Cheyenne, or take the cutoff and head south to Denver, Colo.

Cheyenne/Sherman Hill, Wyo.







An eastbound potash train climbs Sherman Hill out of Laramie at Tie Siding, Wyo., where a signal bridge has witnessed a lot of railroad history. All three tracks over Sherman Hill are together at this spot, one of the few public road crossings in the area.



On the east side of Cheyenne, East Pershing Boulevard provides a vantage point for Archer Hill. While the eastbound shot showing S-curves is more famous, the view for westbounds, such as this stack train in July 2016, is not bad either. Three photos, TRAINS: Jim Wrinn



**TRAIN-WATCHING:** Volume is heaviest on the east-west transcontinental main line with 50-60 moves in 24 hours, but plenty of trains also run south to Denver. All trains stop for crew changes in Cheyenne or, for trains going west out of Denver or vice versa, at nearby Speer Junction. Downtown streets provide viewpoints, and the overpass near the 1887 depot has a sidewalk from which you can see the yard and the shop where UP maintains its heritage fleet of historic steam and diesel locomotives. Tours of the shop are offered in the early spring and autumn through the Cheyenne Depot Museum.

Just west of Cheyenne, at Borie, Wyo., a connector links tracks 1 and 2 with Track 3 at Speer, Wyo., for ultimate operational flexibility. Otto Road provides excellent vantage points.

Farther west, opportunities are more limited. Few public roads lead to the tracks, and area property owners are not keen about

trespassers (most of whom are ATV riders, not railfans). The signal bridge at Tie Siding near the off-limits Hermosa Tunnels, the crossing just east of Dale Junction, and the local frontage road near the quarry at Granite, however, are all still accessible. The Ames monument at the site of the abandoned town of Sherman, where the original route of the first transcontinental railroad passed, is worth seeing.

To the east, the famous S-curve at Archer Hill is still just as photogenic as when Challengers operated there, but a communications tower in the background makes this shot more challenging from narrow, two-lane East Pershing Boulevard.

To the south, Speer Junction is partly visible from public roads in an industrial park, but Terry Ranch Road provides the best views.



**RADIO FREQUENCIES:** BNSF Railway, 161.160; UP Greeley Sub, 161.145; UP Laramie Sub, 160.515; UP Cheyenne yard, 160.680



**FOR YOUR FAMILY:** The Wyoming State Museum, Governor's Mansion, State Capitol, and botanical gardens are all nearby. Not far to the south are Rocky Mountain National Park, the Denver metropolitan area, and the Front Range. The annual Frontier Days rodeo on the third weekend in July packs Cheyenne's hotels and restaurants, so make reservations early or prepare to pay big bucks for a little room. The Cheyenne Depot Museum is worth a visit, and afterward, stroll across the street to The Albany Restaurant, a classic western eatery that offers good food.





# Tehachapi Loop

BY DAVID STYFFE



**BNSF Railway auto rack train V-RICELP4-31 twists and turns as it makes its way through the famous Tehachapi Loop at Walong, Calif., in the snow. The tracks belong to Union Pacific's Mojave Subdivision. BNSF has been a guest since Santa Fe gained rights in 1899.** Alex Gillman



**LOCATION:** Walong, the world-famous Tehachapi Loop, is located on the Union Pacific Mojave Subdivision. The line through the Tehachapi Mountains was built by Southern Pacific in 1876, and Santa Fe gained trackage rights between Mojave and Bakersfield in 1899. Since their respective mergers in 1996, UP and BNSF have been the inhabitants.



**TRAIN-WATCHING:** The loop is 32 miles east of Bakersfield or 36 miles west of Mojave. To reach the location take State Highway 58 to Exit 139 at Keene, and then go east on Woodford-Tehachapi Road for 3 miles to a historical landmark monument next to the road. While that location offers a good overall view of the loop, a better view can be

reached by traveling another 200 feet east on the road to a wide dirt path that leads 530 feet up a gentle hill. From that vantage point, it is possible to see Tunnel 9 below the overhead track. Some additional climbing will yield a view toward Marcel to the east. Trespassing on railroad right-of-way and ranch property inside and west of the loop is not allowed. Recently, the sidings of Walong (4,800 feet) and Marcel (6,189 feet) were connected by a second track that bypasses Tunnel 10, resulting in a 3-mile-long stretch of double track. Train frequency is approximately 40 per day, with a slight majority belonging to BNSF. You can see a mixture of intermodal, mixed merchandise, and unit grain and ethanol trains. Locomotives are a mixture of modern GEs and EMDs with many trains

featuring DPUs to conquer the 2.2-percent grade between Caliente and Tehachapi.



**RADIO FREQUENCIES:** Mojave Sub, 160.320. Talking detectors at Bena (24 miles west), Rowen (5 miles west) and Tehachapi Summit (11 miles east) can offer advance notice of approaching trains.

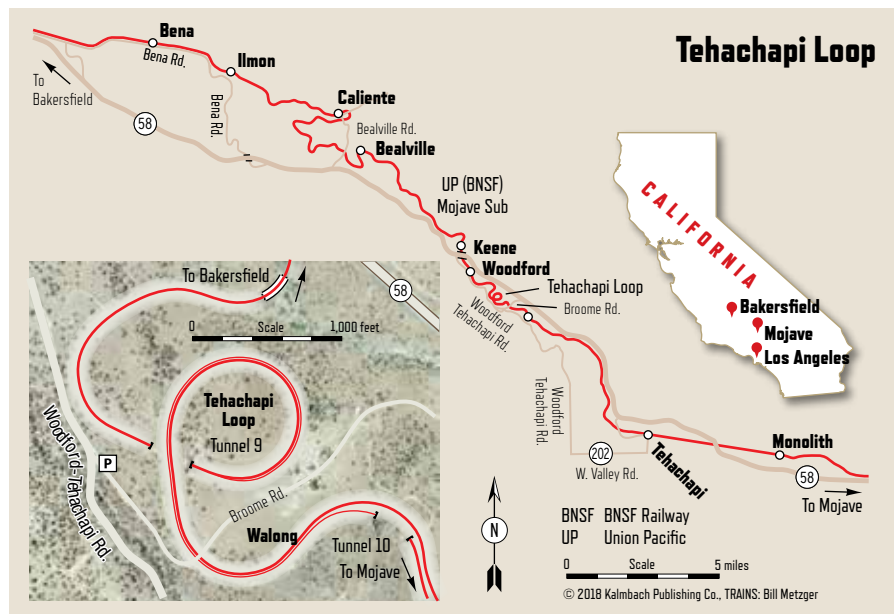


**FOR YOUR FAMILY:** The Tehachapi Depot Railroad Museum is located in downtown Tehachapi 15 miles to the east. Kern River County Park is a 49-minute drive west on Highway 58. For the more adventurous, the river is famous for whitewater rafting. Six Flags Magic Mountain is 1 hour, 40 minutes south on Interstate 5 toward Los Angeles.





A Union Pacific freight works on the former Southern Pacific Tehachapi line at Ilmon, Calif., on April 5, 2010. Scott A. Hartley

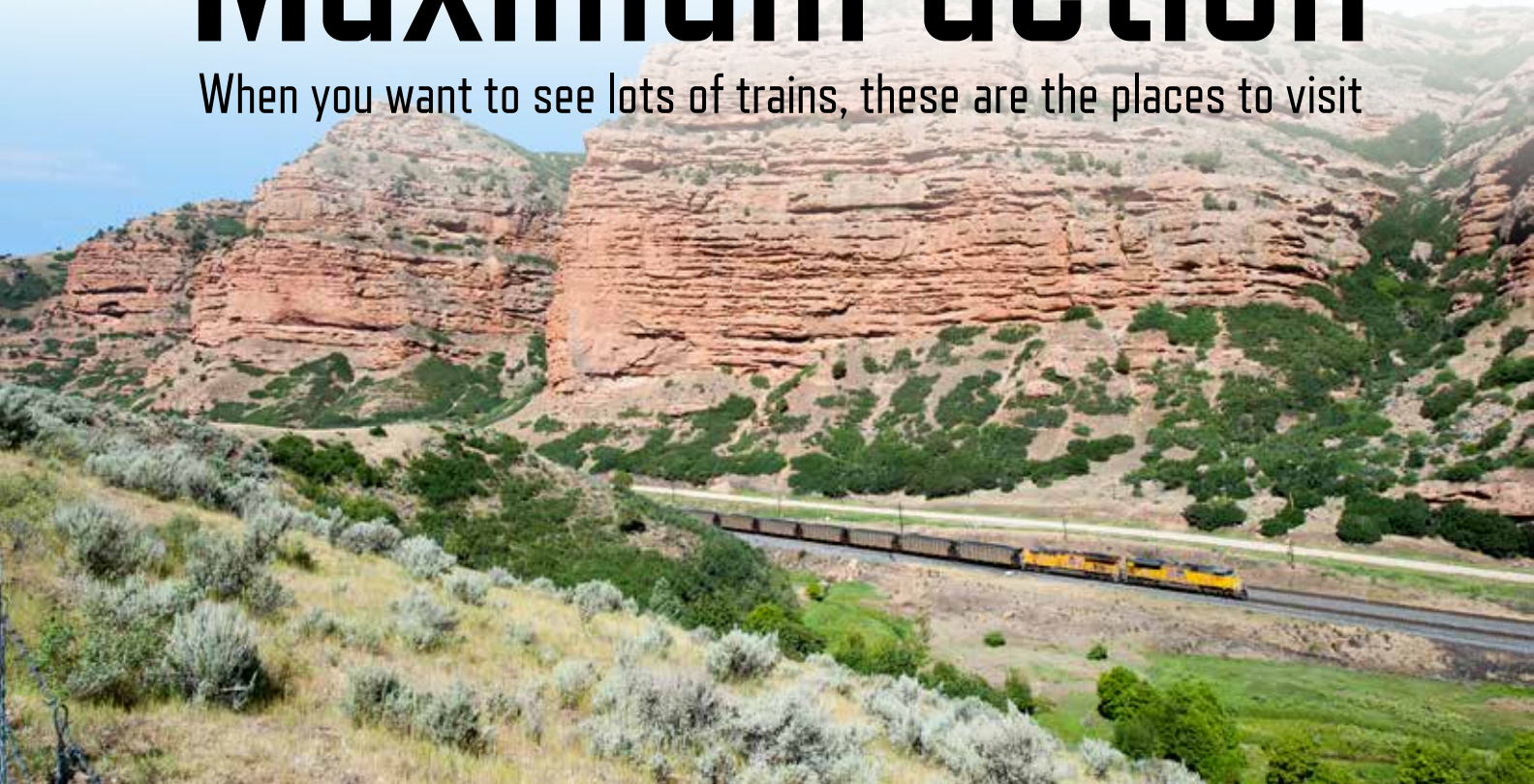


A UP manifest train prepares to pass underneath itself at the famed Tehachapi Loop on April 20, 2012. About 40 trains pass this way every 24 hours. Even though UP owns the track, BNSF actually runs more trains here. Ken Hulsey



# Maximum action

When you want to see lots of trains, these are the places to visit



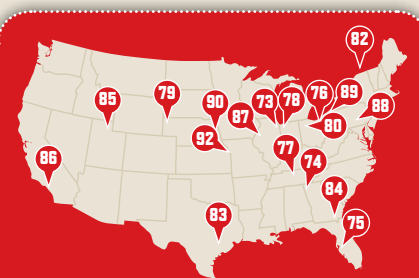
The distributed power units of a westbound coal train pass beneath the I-80 rest area overlook at Echo Canyon in July 2015. The fabled Wasatch Grade is a spectacular place to watch a lot of trains between its start in Ogden, Utah, and the top at Evanston, Wyo. TRAINS: Jim Wrinn

Sometimes, the lure of a train-watching location comes from spectacular scenery, or marvels of engineering, or historic significance. And sometimes, no attraction is greater than the opportunity to simply see a whole bunch of trains.

For those who seek the latter sort of hot spot, we've got a few places to suggest.

These are the places where the attraction is volume, volume, volume. It's a pretty diverse list, stretching from coast to coast and from Florida to Canada. It has major cities (the Kansas City metropolitan area has more than 2 million residents) and small towns (Crawford, Neb., was home to 997 people in the most recent census). There are places where you can expect sun almost every day (hello, Fullerton, Calif.) and those where you should be prepared to bundle up in the winter (*bonjour*, Dorval, Quebec).

What they all have in common are trains, and lots of them. The aforementioned Dorval, a suburb of Montreal, fea-



Dolton, Ill. ....	73
Dalton, Ga. ....	74
Plant City, Fla. ....	75
Berea, Ohio ....	76
Nashville, Tenn. ....	77
Chesterton/Porter, Ind. ....	78
Crawford Hill, Neb. ....	79
Northwest Ohio ....	80
Dorval, Quebec ....	82
Flatonia, Texas ....	83
Folkston, Ga. ....	84
Echo Canyon, Utah ....	85
Fullerton, Calif. ....	86
Galesburg, Ill. ....	87
Rockville Bridge, Pa. ....	88
North East, Pa. ....	89
Omaha, Neb./Council Bluffs, Iowa ....	90
Kansas City ....	92

tures the transcontinental main lines of Canadian Pacific and Canadian National, just yards — *excusez-moi*, meters — apart. Fullerton, with BNSF, Amtrak, and Metrolink commuter-rail activity, sees well over 100 trains a day, almost in Disneyland's shadow.

The Southern California city is hardly alone in that regard. Dolton, Ill.; Chesterton and Porter, Ind.; and Kansas City all are capable of reaching the century mark in a 24-hour period. A number of the other communities on this list offer 50 to 60 trains per day.

In some of these locations, a single railroad generates all the activity. In others, you never know which railroad you'll see next. Some are freight-only; some feature a heavy dose of passenger traffic.

But they're all ideal if you're not inclined to wait hours to see a train. So make sure your camera batteries are charged and you have extra memory cards at hand. And accept the idea that when, inevitably, that moment comes when you need a break — for a meal, a beverage, or other basic needs — that you're probably going to miss a train. Or five. — David Lassen





# Dolton, Ill.

BY BRIAN SCHMIDT

**LOCATION:** South suburban Dolton provides heavy rail action in a gritty urban environment just 15 miles south of the Loop. Union Pacific and CSX Transportation operate a joint line that runs just to the west of Park Avenue. CSX, Indiana Harbor Belt, and Norfolk Southern also have trackage through the junction.

**TRAIN-WATCHING:** The best, and safest, place to view the action in Dolton is the city hall parking lot, off Park Avenue just south of the CSX and IHB lines. Your best photographs may be taken morning to midday from east of the joint UP-CSX main line, which handles traffic for both railroads to and from points south of Chicago. Additional photo angles are available from the library parking lot to the east along Lincoln Avenue. Do not cross tracks around the diamond or encroach on the railroad rights-of-way.

The neighborhood around Dolton appears rough to some visitors, but the city hall parking lot is just yards away from the police department, and you'll often see a group of railfans in town on weekends.

Traffic is varied and includes all manner of commodities. Of particular interest is the NS hot metal "bottle train" that operates twice daily to an ArcelorMittal steel mill in Riverdale, just west of the Dolton diamond. Rail traffic is heavy throughout the day, and, often, some moves are blocked by other traffic. Visitors to Dolton can expect to see more than 100 moves in 24 hours — without any passenger train traffic.

Amtrak's *Cardinal* and *Hoosier State* roll through Dolton on an alternating schedule



In July 2016, an eastbound CSX freight rolls through Dolton on former Baltimore & Ohio trackage, approaching the Lincoln Avenue crossing. These CSX tracks are the farthest north, curving to reach Barr Yard just west of the diamond. Two photos, TRAINS: Brian Schmidt

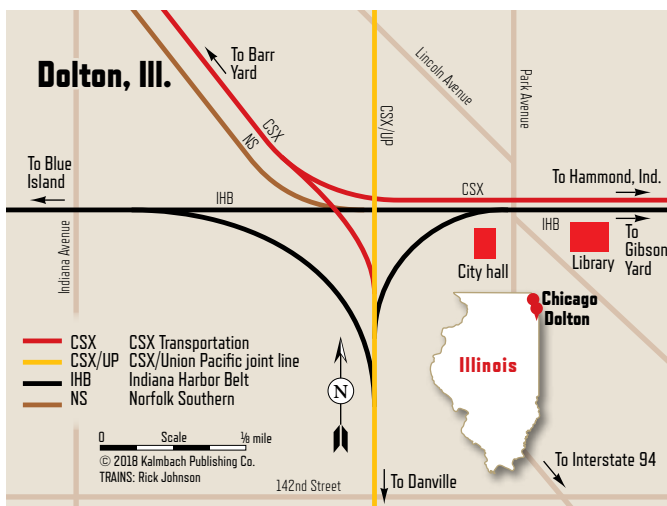
between Chicago, Indianapolis, and points east.

For a splash of color, IHB trains here often feature home-road power. This is more common here and throughout the eastern end of the road than it is to the west.

Both CSX and IHB have yards just west of Dolton — Barr Yard on CSX and Blue Island Yard on IHB. UP's Yard Center lies just south of the multi-track diamond.

**RADIO FREQUENCIES:** CSX road, 160.230; CSX dispatcher, 160.320; IHB road, 160.980; UP road, 160.410.

**FOR YOUR FAMILY:** The wonders of Chicagoland are just a short drive away. Or save yourself some grief and drive a short distance to Indiana to take a South Shore Line commuter train into the Windy City.



A westbound Indiana Harbor Belt train passes Dolton en route to Riverdale Yard, located just west of the diamonds here.

Dolton, Ill.





# Dalton, Ga.

BY DAVID C. LESTER



**A southbound Norfolk Southern intermodal train passes through Dalton, Ga., in April 2015. About 55 trains from both NS and CSX traveling between Atlanta, Tennessee, and parts north pass through this city known as the carpet capital of the world.** Two photos, David C. Lester



**LOCATION:** Dalton is located in the northwest corner of Georgia, along Interstate 75, about 30 miles southeast of Chattanooga, Tenn., and 90 miles north of Atlanta. It is often referred to as the “carpet capital of the world;” nearly 90 percent of the world’s carpet is produced within a 25-mile radius of the city.

Dalton and the surrounding area are also rich with Civil War history, with several battles having taken place in the area. The famed “Great Locomotive Chase” passed through Dalton.

Rail activity through Dalton is significant. Major arteries for CSX Transportation and Norfolk Southern from Atlanta to Tennessee and parts north cross here, with the diamond about 50 yards north of the Dalton Freight Depot & Visitor Center, located downtown at 305 S. Depot St. NS splits to the north in Cohutta, Ga., for Chattanooga and Knoxville, Tenn., while CSX passes through Chattanooga and Nashville, Tenn.



**TRAIN-WATCHING:** Between NS and CSX, Dalton sees about 55 trains in a



**A CSX train crosses the diamond with NS, as seen from Gordon Street. Restored Southern Railway freight house is visible at top.**

24-hour period. Traffic includes manifest, coal, grain, oil, ethanol, and intermodal trains. CSX controls the diamond crossing adjacent to the Depot & Visitor Center. The Gordon Street bridge just north of the depot and diamond provides an excellent vantage point for photography throughout the day.

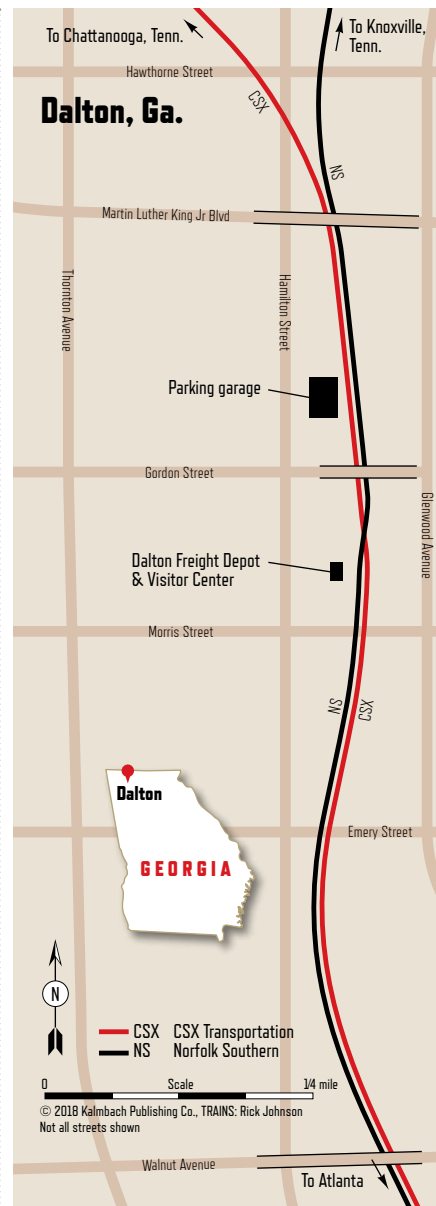
NS operates up to four Powder River Basin coal trains a day to Georgia Power’s plant near Macon. These usually run with a pair of BNSF Railway units on the point, and a pair of distributed power units on the rear. CSX runs up to four coal trains a day, with one from Evansville, Ind., to Cross, S.C., which includes a mid-train DPU.

Both railroads also run locals, with NS operating a switch job that often passes through downtown Dalton around noon to deliver and pick up cars at industries on the north side of town. In addition, NS has two locals that run from Rome, Ga., to Chattanooga, which work industries along the way. CSX has a switch job that usually works downtown around noon on weekdays.

The Depot & Visitor Center is friendly to train-watchers, as the covered walkway on the railroad side of the building runs the length of the depot and offers seating. Inside the depot, there is an ATCS monitor, radio feeds from both railroads, and a livestreaming webcam. Parking is available in the structure north of Gordon Street.



**RADIO FREQUENCIES:** CSX road, 161.370; CSX dispatcher, 161.520; NS road 160.950; NS dispatcher, 160.830.



**FOR YOUR FAMILY:** Dalton offers several restaurants on Walnut Avenue at Interstate 75. Civil War attractions include Tunnel Hill, where the Battle of Tunnel Hill was fought, about 20 minutes north of Dalton, and the tunnel itself, which is a tourist attraction. Autumn is particularly active, with the Festival of Fine Arts, the Prater’s Mill Country Fair, and a reenactment of the Battle of Tunnel Hill. There are also two preserved Native American sites nearby: New Echota and Chief Vann House.





# Plant City, Fla.

BY SCOTT A. HARTLEY

**LOCATION:** A favorite Florida hot spot is the Robert W. Willaford Railroad Museum, opened in 2013 in Plant City, a small city located between Tampa and Orlando. A covered, two-story train-watching platform complements the museum, which is located in and around the station that once served passenger trains of two CSX Transportation predecessors.

**TRAIN-WATCHING:** Plant City features the at-grade diamond crossing of CSX's former Seaboard Air Line Yeoman Subdivision, known as the "S-Line," and the ex-Atlantic Coast Line Lakeland Subdivision, the "A-Line." The S-Line is CSX's primary freight route north of Tampa. The A-Line carries additional freight trains as well as Amtrak's *Silver Star*. Both lines are considered north-south in railroad timetables. CSX's Plant City Subdivision, to and from the railroad's extensive "Bone Valley" phosphate mining region, also connects with the S-Line in Plant City.

Freight traffic can vary throughout the day. Train 0825, which moves chemicals from Tampa to a phosphate plant north of Plant City, generally is seen on the S-Line in daylight in both directions. Tropicana's famous "Juice Train" usually goes north five days a week, although its familiar white refrigerated boxcars often travel in an intermodal train out of Tampa. A variety of other freight to and from the Tampa area, including coal and ethanol unit trains, passes the Plant City museum at varying times. Phosphate trains from the Bone Valley occasionally can be seen on the Plant City Sub. Although most central Florida traffic uses other routes to and from the S-Line farther north, trains occasionally will detour through Plant City using both the S- and A-lines.



**Amtrak's southbound *Silver Star*, train No. 91, rolls through Plant City on a mostly sunny day in November 2015. Each train travels this line twice on its dogleg route to and from Tampa, making for four Amtrak moves through town daily.** Two photos, Scott A. Hartley

In order to serve Tampa, Amtrak's *Silver Star* trains must diverge from their direct New York-Miami route at Auburndale, 20 miles north of Plant City on the A-Line. As a result, both northbound and southbound trains pass through Plant City twice daily, all in daylight.

Train crews call signal indications on the radio. The Plant City train-watching platform has a radio scanner, which usually will advise visitors of approaching trains.

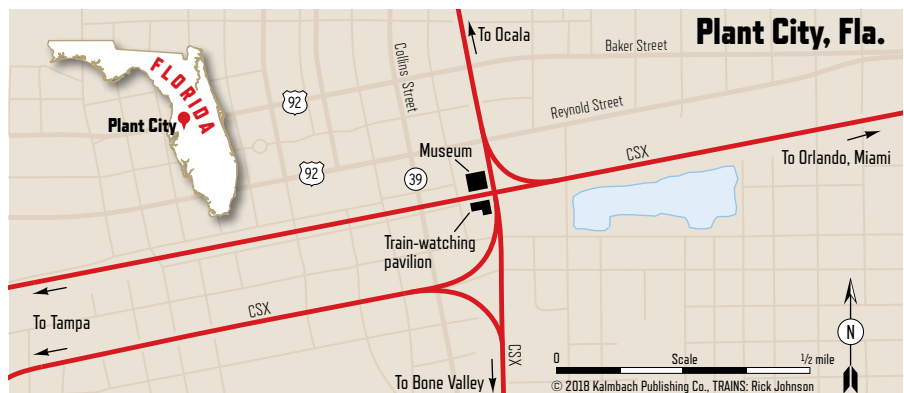
Mulberry, 15 miles southeast by highway, is the center of Bone Valley phosphate operations.

**RADIO FREQUENCIES:** CSX road, 160.590; CSX dispatcher, 160.230.

**FOR YOUR FAMILY:** All of Orlando's and Tampa's attractions, such as Walt Disney World and Universal Studios Florida, as well as Gulf Coast beaches, are easily accessible from Plant City. The Willaford Museum, with numerous local railroad artifacts, a restored Seaboard caboose, and a Whitcomb switcher painted in ACL purple and silver, is worth a visit.



**A northbound CSX freight crosses the diamond at Plant City. The museum's new train-watching pavilion is visible to the right in this December 2013 view.**



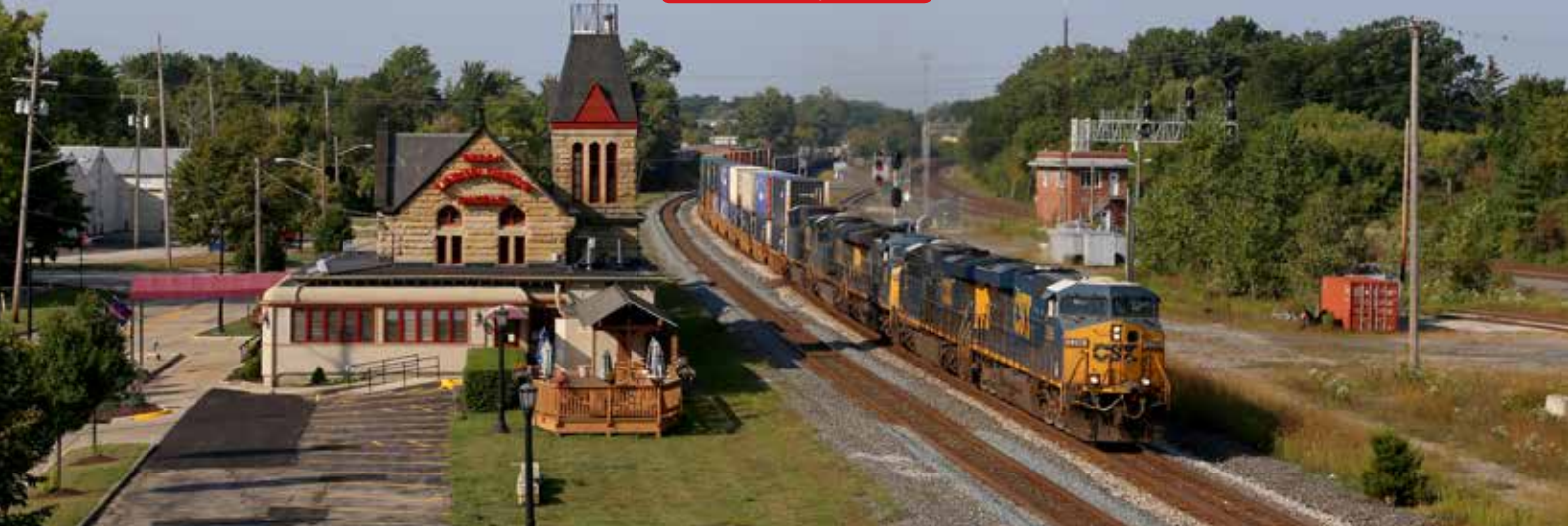
Plant City, Fla.





# Berea, Ohio

BY MICHAEL D. HARDING



**CSX Q020-03, a Bedford Park, Ill.-to-Worcester, Mass., intermodal led by ES40DC No. 5396 and four other units, heads east through Berea, Ohio, past the former station in a view from the Front Street bridge at mid-morning on Sept. 4, 2017.** Two photos, Michael D. Harding



**LOCATION:** A flip of a coin determined Berea, Ohio's name when John Baldwin called "heads" and the name "Tabor" lost out. Baldwin developed a local industry from turning the sandstone banks of the Rocky River into grindstones that became world famous. Local sandstone was also used in the 1876 Berea Union Depot. It initially served the Lake Shore & Michigan Southern Railway and Cleveland, Cincinnati, Chicago & St. Louis Railway, later parts of the New York Central.

Those railroads established Berea as a busy location on a major funnel of traffic from the east to Chicago and St. Louis. During NYC ownership and through the Conrail era, the parade of trains was homogenous, but the split of Conrail in 1999 drastically reshaped the area. Now the high-volume CSX Transportation and Norfolk Southern Chicago main lines pass in close proximity for a short stretch through Berea.



**Westbound loaded coke train NS 412, with ES44AC No. 8032 on the point, rolls by Berea tower, which is no longer staffed, on Sept. 4, 2017.** Two foreground tracks are those of CSX.



**TRAIN-WATCHING:** Depot Street, between North Rocky River Drive and Front Street, provides the primary access. The historic Berea Union Depot, now the Berea Depot Bar and Restaurant, has trackside parking lots north and south of the restaurant. Parking for train-watching is OK at the south end of the south lot, so long as it doesn't interfere with business. Railfans also commonly park in the grass on the east side of Depot Street south of the parking lot and across from the grass dividing the street from the tracks.

Next to a tree in the grass strip is a memorial marker for railfan, photographer, and author Dave McKay. Fans watch trains pass and take pictures from the shade of that tree. Local and railroad police routinely patrol the area and are accustomed to fans. Stay back from the ballast and don't cross any tracks, and it is fine to be there. Sidewalks on the Front Street bridge offer nice photo angles and views of all

four main tracks that can't be obstructed by multiple trains.

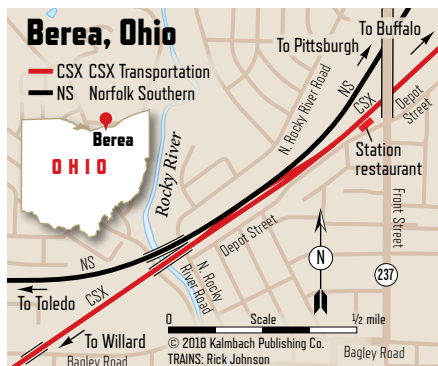
The two main tracks closest to Depot Street are the CSX Cleveland Short Line Subdivision, averaging 30 to 35 trains a day. The Norfolk Southern Chicago Line runs on the west side of BE tower, which still stands but is no longer manned. This is the higher-volume line, averaging 50 to 55 trains per day.



**RADIO FREQUENCIES:** CSX road, 160.860; CSX dispatcher, 160.800; NS road, 160.815; NS yard, 161.070.



**FOR YOUR FAMILY:** Berea is the home of the Cleveland Browns training facility and Baldwin Wallace University. Downtown Cleveland, less than 15 miles away, features attractions like the Rock and Roll Hall of Fame, Great Lakes Science Center, Greater Cleveland Aquarium, and Cleveland Zoo.







# Nashville, Tenn.

BY JIM WRINN

**LOCATION:** Downtown Nashville, Tenn., offers a unique train-watching venue called The Gulch. Here, CSX Transportation lines from Atlanta; Birmingham, Ala.; Chattanooga; Chicago; Louisville, Ky.; and Memphis converge at a crew change point called Kayne Avenue Yard.

**TRAIN-WATCHING:** Several overpasses and nearby parking decks offer vantage points, but the real find is at 1001 Broadway, where a Marriott hotel occupies the former Nashville Union Station. Offering luxurious accommodations, the 1900 Neo-Romanesque-style station features a 65-foot, barrel-vaulted ceiling and Tiffany-stained-glass lobby atrium. It is a must-see for anyone interested in railroads. A visit here and a walk around the balcony is filled with railroad history and glitter. Behind the registration desk is the old arrivals-and-departures board. Outside, a platform overlooks the rail action, where 50-60 trains pass daily. The hotel is aimed at an upscale clientele, so if your wallet does not allow for an overnight stay, come for a drink or meal and soak up the atmosphere of this historic location and the modern action that takes place just outside its doors.

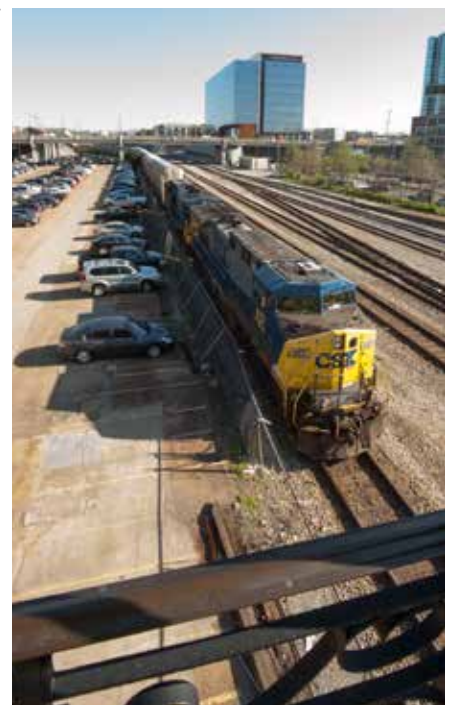
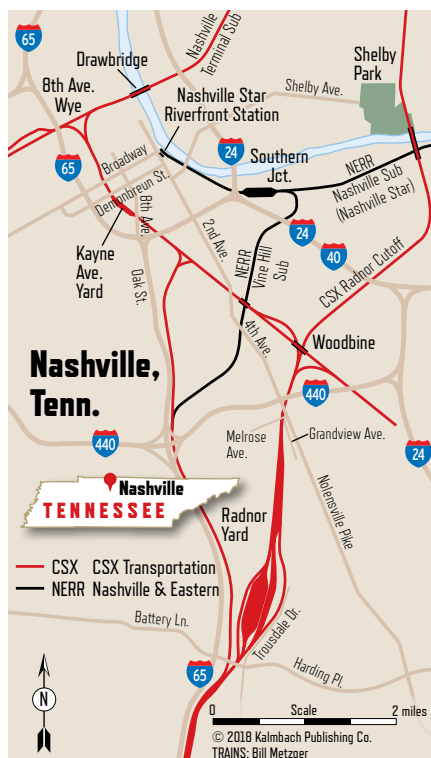
**RADIO FREQUENCIES:** CSX road, 161.370; CSX dispatcher, 161.100 (Nashville Terminal), 160.410, 160.980, 161.520 (adjacent subdivisions).

**FOR YOUR FAMILY:** Nashville's music industry is not far from Union Station. You'll find the Country Music Hall of Fame, Ryman Auditorium, and Music Row just down the street. The state capitol is close by, too. The Gulch area is well known for its many great restaurants and live music venues within walking distance. On the eastern side of town is Andrew Jackson's home, The Hermitage, which is well worth a visit. Please note that Nashville is a vibrant, growing city with traffic to match so plan travel around the city with lots of time to reach your destinations.

**PLUS:** Prominent among the city's railroad attractions are the Tennessee Central Railway Museum, which offers an extensive schedule of day-long excursions on original TC trackage to the east, and Nashville, Chattanooga & St. Louis 4-8-4 No. 576 on display in Centennial Park. It is set to be removed and restored to operation on the TC tracks, which also are used by the Nashville Star commuter train. Can you say 4-8-4 on good mainline track?



Check out this one-time waiting room, now a hotel lobby in Nashville's Union Station, which has been transformed into a Marriott hotel in the heart of downtown. Two photos, TRAINS: Jim Wrinn



Viewed from the hotel balcony, a CSX auto rack train departs Nashville for parts north.

Nashville, Tenn.





# Chesterton/Porter, Ind.

BY BRUCE STAHL



**NS's busy Chicago Line provides near constant action for railfans. Here, a westbound freight bisects Chesterton and Porter in May 2013.** Two photos, TRAINS: Brian Schmidt

**LOCATION:** Chesterton and Porter are neighboring communities in northwest Indiana, located about 55 miles southeast of Chicago. Chesterton is the larger of the two, and is the easternmost of the pair. The towns are located just off Interstate 80/94, and also close to Interstate 65, which provides easy access for travelers.

The center of the action is a junction in Porter known as CP 482. Norfolk Southern, Amtrak, CSX Transportation, and Canadian Pacific trains all run through this busy area.

**TRAIN-WATCHING:** There are up to 100 trains through the area daily, including 14 daily Amtrak trains.

Norfolk Southern's former Conrail Chicago Line sees the majority of the traffic that passes through here, including stack trains, coal and oil unit trains, general freight, and intermodals. Canadian Pacific has trackage rights through the area on NS, which it uses to connect to its own lines at Chicago and Detroit. CSX's line to Grand Rapids, Mich., joins the Chicago Line at CP 482, with trains running west on trackage rights.

Amtrak trains to and from Michigan leave and enter NS trackage at CP 482. The *Wolverine* and *Blue Water* trains use Amtrak's

own route via Kalamazoo while the *Pere Marquette* trains for Grand Rapids use CSX's route. Additionally, Amtrak's *Capital Limited* and *Lake Shore Limited* use NS through the area.

Many trains in Chesterton heading westbound stop at the Coffee Creek Bridge to await track clearance. This is an excellent afternoon location, just east of North Calumet Road, which runs through the heart of town. If you venture west to North Mineral Springs Road in Porter, there are some interesting shots in both directions of both Norfolk Southern and Amtrak trains. This corridor between Porter and Chicago is one of the most congested areas in the U.S. and is undergoing a major investment



**An eastbound Amtrak *Wolverine Service* train snakes through Porter interlocking bound for Detroit and Pontiac in May 2013.**

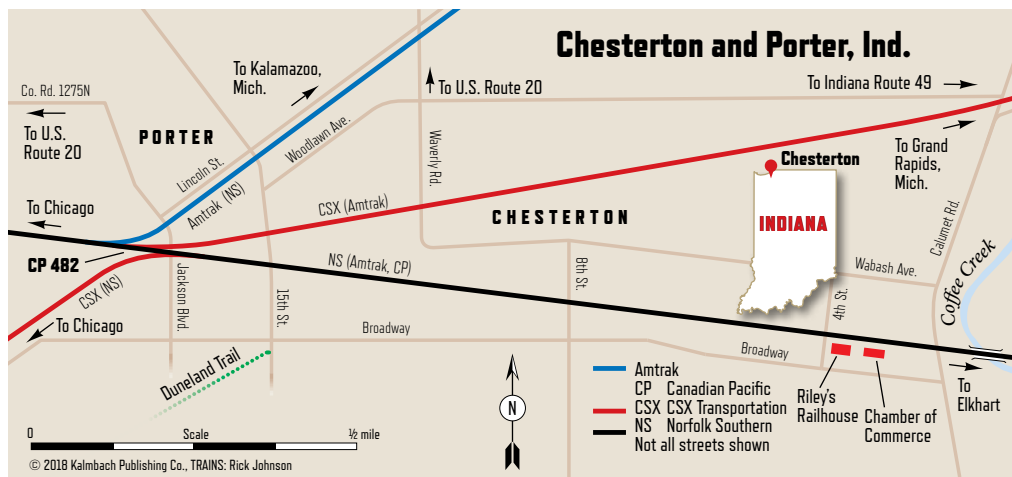
to add capacity and improve operations.

Visitors are discouraged from venturing on railroad property by CP 482, which was tolerated in years past. Instead, there are a number of other options, including the Duneland Chamber of Commerce office in Chesterton's former New York Central passenger station, and on-street parking in Porter.

**RADIO FREQUENCIES:** NS Chicago Line and Porter Branch, 160.800, 160.620 (east of CP 482); CSX road, 160.230; Amtrak Michigan Line, 161.505.

**FOR YOUR FAMILY:** The Indiana Dunes National Lake Shore runs along Lake Michigan from Gary east to Michigan City, and Indiana Dunes State Park is just a short trip north on Indiana Route 49 with camping, hiking, and other outdoor fun. In summer, the nearby Seven Peaks Waterpark Duneland is also open.

There is a bed and breakfast in Chesterton, Riley's Railhouse, which is located in the former New York Central freight station.

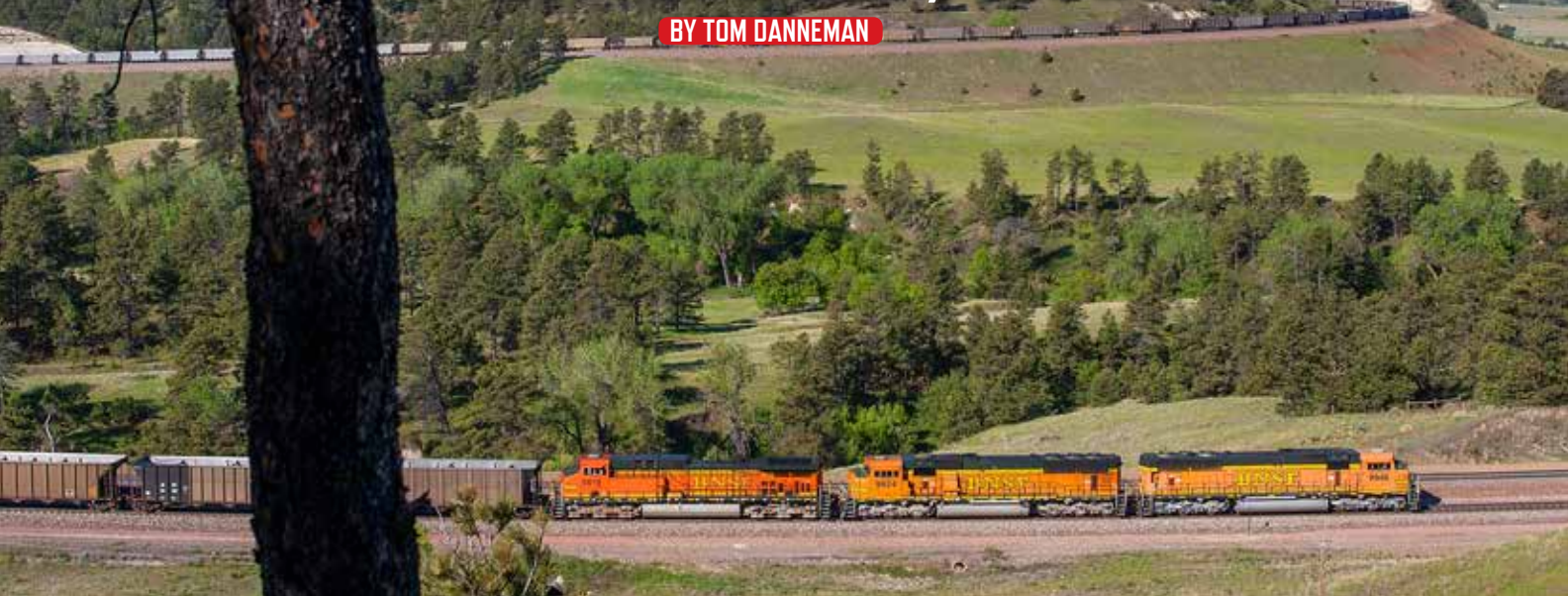






# Crawford Hill, Neb.

BY TOM DANNEMAN



On May 21, 2006, two BNSF SD70MACs and an AC4400CW lead an empty coal train down Crawford Hill, and through the horseshoe curves between Crawford and Belmont, Neb. This photo was taken from the property of Ponderosa Ranch. Two photos, Tom Danneman



**LOCATION:** Crawford Hill is located in the scenic Pine Ridge area of northwest Nebraska. Crawford Hill is part of BNSF Railway's Butte Subdivision, and includes a manned helper district that is based in the small nearby town of Crawford. The Butte Subdivision is a busy artery for Powder River Basin coal traffic. The Rapid City, Pierre & Eastern (a Genesee & Wyoming shortline property) enters Crawford on a line from Dakota Junction, and Rapid City, S.D., and connects with BNSF on the north side of town.



**TRAIN-WATCHING:** Up to 40 trains a day negotiate Crawford Hill in an average 24-hour period. Most of the trains seen here are empty (westbound) or loaded (eastbound) coal trains headed to Midwestern and southern power plants. Some manifest freights ply the hill on occasion as well. Keep an eye out for the westbound manifests, as

they might include Boeing 737 fuselages and other airplane parts from Spirit AeroSystems plant in Wichita, Kan. On occasion, BNSF will run high-priority dedicated "Boeing Trains" to expedite their delivery to Renton, Wash. The RCP&E local from Dakota Junction comes into town on an as-needed basis. The overpass in Belmont is the easiest location from which to view the action, but you can also access the lower horseshoe area right off Sawlog Road. There are also public areas in Crawford.



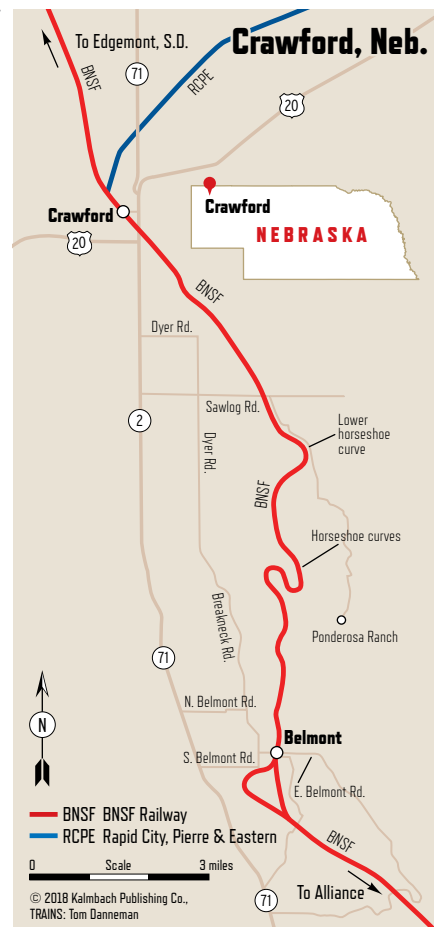
**YARDS:** A small yard is located in Crawford itself. Helper locomotives are based there to assist loaded coal trains eastbound. A large yard and maintenance facilities are located just over 40 miles to the south in Alliance, Neb.



**RADIO FREQUENCIES:** BNSF 161.415, 161.055; RCPE 160.230.



**FOR YOUR FAMILY:** The Pine Ridge area is known for its great hiking, biking, and horseback riding. You can stay at one of the cabins at the Ponderosa Ranch, where you can access property that borders some of the line up Crawford Hill. The ranch also offers wildlife viewing, as well as semi-guided hunting. Check out Fort Robinson State Park just west of Crawford. Fort Robinson is a former U.S. Army fort, where Native American leader Crazy Horse surrendered in 1877.



BNSF ES44AC No. 5760 works upgrade through Crawford's lower horseshoe.

Crawford Hill, Neb.





# Northwest Ohio

BY BRIAN SCHMIDT



**Willard-to-Cincinnati freight Q365 crosses from Track 1 to Track 2 and into the southeast wye at Deshler in July 2012. This small town offers numerous photo angles both from Crossroads Park and throughout the rest of the community.** Three photos, TRAINS: Brian Schmidt



**LOCATION:** Northwest Ohio is home to three popular railfan destinations: Deshler, Fostoria, and Marion. Together, they can more than fill a long railfan weekend in the Buckeye State with a parade of CSX Transportation and Norfolk Southern trains on multiple main lines.



**TRAIN-WATCHING:** Deshler offers the easiest access of the three main hot spots: just roll into Crossroads Park in the southwest corner of the diamond and let the CSX trains come to you. The busiest line is the east-west main, known as the Willard Subdivision to the east and the Garrett Subdivision to the west. It links Chicago with Cleveland, Baltimore, and northern New Jersey and sees about 50 trains a day. The second main line is the north-south Toledo Subdivision, connecting Toledo and Cincinnati directly, but also hosting traffic between Michigan, Louisville, and Atlanta. North-south traffic across the diamond is limited, often just five or six trains a day, but the three connecting tracks help keep the Toledo Sub interesting — and busy.

The park, privately run by the Bartlow Township Historical Society, offers gravel parking, a shelter, fire pit, radio scanner, and Wi-Fi.

Farther east, Fostoria offers even more variety for a visiting railfan. The busiest line in town is the CSX Willard Sub again. CSX's other main line, a former Chesapeake & Ohio route, is

known as the Pemberville Subdivision to the north and the Columbus Subdivision to the south. It hosts about 20 trains a day. Norfolk Southern's former Nickel Plate Road Fostoria District crosses its namesake city, and both CSX lines, providing another 20 trains each day. However, a number of CSX trains make use of the four connecting tracks in the city, complicating the CSX train counts.

A railfan park opened in 2013 is the best train-watching spot, but there are locations throughout the city which lend themselves to railroad photography. Thankfully, Fostoria is busy enough that an adventurous railfan can look for photo spots and not miss all the action.

Marion, possibly the best of the three, was once dubbed the "train-watching capital of Ohio." CSX has two main lines here and NS one. The former C&O is now the Columbus Sub, handling traffic between Toledo and its namesake city, and the former New York Central is now the Mount Victory Subdivision, with traffic between the Northeast, Indianapolis, and St. Louis. NS operates an ex-Pennsylvania Railroad line as its Sandusky District between Columbus, Bellevue, and Sandusky. The city sees 80 trains a day.

The best place to catch the action is the Marion Union Station museum complex on West Center Street adjacent to all the diamonds. The Marion Union Station Association owns the museum, which features railroad signals and dis-

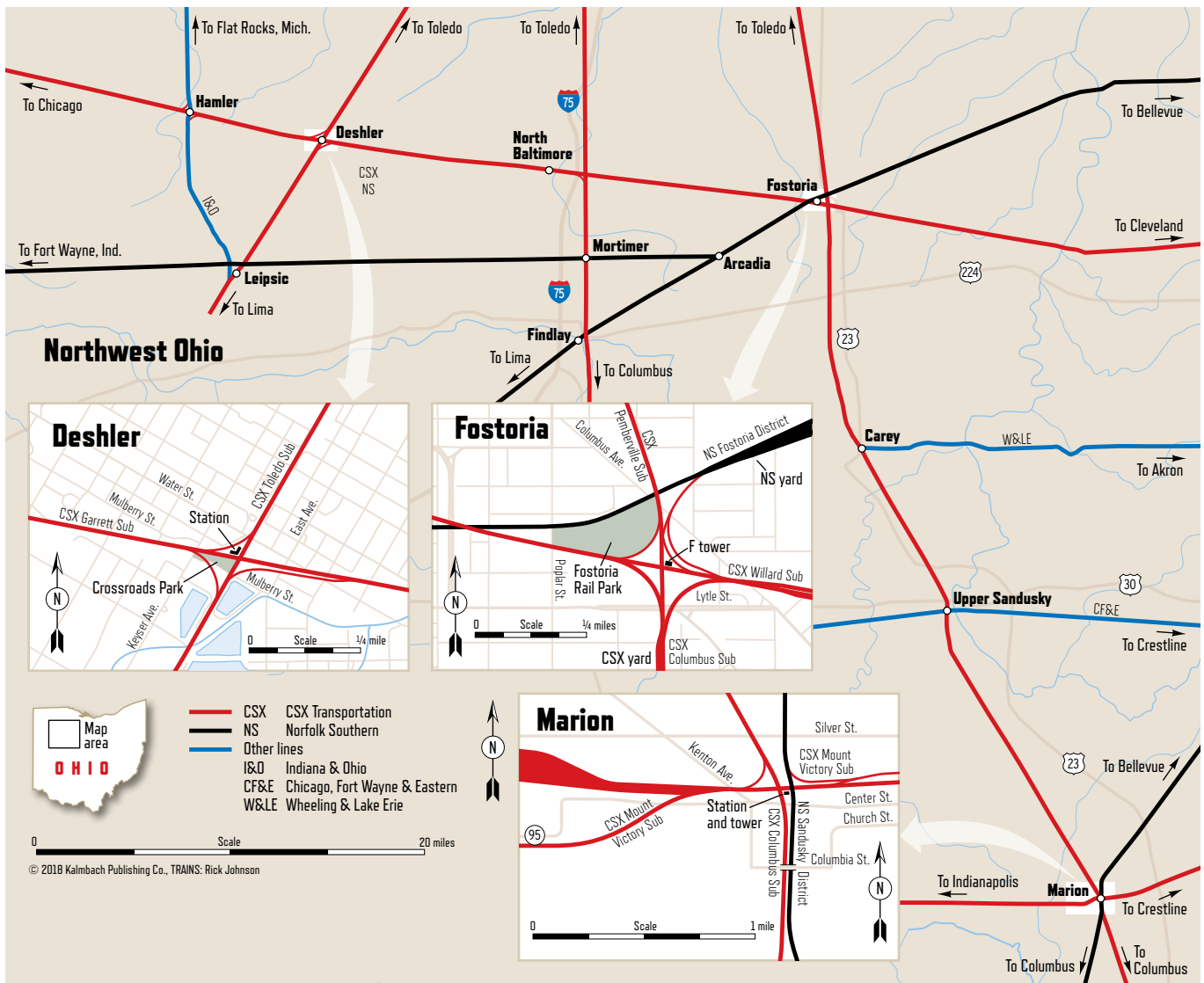


**Two NS trains pass through Fostoria, Ohio, in March 2016. This head-on view is easily shot from the city's new railfan park.**

patchers' equipment, an Erie Lackawanna caboose, and the restored AC Tower. Displays are open 10 a.m.-2 p.m. on Tuesdays and Thursdays, and on select weekends, but the grounds are always available for train-watching.

Three regional railroads make an appearance in the area. The Chicago, Fort Wayne & Eastern's Crestline Subdivision crosses CSX at Upper Sandusky; the Indiana & Ohio's DT&I Subdivision crosses CSX at Hamler; and the Wheeling & Lake Erie's Carey Subdivision terminates in its namesake city.





**RADIO FREQUENCIES:** CF&E Crestline Sub, 160.800; CSX Columbus Sub, 160.230; CSX Garrett Sub, Toledo Sub, Willard Sub, 160.230; CSX Indy Line Sub, 160.800; CSX Pemberville Sub, 160.230; CSX Toledo Branch Sub, 160.860; I&O DT&I Sub, 161.220; NS Fostoria District, Lima District, 160.250; NS Sandusky District, 160.440; W&LE Carey Sub, 161.025.

**FOR YOUR FAMILY:** There are a number of family-friendly attractions in the area for a variety of interests. Toledo has a great zoo, art museum, and a minor league baseball team, the Toledo Mud Hens. Sandusky, about 40 miles northeast of Fostoria, is home to world-famous Cedar Point amusement park and other attractions.

Marion was the home of Warren G. Harding, the 29th president of the U.S., when he launched his campaign in 1920. A celebration is planned for the 2020 centennial. The city also hosts the Marion Popcorn Festival, held every September to celebrate its claim as the popcorn capital of the world.



A southbound CSX train on the former Chesapeake & Ohio main passes the restored Marion Union Station and AC Tower in August 2017. The parallel track in the foreground is Norfolk Southern while the crossing route is CSX's former Conrail Indianapolis main.



# Dorval, Quebec

BY JOHN GODFREY



VIA Rail Canada F40PH-3 No. 6411 cools its wheels while passengers board three-car train No. 67 for Toronto on the south track at Dorval, Quebec, Nov. 2, 2017. John Godfrey

**LOCATION:** Dorval is 11.6 miles west of Montreal's Central Station, where Canadian National's Montreal Sub becomes the Kingston Sub, and 4.9 miles west of Lucien L'Allier Terminal (Windsor Station) on Canadian Pacific's Vaudreuil Sub. The suburb is home to Pierre Elliott Trudeau International Airport, little more than a mile north of the two main lines.

**TRAIN-WATCHING:** CP and CN main lines west from Montreal are side by side from 2.7 miles to the east in Lachine, Quebec, through to Vaudreuil-Dorion, Quebec, 14 miles west. CN has an edge in freight traffic density over CP. Commuter service Réseau de transport métropolitain moves 26 weekday trains on CP. Only four round trips operate on Saturdays, and three on Sundays.

About 30 VIA Rail Canada passenger trains travel daily to and from Toronto and Ottawa, Ontario, on CN. As a result, more freight traffic operates nocturnally on both lines. CP and CN are double-tracked from Dorval west. Long CTC-equipped sidings lie to the north of both railroads from east of Dorval to the entrances of their yards in Lachine. Both lines make a slight jog north just east of the VIA Dorval station. Commuter platforms are a "paid fare zone;" you must have a valid ticket to take pictures. You can access the south VIA Rail platform to photograph CN traffic during morning and early afternoon light.

Cardinal Avenue (Donegani Avenue west of the Valois RTM stop) parallels the north side of the CP, so you can shoot from that side later in the day, and access overpasses west of Dorval

(where Cardinal Avenue becomes Donegani Avenue) on foot for overhead shots.

Provincial Autoroute 20 runs along the south side through to Vaudreuil-Dorion, continuing to the Ontario border. You can use it to get to overpasses and some commuter stations west of Dorval for more views.

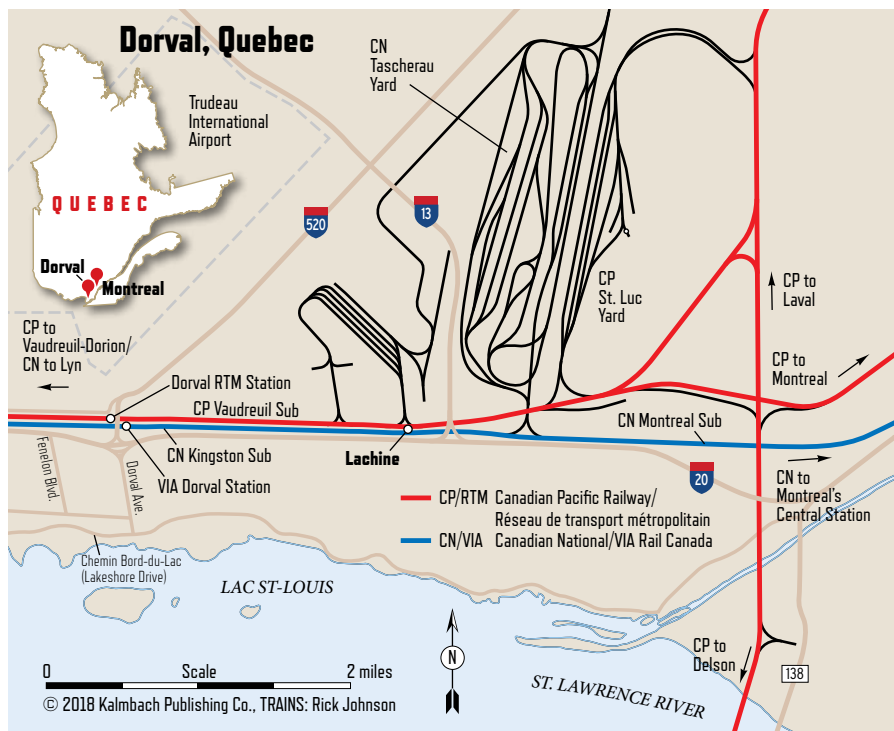
You can catch early afternoon westbound

trains on the north end of the Fenelon Boulevard highway overpass just to the west of the stations. A little luck and some patience will net a shot of a train and an aircraft landing or taking off from nearby airport runway 6R/24L.

VIA Nos. 63 and 64, usually solid stainless steel consists, are popular with enthusiasts. British-built Renaissance fleet consists operate on some Ottawa trains which originate or terminate in Quebec City. You can find Vaudreuil/Hudson commuter line schedules at [rtm.quebec/en](http://rtm.quebec/en) and intercity passenger train schedules at [www.viarail.ca](http://www.viarail.ca).

**RADIO FREQUENCIES:** 161.115 (east of Dorval, CP, RTM); 161.535 (west of Dorval); 161.425 (rail traffic controller). 161.415 (east and west of Dorval, CN and VIA); 161.205 (rail traffic controller).

**FOR YOUR FAMILY:** Hobby Junction, a hobby shop, is west on Cardinal Avenue and Meadowvale. Across Autoroute 20, you'll find a shopping center and restaurants, and hotels along Autoroute 520. Several parks are on the shore of the St. Lawrence and Lac St-Louis to the south of the stations along Chemin Bord-du-Lac (Lakeshore Drive).







# Flatonia, Texas

BY HAYLEY ENOCH



Sunset on the Sunset Route: Tower 3 and a Southern Pacific caboose are found in Flatonia's railroad park.



A field of flowering Texas bluebonnets greets a Union Pacific train just outside of Flatonia, Texas, a busy crossing for the UP. Two photos, Ken Fitzgerald

**LOCATION:** In 1874, the entire community of Flatonia, Texas, decided to pick up and move closer to the railroad being built by the newly chartered Galveston, Harrisburg & San Antonio Railway. It was a good move: The new railroad connected Houston and San Antonio, and Flatonia, halfway in between, was an ideal place for trains to stop for servicing.

Flatonia's tracks changed hands several times in the early 20th century. Both main lines eventually became part of the Southern Pacific and in the 1990s were merged into the Union Pacific network. UP renamed the east-west track the Glidden Subdivision, and the north-south route the Cuervo Subdivision.

Flatonia's population is just under 1,400 people. It sees heavy traffic from Gulf Coast ports and from cargo bound for the U.S.-Mexico border. Trains are still such a part of the area's culture and economy that the city constructed a viewing platform, the Flatonia Rail Park, where the public can watch and photograph trains 24/7. It is typical to see at least one train per hour. Amtrak's

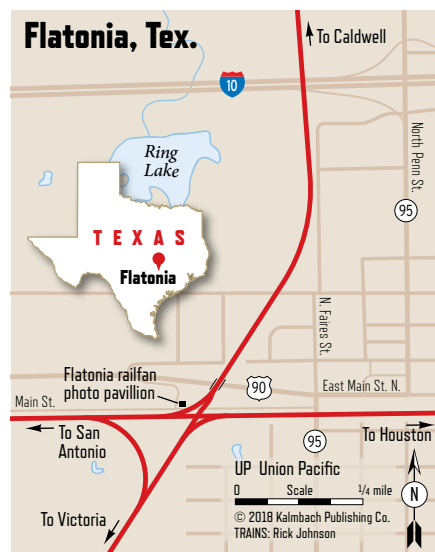
eastbound *Sunset Limited* passes through Flatonia during daylight hours; the westbound train may do so part of the year.

**RADIO FREQUENCY:** Both main lines use 160.665.

**TRAIN-WATCHING:** Flatonia is on I-10, 90 miles east of San Antonio and 110 miles from Houston. The Rail Park at 104 S. Main St. includes:

- Tower 3, one of the first manned interlocking towers. In operation between 1902 and 1996, it has been restored and moved east. It can be booked for private tours with the Flatonia Chamber of Commerce at 361-865-3920.
- The 1890 San Antonio & Aransas Pass Railroad passenger depot, still owned by Union Pacific and used a storage facility. It is next to Tower 3.
- Viewing platform next to the diamond interlocker, at the tower's original location, a short distance from its current home. Always open and shaded by a roof.

## Flatonia, Tex.



**FOR YOUR FAMILY:** The E.A. Arnim Museum documents Flatonia's history, including the town's origins supporting the railroad industry. Czhlispiel festival, a chili cook-off and festival in late October, commemorates Flatonia's German and Czech heritage. The Texas Transportation Museum in northeast San Antonio displays model railroads, vintage cars, and several display pieces, and offers a short train ride. The Galveston Railroad Museum is about 2½ hours away. Houston's attractions, including NASA's Johnson Space Center, can be reached in about 2 hours.



# Folkston, Ga.

BY KEVIN ANDRUSIA



A northbound CSX train rolls through Folkston, Ga., where freight counts average about 60 moves per day. Throw in six Amtrak trains, and you've got one hot spot. Kevin Andrusia



**LOCATION:** Folkston, Ga., is perhaps the best-known train-watching hot spot in the Southeast. The Charlton County seat sees CSX traffic in the Jacksonville Service Lane from its Nahunta and Jesup subdivisions' main lines funneling to/from Jacksonville, Fla., hence the nickname "Folkston Funnel." Trains from the Northeast take the Nahunta Subdivision via Jesup, Ga., while trains from the Midwest and Waycross, Ga., travel the Jesup Subdivision (which branches off at Waycross toward Savannah as well, serving as a detour route). CSX has upgraded the Jesup Subdivision connection, allowing for faster crossovers and more frequent at-speed meets. The city features a well-lit and safe viewing platform on the east side of the tracks south of the junction, complete with live-scanner feed and webcam. The platform is across the tracks near the Folkston Railroad Transportation Museum in the restored Atlantic Coast Line depot.

**TRAIN-WATCHING:** CSX offers an average of 60 trains per day while Amtrak offers six (three in each direction), including the impressive *Auto Train*. CSX traffic includes unit trains of sulphur, potash, and other minerals mined in the Bone Valley. Tropicana juice service has been combined into daily intermodal traffic, so there is no longer a unit juice train.

**RADIO FREQUENCIES:** 160.590 and 160.320, with defect detectors at Boulogne (Nahunta MP 610), Hague (Jesup MP 611) and Newell (Nahunta MP 592).

**YARD:** Nearby Waycross is home to CSX's Rice Yard, the second-largest classification yard on the system. While the yard is off limits to the public, its traffic is visible from numerous public vantage points. Waycross has been subject to massive infrastructure enhancements in recent years that have increased train speeds.

**FOR YOUR FAMILY:** Within 45 minutes north or south of Folkston, you will find other items of interest. Heading north out of Folkston, take U.S. Highway 1 toward Waycross where you will find the world-famous Okefenokee Swamp. Popular places to stay in Folkston include The Inn at Folkston, Relax Inn, and Western Motel. The *piece de resistance* is RAILSIDE Lodging, where you can choose from a variety of trackside accommodations.

Dining includes the superb Southern buffet at Okefenokee Restaurant on 3rd Street and Whistlin' Dixie on Main Street. There are plenty of fast-food alternatives, too.

Folkston's rail museum is open Monday-Friday, 9 a.m. to 5 p.m., and 10 a.m. to 3 p.m. on Saturdays. While the city welcomes rail

enthusiasts 24/7, the city rolls out the red carpet twice a year for official enthusiast gatherings. "Railwatch" takes place the first weekend in April, and "Winterwatch" happens the first weekend in December. Crowds are always at capacity and advance lodging reservations are recommended.

**PLUS:** U.S. 301 south of Folkston will take you straight to Jacksonville, Fla., with numerous CSX operations, as well as connections to Norfolk Southern and Florida East Coast. Jacksonville Landing, along the Saint John's River downtown, has numerous restaurants and nightlife spots when you want to take a break. CSX's headquarters building is at the Landing's Riverwalk, which goes underneath FEC's main line and drawbridge spanning the river.

An hour drive east of Folkston will take you to Fernandina Beach, Fla., where you can splash in the ocean or walk thru the city's historic district. There's also the First Coast Railroad, running from Fernandina to Seals, Ga.; CSX turned over operations to the 32-mile Genesee & Wyoming short line in 2005.

You can get to Fernandina Beach by taking county road 108 east out of Folkston to U.S. 17 south, then state Route 200 east the rest of the way.



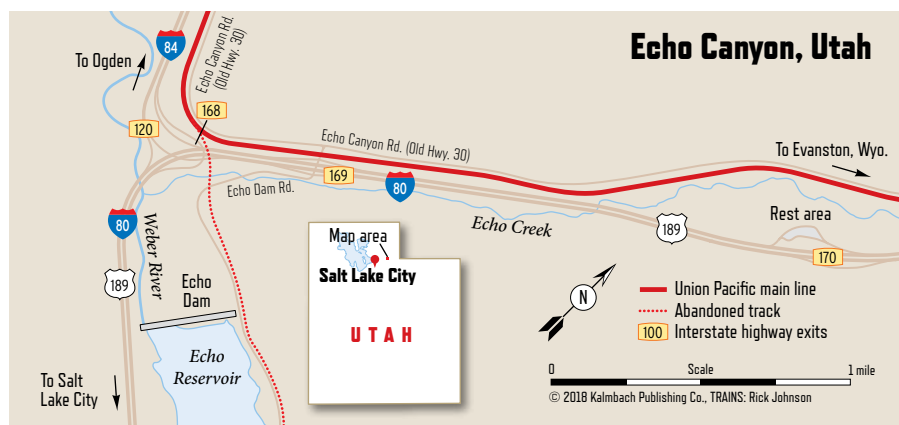


# Echo Canyon, Utah

BY JIM WRINN



The view from the I-80 west rest stop in Echo Canyon is magnificent. But if a trackside view is more to your liking, Echo Canyon Road parallels the Union Pacific main line to the west for several miles between exits 168 and 185, so take off on the two-lane road.



**LOCATION:** Perched high on a hillside on a lonely but breathtakingly beautiful stretch of Interstate 80 just outside of Echo, Utah, must be the best rest stop in America — for railfans. With a sweeping view of the rough, red, sandstone cliffs of Echo Canyon, frequent trains on Union Pacific's original transcontinental route, and convenient benches under sunshades, this location has everything a railfan could want.

**TRAIN-WATCHING:** Located about 45 miles east of Ogden and about 30 miles west of Evanston, Wyo., the westbound rest stop is the ideal perch to watch a busy main line that sees 50-60 trains per day. Nearby are scenic Weber Canyon and the top of the rugged Wasatch grade (original Big Boy territory), but the I-80 rest stop is a real gift to those who enjoy big-time railroad action in a dramatic setting. The rest stop, located at exit 170, offers three vantage points: two formal ones with sidewalks, benches, and pavilions that provide views directly ahead and to the east; and a third one atop a hill that is

accessible via a dirt trail with views to the west. For a closer look, you can still drive the paved old road, Echo Canyon Road (itself historic as part of the Lincoln Highway), that closely parallels the double-tracked main line between Echo and Emory, but you're trapped on the west side of the tracks. Thanks to curves you can shoot across the arc to the sunny side in the morning, but most of the shots are nose and in your face, and it is difficult to feature the canyon's famous red rocks unless you have an exceptionally wide-angle lens (a 12-24mm lens came in handy during my visit). A few practical tips to visit this spot:

1. You can only reach this rest area traveling westbound. If you are on I-80 east, go past the rest area about 7 miles to the Castle Rock exit (itself a great place to view the paired mainline tracks), and turn around.
2. Go in the morning for the best sun for photos. In the afternoon, the sun sets behind the cliffs.
3. Bring food. The rest area has snacks but if you want more than chips and soda, you will need to travel. There are Subway sandwich shops a few



**A westbound stack train and eastbound grain train pass at Echo, Utah, as seen from the I-80 rest stop.** Two photos, TRAINS: Jim Wrinn

miles away in Morgan, Utah, and Evanston, Wyo., but the real find is Taggart's Grill at exit 108 near Morgan. Try the 1/3-pound burger with fries.

**RADIO FREQUENCY:** Union Pacific road, 160.515.

**FOR YOUR FAMILY:** For the outdoor enthusiast, Utah offers many treats year-round, such as hiking in the Wasatch Mountains and rafting in Weber Canyon.

Echo Canyon, Utah





# Fullerton, Calif.

BY BRIAN SCHMIDT



Amtrak and Metrolink passengers watch as BNSF container train Z-LACWSP9 passes through Fullerton station on the center track on Sept. 6, 2013. David Styffe



Amtrak's Pacific Surfliners stop throughout the day. Two photos, TRAINS: Brian Schmidt

**LOCATION:** Looking for a taste of Los Angeles-area railroads without wading through the entire urban area? Suburban Fullerton offers steady railroad action with a mix of passenger and freight action just off Interstate 5 about 25 miles southeast of downtown Los Angeles.

**TRAIN-WATCHING:** BNSF Railway's San Bernardino Subdivision passes through Fullerton, connecting Los Angeles with its namesake city. Metrolink's Orange Subdivision begins in Fullerton and runs south, with traffic for Oceanside and San Diego.

Passenger trains are the main attraction in Fullerton, with 38 Metrolink commuter trains and 22 Amtrak Pacific Surfliners stopping on weekdays. That includes trains on both the Orange County and 91/Perris Valley Metrolink lines, which will soon feature new EMD-Progress Rail F125 locomotives. Amtrak's Chicago-Los Angeles Southwest Chief also stops daily. Metrolink's offerings are reduced on weekends, so plan ahead to make the most of them.

BNSF provides a supporting cast of freight traffic, up to 80 movements a day. Fullerton sees a heavy dose of intermodal traffic, linking the Los Angeles Basin with the rest of BNSF's network. The best views of the action come from the Metrolink station, located appropriately



An eastbound Metrolink train comes to a stop under the walkway in Fullerton.

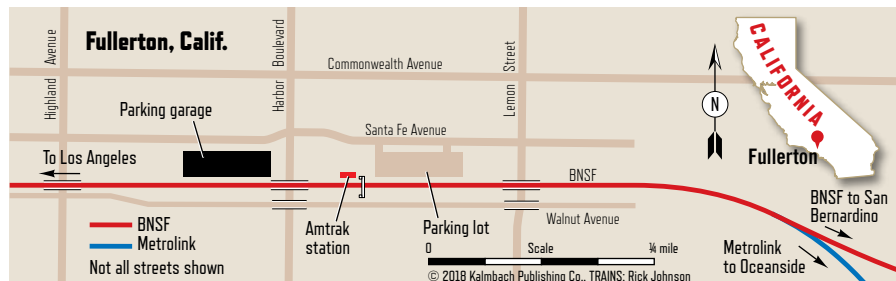
on Santa Fe Avenue.

Weekdays, ample parking is available to the west, just across Harbor Boulevard in a garage; on weekends, visitors can try their luck in the surface lot by the station.

**RADIO FREQUENCIES:** BNSF San Bernardino Sub, 160.650; Metrolink Orange Sub, 160.560.

**FOR YOUR FAMILY:** Be sure to check out the Angels for baseball and the Ducks for hockey, both in Anaheim, just a few miles south of Fullerton. Also in Anaheim, of course, is the famed Disneyland park. Just west of Fullerton is Knott's Berry Farm with its steam railroad, featuring historic Colorado narrow gauge equipment.

The Fullerton Train Museum maintained by Southern California Railway Plaza Association has a selection of rail equipment on display in Fullerton, including cabooses and passenger cars. It is open the first and third Saturdays of each month from 9 a.m. to noon. For more information, go to [www.fullertontrainmuseum.org](http://www.fullertontrainmuseum.org).







# Galesburg, Ill.

BY JEREMY J. SCHRADER

**LOCATION:** Galesburg, Ill., has long owed its existence to the railroads. It is a hub for BNSF Railway that sits at the junction of six principal routes since the landmark 1996 merger of Burlington Northern and Santa Fe.

The city was founded in 1836 and named after minister George Washington Gale, who was instrumental in establishing Knox College. The first train to arrive in the town was that of a Chicago, Burlington & Quincy predecessor in 1854, and in the ensuing decades, a network of Burlington routes emerged that were centered on Galesburg. The city later found itself along a transcontinental route between Chicago and Los Angeles when it enticed the Santa Fe to build through the community in 1887.

**TRAIN-WATCHING:** Trains are safely viewed from the Amtrak station and railroad museum grounds on Seminary Street downtown. Amtrak trains serving Galesburg include two long-distance services, the *California Zephyr* and *Southwest Chief*, and two corridor services, the *Carl Sandburg* and *Illinois Zephyr*.

BNSF yard jobs pull out of the yard by the Amtrak station with long cuts as they retrieve cars from the hump yard and assemble them into outbound trains.

Another location to safely view trains on the former Santa Fe Transcon, as well as those heading east to Chicago on the Mendota Subdivision and north toward Savanna on the Barstow Subdivision, is Peck Park. The former BN Mendota and Barstow subs are elevated through here and cross the former Santa Fe Chillicothe Subdivision on a bridge. Union Pacific has trackage rights on the former Santa Fe.

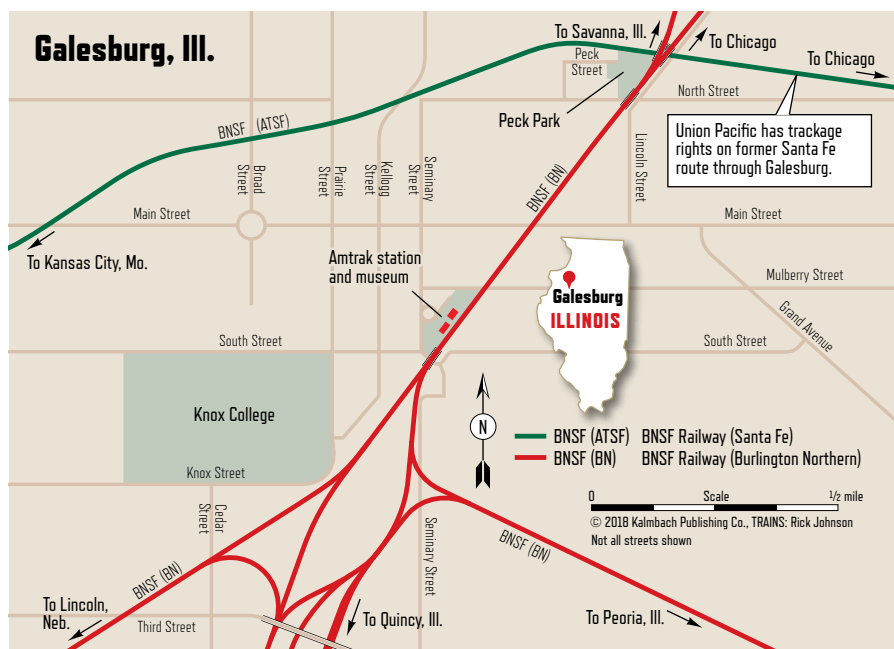
BNSF Yard Control is in charge of all train movements within the yard and all trains arriving and departing.

**RADIO FREQUENCIES:** Chillicothe Sub road, 160.650; Mendota Sub and Peoria Sub road, 161.385; Ottumwa Sub road, 160.695; Brookfield Sub road, 160.815; Barstow Sub road 161.415; Yard Control, 160.875.

**FOR YOUR FAMILY:** Galesburg has family attractions including the Galesburg Railroad Museum, located next to the Amtrak station, and the Discovery Depot Children's Museum. It is also the birthplace of Pulitzer Prize winner Carl Sandburg. The city hosts an annual celebration in June with activities including crafts, street vendors, carnival, and a model train show.



Westbound empty Detroit Edison coal gondolas roll through the Amtrak station at Galesburg in September 2009 behind General Electric ES44AC No. 5798. Nick Suydam



Galesburg, Ill.



# Rockville Bridge, Pa.

BY MICHAEL S. MURRAY



**NS intermodal train 20T is almost home as it makes its way east across Rockville Bridge in July 2017.** Two photos, Michael S. Murray



**LOCATION:** “Susquehanna” comes from the Delaware Native American term Sisa’we’hak’hanna, which means “Oyster River.” Today’s Rockville Bridge crosses this river about 5 miles north of Harrisburg, Pa., the state capital. Constructed between April 1900 and March 1902 by the Pennsylvania Railroad to replace a previous iron truss bridge, it has 48 70-foot spans, totaling 3,820 feet in length. More than 100 years later, it remains the longest stone masonry arch railroad viaduct in the world.



**TRAIN-WATCHING:** Rockville Bridge has great strategic importance as the epicenter of Norfolk Southern’s Harrisburg Terminal. On the east bank, the Buffalo Line meets the Harrisburg Line (CP Rockville/CP Wye). On the west bank the Pittsburgh Line meets the north end of Enola Yard (CP Mary/CP Hip), and what further south becomes the Port Road

Branch and a connection to the Lurgan Branch.

The majority of the activity in the Harrisburg Terminal traverses the Pittsburgh and Harrisburg lines. East-west traffic is primarily intermodal, served by transfer facilities in Harrisburg proper and further east at Rutherford. The balance is a combination of auto racks, mixed freights, and unit trains.

North Front Street on the east in Rockville is best for catching the action in the morning. There are ample places to park and walk across the road to catch broadsides of the bridge. Linglestown Road southeast of Rockville Bridge provides elevated views of trains entering and departing Harrisburg Yard (where through trains frequently stop for refueling). The State Street overpass south of Harrisburg Yard (in downtown Harrisburg itself and north of the Amtrak station) is also worth a visit.

It is best to move to the west bank of the river as the day progresses. The quickest way to span both shores is via the Interstate 81 bridge between Rockville and Enola. Once there, the best shots of the Rockville Bridge itself may be had along River Road — it parallels the north end of Enola Yard to Marysville. Many photographers will proceed north on U.S. routes 11 and 15 to Cove (between Marysville and Duncannon) to watch the action trackside.

Enola Yard itself is worth a visit. Elevated views from Enola Road in afternoon sun can afford some interesting views of assorted NS and other Class I railroad motive power.

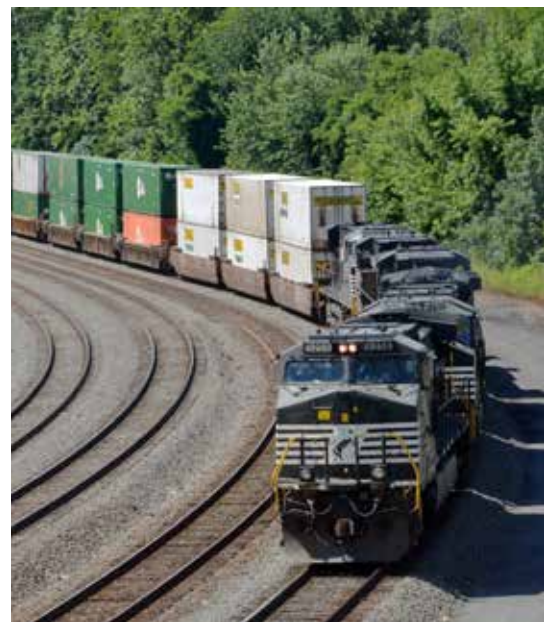


**RADIO FREQUENCIES:** NS Harrisburg Terminal, 190.980; NS Pittsburgh Line,

160.800; NS Harrisburg Line, 160.860; NS Port Road, 161.070; NS Enola Yard, 161.445; NS Harrisburg Yard, 160.410.

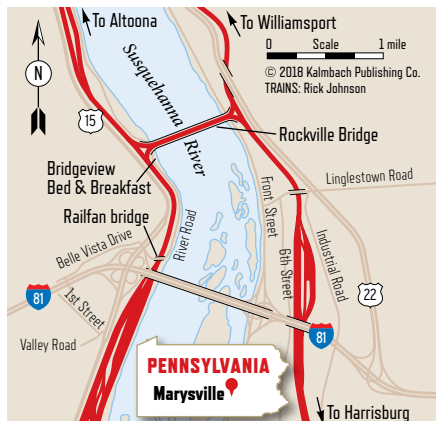


**FOR YOUR FAMILY:** There are ample options for food and fuel on both sides of the river. Bridgeview Bed & Breakfast on the west end of Rockville Bridge is also worth an overnight stay.



**Train 26T takes the siding east of Rockville Bridge as it approaches the Harrisburg intermodal yard. This view comes from the Linglestown Road overpass.**

Rockville Bridge, Pa.







# North East, Pa.

BY STEVE SWEENEY

**LOCATION:** North East is a borough of about 4,200 people and is the northernmost incorporated community in Pennsylvania. It is little more than a mile from the shore of Lake Erie, and just 3 miles off Interstate 90. The community, located in northwestern Pennsylvania, is named North East for its location in northeastern Erie County.

The Lake Shore Railway Historical Society and Museum is located in the former Lake Shore & Michigan Southern station. The complex is adjacent to former New York Central and Nickel Plate Road tracks, which now belong to CSX Transportation and Norfolk Southern.

**TRAIN-WATCHING:** As many as 80 trains pass through North East each day. CSX accounts for the majority on its former NYC trackage, while NS also hauls respectable numbers on its line just to the south. Canadian Pacific has trackage rights on CSX and sends a daily intermodal through town. NS and CSX locals switch nearby plants as needed. The largest are Welch's and Cott Corp., which process locally grown Niagara and Concord grapes into juice, jelly, and other food products.

Mainline freights run the gamut from slow coal to priority intermodal, including trailers and containers. Unit garbage, manifest, and crude oil trains also appear. Traffic is heaviest toward the end of the week, especially Thursdays and Fridays. Weekends see respectable numbers of trains that drop off come Monday morning.

Amtrak's *Lake Shore Limited* passes North East westbound minutes before the scheduled 1:48 a.m. arrival in Erie, and soon after the scheduled 7:20 a.m. departure from Erie headed east.

The Lake Shore Railway Historical Society owns and operates the museum, housed in the 1899 brick station, the third on the site. It succeeds two previous structures, built in 1852 and 1869, the second of which was reused as a freight station and still stands. The NYC and later Penn Central used the station until the end of passenger service to North East in 1971.

Museum visitors are welcome to walk the grounds day or night, year-round. Benches and tables are provided. The historical society owns the property and permits visitors to watch trains from behind a small steel fence that is less than 10 feet from the CSX main line on the west side of the right-of-way and on the original brick passenger platform. Platform speakers carry scanner chatter.



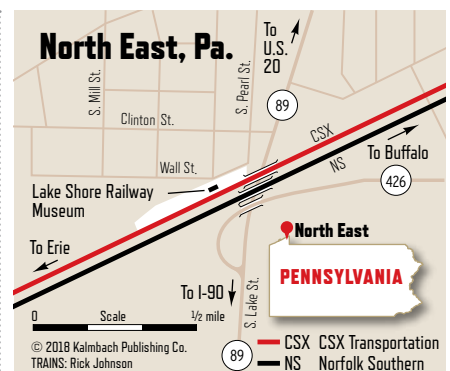
**A westbound CSX intermodal zooms by the preserved Lake Shore & Michigan Southern station in North East, Pa., in May 2014.** Two photos, TRAINS: Steve Sweeney



**Modern rail action, like this CSX train, and historic artifacts are both on tap at the Lake Shore Railway Museum in North East.**

The museum focuses its collection on objects or equipment related to North East and Erie County, followed by items related to the General Electric locomotive shops in Lawrence Park, 11 miles to the west. That is why visitors will see a lot of GE equipment on site: Various box-cab industrial locomotives; a Chicago South Shore & South Bend 800-series "Little Joe" electric; a 132-ton center-cab diesel built for Ford Motor Co.; and NYC U25B No. 2500.

The museum also hosts a collection of NYC, Nickel Plate, and Great Northern passenger cars, and assorted freight cars. Volunteers also boast of having the only operating fireless Heisler-built locomotive, an O-6-OT assembled in Erie that now runs on compressed air. For more information on the



museum, go to [lakeshorerailway.com](http://lakeshorerailway.com).

**RADIO FREQUENCIES:** NS road, 161.250; CSX road, 160.860; CSX dispatcher 161.520.

**FOR YOUR FAMILY:** Local festivals, wineries, antique stores, and hiking trails provide year-round entertainment possibilities. Freeport Beach, on Lake Erie, is the closest public beach and is open seasonally. Heading west toward Erie, visitors can visit the Erie Zoo; a large indoor water park; several micro-brewery pubs; and Presque Isle State Park, the largest free-admission park in Pennsylvania with more than 7 miles of paved bicycle trails and miles of groomed sand beaches.

North East, Pa.





# Omaha and Council Bluffs

BY DARRELL WENDT AND JIM WRINN



**LOCATION:** As headquarters for Union Pacific and home to Warren Buffett, the leader of Berkshire Hathaway that owns BNSF Railway, this jewel of the corn belt is as heavy on railroad action as you'd expect.



**TRAIN-WATCHING:** The best and safest place to watch train action in the Omaha-Council Bluffs area is the 10th Street viaduct, which crosses over BNSF and UP main lines in downtown Omaha. The Burlington Route station, now a local television station, and the former Union Station, now the Durham Museum (which has a significant railroad history display), anchor each end of the bridge. There are wide sidewalks on the east and west sides as well as parking available on either side. In addition, you'll find Canadian National (former Illinois Central) and Iowa Interstate across the Missouri River in Council Bluffs, where the zero milepost for the transcontinental railroad is found near a giant spike-shaped monument. Numerous city streets provide train-watching opportunities for UP and BNSF. Most UP traffic through Council Bluffs is eastbound as directional running is in place via Missouri Valley, Iowa. Most westbound UP trains go via Blair, Neb. UP's passenger car shop is located in Council Bluffs, but viewing is

poor from city streets. Amtrak's *California Zephyr* calls at Omaha late at night and early in the morning. CN uses trackage rights over UP and BNSF to access its own tracks in Omaha, north of downtown. Iowa Interstate is the only railroad that doesn't cross the Missouri River into Omaha. Operations of that line are best viewed by the restored Rock Island depot at 16th Avenue, which serves as the RailsWest museum, which features a rolling stock display with a UP 4-8-4 and a model railroad.



**RADIO FREQUENCIES:** BNSF Omaha Sub, 161.415; UP Omaha Sub, 160.740; Canadian National Omaha Sub, 161.190; Iowa Interstate Council Bluffs Sub, 161.220.



**FOR YOUR FAMILY:** There are several nearby restaurants within a few blocks of the 10th Street bridge. Omaha's famous Old Market area, filled with unique shops, breweries, and restaurants, is about two blocks north of the viaduct. Omaha's Henry Doorly Zoo is worth a visit, and it features a narrow gauge steam railroad with two locomotives in operation. Midtown Crossing, just north of the Old Market, offers shops, restaurants, and a movie theater. Council Bluffs offers riverboat casinos.



**Iowa Interstate adds variety to the Omaha-Council Bluffs area. This transfer is for UP in Council Bluffs.** Three photos, TRAINS: Jim Wrinn



**PLUS:** Check out the UP store on the first level of the 19-story headquarters building at 14th and Douglas. It's open to the public. Additionally, you will want to see the UP Big Boy and Centennial locomotives on display at Lauritzen Gardens; both locomotives greet drivers on I-80 west as they enter Nebraska from Iowa. In Council Bluffs, do not miss the world-class Union Pacific Museum at 200 Pearl Street. It tells the story of the building of the railroad and today's modern system.



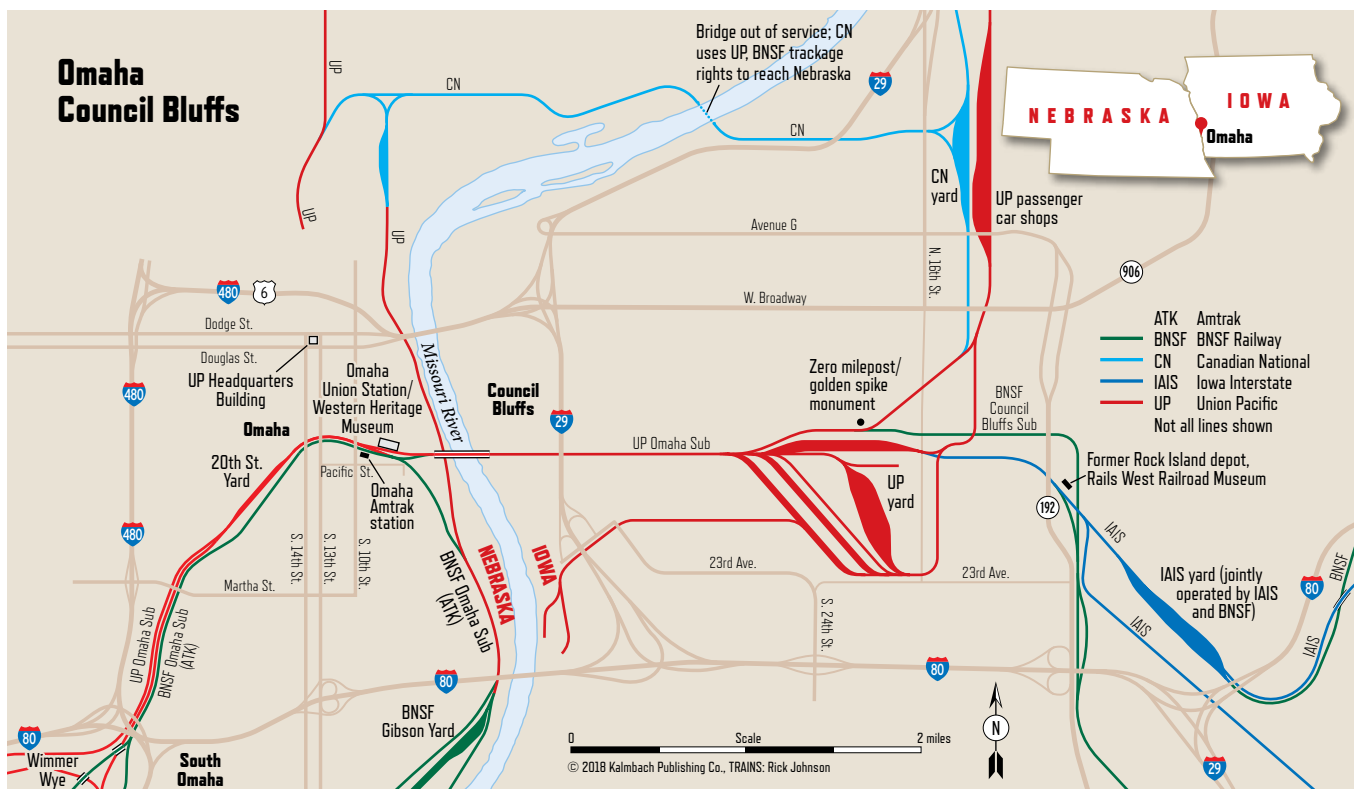
A unit oil train heads north out of Council Bluffs, Iowa, on Union Pacific's busy line to Missouri Valley, Iowa, where tracks head east to Chicago.



Having just passed milepost 0.0 on the Union Pacific main line in Council Bluffs, Iowa, an eastbound merchandise freight rolls through the city before heading north to Missouri Valley.



A westbound BNSF train moves through the downtown area under the 10th Street viaduct in Omaha, Neb. To the left are UP's mainline tracks. Darrell Wendt

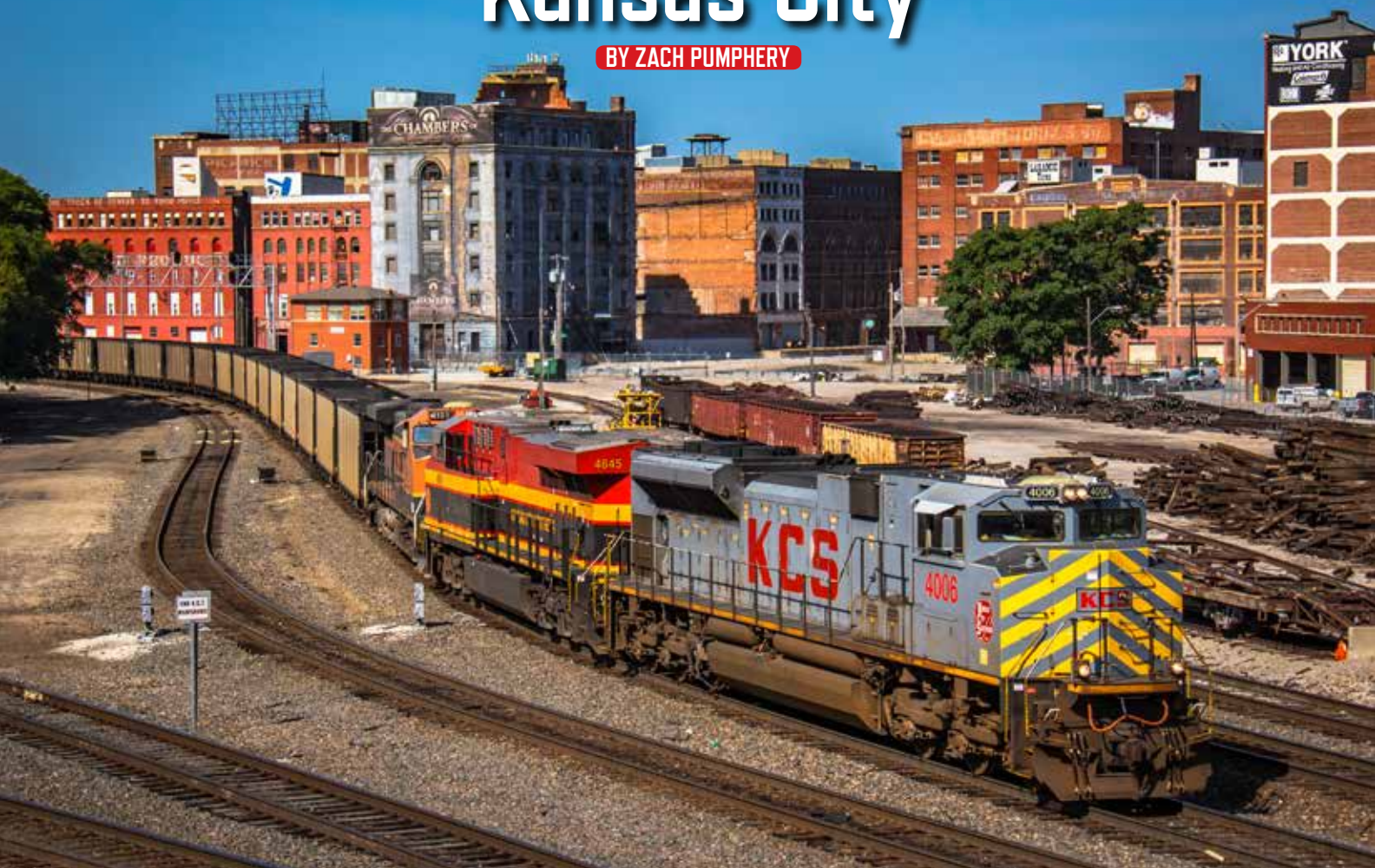






# Kansas City

BY ZACH PUMPHERY



An empty Kansas City Southern coal train snakes through Old Union Depot interlocking on its way toward BNSF Railway's Murray Yard. The view is from Bluff Road in the West Bottoms on June 25, 2015. Three photos, Zach Pumphery



**LOCATION:** The Kansas City metro area is astride the Missouri and Kansas state lines at a confluence of rivers bearing the same names. The municipalities are surrounded by a hive of railroad activity. This is the second busiest railroad hub in the U.S., with the nation's second-largest train station, the jointly owned Kansas City Terminal Railway, five Class I railroads, two Amtrak routes, a pair of short lines, and a streetcar system. And there's plenty of good barbecue and sporting events.



**YARDS:** In Missouri, Union Pacific's Neff is a large hump yard with an intermodal ramp. Knoche Yard, shared by Kansas City Southern and Canadian Pacific, forms the north and south end of those railroads, respectively. In North Kansas City, Norfolk Southern has Avondale, a flat switching yard. Nearby is BNSF's Murray, used for staging, inspecting,

and fueling unit trains. On the Kansas side, UP has two parallel yards — 18th Street and Armourdale, handling manifest and automotive traffic — that operate as one facility. Kansas City Terminal's Mill Street Yard is occupied by Watco's Kansas City Transportation Co. LLC, the contracted operator for the terminal's on-line customers. BNSF's main facility, Argentine, is the largest on its system.



**TRAIN-WATCHING:** The 1914-built Union Station is an excellent place to view trains. Amtrak's *Missouri River Runner* calls here four times daily, as well as the *Southwest Chief*. The tracks here are Kansas City Terminal Railway's East-West Corridor and you may see trains of all roads. A majority of traffic belongs to BNSF, but many UP trains are routed this way. Several overpasses offer viewing positions, most notably the Michael R.



Two heritage units and a Winter Olympics locomotive lead a Union Pacific train under the Mike Haverty bridge at Union Station.





A pair of northbound trains are split by a southbound coal load in the West Bottoms on Aug. 12, 2015.

Haverty Freight House Bridge.

A major interlocking, on the state line, is Santa Fe Junction, one of the busiest in the country. A popular hangout for railfans is the area east of the tracks and along 25th Street. A diverse mix of commodities and carriers represented, wide-open views, and three levels of busy railroad makes this a compelling spot. At ground level, the KCT's two perpendicular sections meet. Tracks and bridges allow movements to and from virtually any direction, with diamonds and connecting tracks at ground level for movements in and out of Argentine, 18th Street, and Mill Street yards. Two blocks east, another pair of KCT tracks handle BNSF coal trains. The Terminal's "High Line" is above, leading to the double-deck Kaw River Bridge, with two tracks on both levels carrying trains into Kansas. The bottom deck is a common route for KCT transfers and industry jobs. At an even higher elevation looms the Argentine Connection Flyover, also called the "Skyway," used by most BNSF Transcon freights to access Argentine Yard.

The West Bottoms are home to busy points with diverse traffic. From Bluff Road, a lightly traveled dead end, you overlook Old Union Depot Interlocking on the KCT. This is also close to the UP's line, a short walk north, and easily viewed from the Forrester Viaduct. UP and BNSF make up the bulk of the traffic, but all carriers are represented.

At ground level, Santa Fe Street offers parking, and has shade on hot summer afternoons. UP's line bisects a revitalized warehouse district with parking near Hickory and Union. The James Street overpass has a sidewalk on the east side of the bridge looking



out over the Bottoms and skyline.

Near the River Market, you'll find the Town of Kansas Bridge, part of the Riverfront Heritage Trail. This walkway spans the UP KC Metro Sub, with a view of the Missouri River and nearby drawbridges. This is a convenient place to see BNSF trains using the Hannibal and ASB bridges.

KCT, BNSF, and UP maintain dispatch consoles at the Regional Operations Center next to Argentine; KCS, CP, and NS are also dispatched within the city. The proximity of the dispatchers to each other, and to the territories they control, can limit radio traffic; users of ATCS Monitor will find it to be useful, with coverage of virtually the entire metro area. Keep in mind that the Kansas City Terminal is owned by five Class I carriers, and all railroads may use multiple routes through the area.

**FOR YOUR FAMILY:** Attractions include the National World War I Museum and Memorial; Royals baseball, Chiefs football, and Sporting KC soccer, in season; the Worlds of Fun/Oceans of Fun amusement park and

water park; the Kansas City Zoo, the Negro Leagues Baseball Museum, Science City (at Union Station); Crown Center/Legoland; the Nelson-Atkins Museum of Art; River Market. Tourism details: [www.visitkc.com](http://www.visitkc.com) or call 800-767-7700.

### **RADIO FREQUENCIES** (Only major channels shown)

**BNSF:** 161.100 road, 161.100 yard, north of Old Union Depot and Murray Yard; 161.085 road, 160.650 yard, west of Santa Fe Junction and Argentine Yard.

**CP:** 160.770 road, 161.055 yard; yard channel for CP and KCS yard jobs at Knoche.

**KCS:** 160.260 road, 161.070 yard; yard channel for road freights at Knoche.

**KCT:** 161.010 road, 161.310 yard; maintenance-of-way workers use 160.500.

**NS:** 160.440 road, 160.380 yard; road channel is east of South Liberty.

**UP:** 160.680 road, 161.550 yard, west of Broadway/18th Street and Armourdale; 160.980 road, 160.815 yard, east of Broadway and Neff Yard/East Bowl.





# 25 (more) places to see

Compare our railroad bucket list to yours

BY JIM WRINN

1

One of the most spectacular spots on Marias Pass is the Goat Lick trestle near Essex, Mont.  
Justin Franz







3

Montana Rail Link's Laurel-to-Missoula manifest blasts out of Bozeman Tunnel near West End, Mont. TRAINS: Tom Danneman





10



Iowa Traction's bright orange 1920s motors busily move grain around Mason City, Iowa. This is the last operation of its kind in the U.S. As they say in "The Music Man, "Ya gotta know the territory!" Nikki Burgess

**1 GOAT LICK TRESTLE** Fast-paced action of BNSF's northern transcon and the beauty of Glacier National Park, plus live GN goats. Watch them rock hop!

**2 GAVIOTA TRESTLE** 80-foot-tall, 811-foot-long landmark on Southern Pacific's Coast Line.

**3 BOZEMAN PASS** Echoes of the Northern Pacific abound, as do Montana Rail Link helpers. Lewis and Clark came through here.

**4 PROMONTORY SUMMIT** Lonely Utah desert spot where work on the first transcontinental railroad was declared "done!"

**5 CASCADE TUNNEL** 7.8-mile tunnel in Washington state is the longest in the U.S.

**6 PORTLAND UNION STATION** The essence of a classic major station resides in the Rose City of the Pacific Northwest.

**7 DUNSMUIR, CALIF.** Southern Pacific's mountain-climbing character is vibrant in mountainous Northern California. A great place to get a volcano in the background of your shot.

**8 LOS ANGELES UNION STATION** Where named trains and Hollywood stars once gathered, commuters and light rail (and some Amtrak long-distance trains) converge today.

**9 NORTH PLATTE, NEB.** The world's largest yard merits a spike-shaped observation tower. The yard covers more than 2,800 acres of land. Action is relentless.

**10 MASON CITY, IOWA** Iowa Traction still moves covered grain hoppers with ancient, bright orange electrics.

**11 MICHIGAN CITY, IND.** Street running for the South Shore, America's last true interurban, from big-city Chicago to rural South Bend, Ind.

**12 MANITOWOC, WIS.** Coal-fired ex-Chesapeake & Ohio car ferry still ping-pongs between here and Ludington, Mich.

**13 PINE JUNCTION, IND.** Ghosts of the Pennsy and the New York Central duke it out in northern Indiana as NS and CSX rush to and from the Windy City.

**14 RAHWAY, N.J.** Six tracks abreast proclaim speed

4



Reproductions of the Central Pacific Jupiter and Union Pacific No. 119 face each other at Promontory, Utah, where the first transcon was "done." This is a National Park Service site. TRAINS: Jim Wrinn

11



South Shore still runs down the middle of the street in Michigan City, Ind. TRAINS: Brian Schmidt





15

A westbound CSX freight skirts the storefronts in downtown Thurmond, W.Va., in the New River Gorge. Chase Gunnoe

and intensity on the ultra-busy Northeast Corridor.

## 15 THURMOND, W.VA.

Classic 20th century coal and railroad town in the New River Gorge. Storefronts line the tracks. National Park Service exhibits in classic Chesapeake & Ohio depot.

## 16 HELL GATE BRIDGE

Opposite of its name, this 1,017-foot span in New York City is a commanding beauty and a spectacular part of the NEC.

## 17 RICHMOND, VA.

Two over one isn't fair. The first triple crossing in the U.S.; the second is in Kansas City. It's CSX on top two layers, and NS on bottom.

## 18 LAMBERTS POINT, VA.

NS's Pier 6 is the biggest and most efficient coal-loading dock. Constant action.

## 19 HUEY P. LONG BRIDGE

Massive, 7,000-foot-long structure over the Mississippi at New Orleans on Union Pacific's Sunset Route.

## 20 LONGEST STRAIGHT STRETCH IN THE U.S.

78.9 miles on CSX's former

16



Spectacular Hell Gate Bridge, opened in 1917, is a New York City icon. It's part of the Northeast Corridor, spanning the East River between Astoria and Manhattan. Matt Van Hattem

Seaboard route between Hamlet, N.C., and Wilmington, N.C.

## 21 DAYTONA BEACH, FLA.

Upstart regional Florida East Coast bucks the trend in classic citrus colors.

## 22 KENNESAW, GA.

Where the Great Locomotive

Chase began; home of the 4-4-0 General and the story of Glover locomotives. Now a busy CSX artery with traffic galore.

## 23 NATURAL TUNNEL

In southwest Virginia, the only location where a Class I railroad, Norfolk Southern, uses a non-manmade passage. A state park.

## 24 HARPERS FERRY, W.VA.

Historic location on CSX's former Baltimore & Ohio main line with lots of possibilities.

## 25 AUSTELL, GA.

Junction of Norfolk Southern's busy routes from Atlanta to Birmingham, Ala., and Chattanooga, Tenn., it also hosts Amtrak's daily Crescent.







NEVADA NORTHERN RAILWAY

# HANDS ON HISTORY

SEE IT • FEEL IT • RUN IT!

Get the hottest view on the Railway...

...from inside the Cab!



Operate a Diesel Locomotive!



Work on the Railroad!



Operate a Steam Locomotive!

Treat Yourself  
to an Intense,  
Unforgettable  
Experience!



**Nevada Northern Railway Museum**  
Ely, Nevada

(775) 289-2085 • [www.nnry.com](http://www.nnry.com)