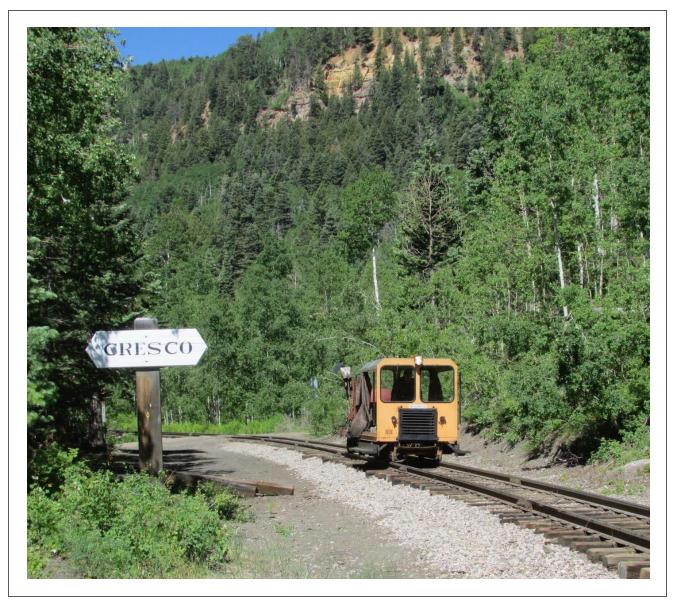
# Signs from the Railroad: Serving Train Crews & the Public



FCTS JW01-2443 John B. West 1967.





### Introduction

Today trains on the Cumbres & Toltec Scenic Railroad are equipped with radios. The radios allow train crew members to talk with each other, talk with railroad workers along the tracks and talk with Dispatchers who monitor the train's progress. Even with modern radio technology, train crews still rely on the historic signs found along the tracks of the Cumbres & Toltec.

These signs, made of wood or metal, have designs dating back well over a century. To this day, the signs tell engineers how fast to operate their trains, when to blow the whistle, and where the train is located.

An example of a Station Sign without a passenger depot. Today at Cresco, there is nothing but a siding and a telegraphone booth.





# **Basic Sign History**

The Cumbres & Toltec railroad is a preserved portion of a rail line once part of the Denver & Rio Grande Railroad. Historic signs found on the Cumbres & Toltec were originally installed by the Denver & Rio Grande and many of these signs have histories dating back to the late 1800s.

Signs were made using wood or metal. The original wood signs suffered from the harsh weather environment present along the Cumbres & Toltec. Over the years, original wood signs have all been replaced. New wood signs are made to look like the historic signs they replace.

Metal signs lasted much longer. Most of the metal signs are original and some of the oldest signs on the Cumbres & Toltec. The metal signs are made from a recycled rail or an old part from a locomotive for the post. Scrap sheet metal, welded to the post, is used to make the panel for the sign.





Preservation of Historic Signs: The Friends of the Cumbres & Toltec Scenic Railroad

Because the Cumbres & Toltec is registered as a National Historic Landmark, preservation and restoration are very important. The tasks of preservation and restoration are done mostly by a group of volunteers; the Friends of the Cumbres & Toltec Scenic Railroad.

Two weeks a year, two groups of dedicated Friends members volunteer their time maintaining the historic signs found along the 64 miles of Cumbres & Toltec track. Their maintenance work can include repainting, replacing, repairing, and reconstructing various signage examples. Riding the Cumbres & Toltec you will see many examples of their handiwork; you might even catch a crew at work.

Top: Volunteers repaint milepost 285 in place. Bottom: Volunteers prepare replica mileposts in the Chama railyard before installing them along the line.

#### Mileposts – A Brief History

When riding the Cumbres & Toltec, the most frequent historic sign you will see is a milepost. These signs placed one mile apart, indicate the position of the train along the railroad. The number on each milepost shows the distance, in miles, that milepost was from Denver, Colorado. Why? Because originally, the Cumbres & Toltec railroad was part of the Denver & Rio Grande railroad. The headquarters for the Denver & Rio Grande was in Denver. The further away you go from Denver, the higher the mileage number on the milepost.

Mileposts are critical in determining the location of a train. Back then, they didn't have the modern locating technology we have today; mileposts filled that role. The correct location of multiple trains was especially important because, with only a single track, a train might have to pull into a siding at a certain time and location to get out of the way of other rail traffic.



Milepost 322 shows one of the older ways of showing mileage information. The "D" is for Denver; the "M" is for miles. The post reads "Denver, 322 miles."



### Mileposts – How They are Used

In addition to determining a train's position and marking its progress, mileposts are used by the engineer to determine how fast the train is moving. The steam engines on the Cumbres & Toltec do not have speedometers; the engineer uses a watch to time how long it takes to go one mile to figure the speed of the train. Here are some examples for speed checks: if the train is traveling at 20mph, it should take three minutes to go one mile. Or, if it takes six minutes to go one mile, the train is traveling 10mph.

For safety reasons, it is important for the engineer to know the speed of the train. For instance, in places where the engineer cannot see far ahead, it's important to maintain a speed slow enough to stop the train quickly to avoid hitting an unexpected obstruction. Common obstructions along the Cumbres & Toltec might be a fallen tree or a rockslide.



## Types of Mileposts

There are two types of mileposts found on the Cumbres & Toltec; posts made of solid wood and posts made of solid metal. The wooden posts have several different ways the mileage numbers are displayed. These posts show the change in how things were done over the years. The most recent mileposts are solid white with a vertical number painted in black. Other mileposts, showing older ways of displaying the mileage, have a combination of letters and numbers.

The metal mileposts are made from a recycled piece of old rail to act as the post. A scrap of sheet metal is welded to the rail and bent to form a kind of "V". The V-shape allows the mileage number to be more easily seen by approaching trains.

Important infrastructure along the track has mileage plates attached to them; these would be bridges, trestles, and tunnels. Mileage plates are not mileposts; they are placed to quickly identify the location of a critical structure should a serious problem have to be reported. When you have a lot of bridges, trestles, and tunnels it's important to get the right one.



Milepost 342 is an original, all-metal milepost. The post is made from an old rail, the sign from scrap sheet metal bent into a "V" to allow visibility from both directions.





## Whistle Boards

Whistle boards, sometimes called whistle posts, are another common type of sign found along the tracks. Most whistle boards are made of wood; the newest versions are made of metal much like the metal mileposts.

Whistle boards tell the engineer to blow the locomotive whistle based on what letter is shown on the sign. The signs are placed to allow a timely warning and alert people up ahead at the road crossing, in the station, or on the tracks that the train is approaching. On the Cumbres & Toltec, there are three types of whistle boards:

- 1. "X" indicates a road crossing ahead
- 2. "S" indicates the train is approaching a station

3. "W" indicates a general warning when approaching trestles, tunnels, and blind curves.

### Station Signs

A "station" is simply a location on the railroad having a name. Some stations have depots; passengers can get on and off the train at these stations. Some stations were remote locations where track workers and their families lived. Some stations have nothing more than a siding track. How did they get their names? That would be a subject for another time.

The Cumbres & Toltec has several types of station signs. The first is the "Station One Mile" sign. This is a large sign telling the engineer that the train is one mile from the next station. As the train moves into the station, the type of signs and their location will be based on what kind of station it is. For a passenger station with a depot, the station sign will be mounted on the depot building. The sign shows the name and usually the elevation of the station. For stations without passenger service, you will see a large, two-sided sign on a post with the station name painted on it. This sign can be all wood or all metal.



### Historic Safety Signs



The most common safety signs on the Cumbres & Toltec are speed limit signs. Just like speed limit signs on highways, the ones along the tracks tell the engineer the maximum speed for that part of the track. The speed limit may be for several reasons such as a sharp curve, a road crossing, a long trestle, or going through a tunnel.

Speed limit signs can be permanent or temporary. Temporary speed limits are used for safety when people are working on the tracks. People and equipment on or near the tracks require the train to move much slower than normal. Temporary speed limit signs are set until all work is completed.

Another safety sign is called a "Yard Limit" sign. The Yard Limit sign tells the engineer that the train is entering a track that is part of a rail yard. Rail yards can be a complicated tangle of tracks, switches, and a lot of other train activity; train speed must be reduced, and vigilance must be increased.

Left: A Speed Limit sign in the Sign Garden Exhibit in Chama, NM.

Right: The Yard Limit sign coming into Chama, NM. As the train moves closer to the yard the engineer will slow the train to aid in increased vigilance.



## Historic Informational Signs

Informational signs on the Cumbres & Toltec include "State Line" signs. There are eleven places where the tracks cross the state line between New Mexico and Colorado. At each location there is a sign; one side tells train passengers going in one direction that they are entering Colorado. For train passengers going in the opposite direction, the same sign will tell passengers they are entering New Mexico.





## Historic Special Signs

A long time ago trains stopped at Toltec Gorge; passengers could get off and enjoy the view and see the monument to President Garfield. There are two special signs, replicas of the originals, warning passengers not to throw rocks into the gorge because there may be "fisherman below". Why? The Los Pinos River flows through Toltec Gorge and is a popular spot for fishing.

Another unique sign is in Antonito and says: "End of Standard Gauge". At one time there were three rails on the track between Alamosa and Antonito, Colorado. The three rails allowed the track to be used by standard and narrow gauge locomotives and rail cars. The sign marks the spot where the standard gauge track ended and only the narrow gauge track continued. 12







### Modern Day Signs

While most of the signs on the Cumbres & Toltec are historic, there are also some modern-day signs.

One familiar modern sign is the "X"-shaped railroad crossing sign, called a **grade crossing** sign, found at places where the train tracks cross public and private roads. These grade crossing signs warn drivers to be alert for approaching trains and to stop if a train is coming. Grade crossings along the Cumbres & Toltec do not have gates that lower automatically when a train is coming, so it is important for drivers to heed the crossing signs.

At one time, the Denver & Rio Grande had their own railroad crossing signs. These were large signs in the shape of a "T" with the words "Railroad Crossing" painted across the arms of the "T". No examples of these historic signs exist today as they fail to meet modern federal standards.

Top: Modern-day sign alerting drivers to an upcoming railroad crossing; drivers are responsible for watching for any trains. Bottom Left: Modern-day grade crossing sign. The "Yield" sign informs drivers they must give way to any trains approaching the crossing.

Bottom Right: Another modern-day sign alerting drivers to an upcoming railroad crossing.



### Blue Flags







Left: Blue Flag sign letting railroad workers know a crew is working on this track. Right: Blue Flag sign telling railroad workers that the car is connected. **Blue Flags** are all about people's safety; they are required any time people are working on railcars or locomotives. Blue flags are also used for railcars on display and any other time rail equipment cannot be moved or coupled.

Blue Flags are blue metal signs with white lettering. Blue flags are typically placed on the rails at both ends of rail equipment that cannot be moved. They can also be placed at the end of a line of cars that cannot be moved or coupled to.

The Blue Flag signals railroad employees, especially locomotive crews, to stop and not couple to, move, or come near the equipment protected by the Blue Flags. A Blue Flag violation is one of the most serious violations in railroad safety.

Historically, Blue Flags were actual flags made of blue fabric signaling restricted access to cars and tracks; that original standard was upgraded to the metal signs of today. The U. S. Department of Transportation sets modern Blue Flag standards and rules.





## Sign Garden



To see examples of historic signs along the Cumbres & Toltec, visit the Sign Garden. The Sign Garden is located near the Chama Depot, next to the stairs coming down from Terrace Ave/Highway 17. The Sign Garden is a new interpretive exhibit displaying reduced and full-size examples of the signs you will see along the tracks. Each display includes an explanation of what the sign means. Volunteers from the Friends of the Cumbres & Toltec started the Sign Garden project in 2022 and it is expected to be completed in 2024.

Top Left: A group of signs in the Friends of the Cumbres & Toltec Sign Garden. Signs include whistle posts, a speed limit sign, and a milepost. Top Right: A group of Friends' volunteers, who installed the Sign Garden in 2023, hold a sign that says, "Signs and Sounds Along the Rails". Bottom Left: Yard limit and Cresco Station signs in the Sign Garden. Bottom Right: Volunteers install a milepost sign in the Sign Garden.

## Glossary



- **Blue Flag:** Modern-day blue metal signs with white lettering that replaced blue flags. They are used to keep people safe when working in the railyard.
- **Grade Crossing Sign:** Modern-day signs placed at each location where the Cumbres & Toltec tracks cross through a road. If there is more than one track at the crossing, the Grade Crossing Sign will indicate how many tracks there are to cross.
- **Milepost**: Historic sign made of wood or metal marking a location's distance, measured in miles, from Denver, CO. The further away from Denver, the higher the mileage number.
- State Line Signs: Historic signs, made of metal, placed at each location where the Cumbres & Toltec tracks cross the state line between Colorado and New Mexico. There are eleven state line crossings on the Cumbres & Toltec.
- Whistle Board/Whistle Post: Historic sign made of wood or metal indicating the need for the engineer to blow the whistle based on the letter displayed on the sign. The letters are X (crossing); S (station); W (warning)

## Printable Activities



- Railroad Signs Booklet
- Signs Fill In the Blank Activity
- Create Your Own Sign Activity

## References

Bogart, C. H. (2006, May 1). Blue flags | Trains Magazine. Trains; Kalmbach Media. 14 July 2023. <u>https://www.trains.com/trn/train-basic</u>



Gross, Jim (2012). *Milepost styles*. C&TS Dispatch, Vol. 25 (No. 1). pp. 4-7.

Gross, Jim (2013), Article #4 – Station and Yard Limit Signs. C&TS Dispatch, Vol. 26 (No. 2). pp. 20-23.

Gross, Jim (2013), Article #5 – Station One Mile, Bridge Number and Derail Signs. C&TS Dispatch, Vol., 26 (No. 3). pp. 20-23.

Gross, Jim (2015), Article #6 – Speed Limit and State Line Signs. C&TS Dispatch, Vol. 28 (No. 2). pp. 7-10.

Highway-Rail Grade Crossings. (n.d.). Federal Railroad Administration; Federal Railroad Administration. 7 July 2023.

https://railroads.dot.gov/sites/fra.dot.gov/files/2019-11/Grade%20Crossing%20Resource%20Guide%20022015.pdf



## References

Knoob, Earl (2019). Limiting factors for speed on any narrow gauge. Narrow Gauge Discussion Forum.

https://ngdiscussion.net/phorum/read.php?1,365946,366022#msg-366022

Project 1307 Details. Friends' Integrated Data Online. https://fctsfido.org/FIDO/proj\_sched.php

SAFETY & WORK RULES FOR VOLUNTEERS. (2022, December 19). Friends of the Cumbres & Toltec Scenic Railroad, Inc.

https://friendsofcumbrestoltec.org/wp-content/uploads/2021/10/R-8\_Friends\_Safety\_Manual\_Web\_Final\_Dec\_19\_2022.pdf

Scott, Robert W. (2022). What are railroad signs for? Trains Magazine. <u>https://www.trains.com/trn/train-basics/abcs-of-railroading/what-are-railroad-signs-for/</u>.

Wilson, Jeff (2022). Signs. The Railroading Handbook. pp. 341-343.

Yepsen, Roger, (1983). Other Signals and Signs. Train Talk. pp. 34.



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Friends of the Cumbres & Toltec Scenic Railroad, Chronicler Collection, Mee, Mike, 2023.0750.0619.0151.MEE,

2023.1307.0619.060.MEE.

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MP285davenport, MP322davenport, MP335davenport, MP342davenport, SwbAdavenport, LobatoDavenport,

SLcoDavenport.

Friends of the Cumbres & Toltec Scenic Railroad, Education Collection, Kelly, Ian, IK06232023-01.

Friends of the Cumbres & Toltec Scenic Railroad, Education Collection, Sellers, Melissa, 2023-06-21\_Sign\_Garden\_015, 2023-

06-23\_Yard\_Limit\_Sign\_077, 2023-06-21\_Look\_for\_trains\_006, 2023-06021\_RR\_Crossing\_031, 2023-06-

21\_RR\_Crossing\_029, 2023-06-22\_Stop\_Crew\_at\_Work\_049, 2023-06-22\_Stop\_Car\_Connected\_047, 2023-06-

21\_Sign\_Garden\_004, 2023-06-23\_Sign\_Garden\_016.

Friends of the Cumbres & Toltec Scenic Railroad, West Collection, West, John B. JW01-2443.

Friends of the Cumbres & Toltec Scenic Railroad, Robart Collection, Robart, Ernie, ERNG19680630-0263.



# Prepared by the Friends of the Cumbres & Toltec Scenic Railroad Education Committee.

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