



# SD40-2 V2: Burlington Northern Livery



<b>1 BACKGROUND .....</b>	<b>2</b>
EMD SD40-2 .....	2
The Burlington Northern Railroad .....	2
<b>2 ROLLING STOCK .....</b>	<b>3</b>
2.1 SD40-2 Burlington .....	3
2.2 SD40-2 Burlington 2.....	3
50" Boxcar .....	4
Tie Down Flat Car .....	4
Coal Hopper .....	5
3 Bay Hopper .....	5
<b>3 SCENARIOS .....</b>	<b>6</b>
Burlington Northern Train 206.....	6
Over the Top.....	6

Version 1.0

## 1 Background

### EMD SD40-2

Introduced between 1972 and 1986, General Motors Electro- Motive Diesel (EMD) produced the SD40-2 as a 3,000 horsepower model as an upgrade from the SD40. Although not as powerful as some rival locomotives in the same Class, the SD40-2 features modular electronic control systems, making it significantly more reliable and economical than its competitors.

With almost 4,000 units built for 29 Railroad companies, the SD40-2 is one of the best selling locomotives of all time. The British Class 59 is even derived from the processes and experience learned from the SD40-2.

The SD40-2 shares the same basic superstructure as the SD38-2 as it uses the same 16-645E3 engine (with turbo charging modifications). The Dash 2's (-2) also have longer front and rear 'porches' than other models, making for distinguishing features when comparing locomotives. Another alteration from previous designs is the three radiator grilles mounted on the roof, where previously there were only two.

### The Burlington Northern Railroad

On March 2<sup>nd</sup> 1970, Burlington Northern Railroad was formed from a merger of four historic railroads: The Great Northern Railway, the Northern Pacific Railway, the Chicago, Burlington and Quincy Railroad, and the Spokane, Portland and Seattle Railway.

The Burlington Northern Railway formed the most northerly route of any railroad in the western United States. This route started at Chicago and ran to La Crosse, Wisconsin. Then the route continued northwest through Minneapolis and St. Paul, Minnesota to Grand Forks, North Dakota. From Grand Forks the route ran west through North Dakota, Montana, and Idaho to Spokane, Washington. At Spokane the route was split into three routes.

The former Great Northern route proceeded west to Wenatchee, Washington, crossed under the Cascade Range at New Cascade Tunnel, then into the Puget Sound region through Everett, Washington. The former Northern Pacific proceeded southwest towards the Tri-Cities, turned to Yakima, Washington, and crossed under the Cascade Range at Stampede Tunnel, descending into the Green River Valley at Auburn, Washington, where it connected with existing lines running from British Columbia to Portland, Oregon. The Spokane, Portland and Seattle also proceeded southwest to the Tri-Cities and then followed the Columbia River to Vancouver, Washington.

When the St. Louis - San Francisco Railway was acquired, the route was extended into the South Central and South-eastern United States.

On December 31, 1996, Burlington Northern merged with the Atchison, Topeka and Santa Fe Railway to form the Burlington Northern Santa Fe Railway, which was later shortened to simply the BNSF Railway.

## 2 Rolling Stock

The following two liveries are provided in the SD40-2 Burlington Northern pack:

### 2.1 SD40-2 Burlington

Appearing as “BN SD40-2” in the browser list, this is a typical pre-BNSF merger Burlington Northern “Cascade Green” livery.



### 2.2 SD40-2 Burlington 2

Appearing as “BN SD40-2 White Face” in the browser list, this livery is post-BNSF merger and retains the familiar green hue but with a “whiteface”.



### 50" Boxcar



### Tie Down Flat Car



### Coal Hopper



### 3 Bay Hopper



## 3 Scenarios

### **Burlington Northern Train 206**

Burlington Northern Train 206 was an actual BN heavy local that operated eastbound from Whitefish to Havre, MT. This scenario begins as BN 206 waits for a westbound intermodal to cross the single-track Cut Bank Creek bridge, then 206 heads into Cut Bank for a pick up, then proceeds to Shelby where it drops its train in the yard and parks its power near the Shelby depot. Power is a pair of BN SD40-2s hauling a good-sized train. This scenario is set in Autumn on a foggy day.

### **Over the Top**

This scenario begins at Essex and features a heavy manifest freight's climb up to and over Marias Summit, ending at Bison. A pair of SD40-2s on the point and a single SD40-2 helper on the rear have their hands full with this heavy train's climb which includes a stop mid-grade due to traffic ahead. This scenario is set in Spring and the weather nice and clear to afford you a glorious view of the route as you drive.

Both scenarios are provided as standard and career versions. In career scenarios you are given a score at the end which you can compare against other players if you are connected to the Internet.