

# PENINSULA CORRIDOR



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# **ROUTE INFORMATION**

### The Route

The Peninsula Corridor route is a California commuter rail line on the San Francisco Peninsula and in the Santa Clara Valley (Silicon Valley). The northern terminus of the line is in San Francisco at 4th and King Streets; its southern terminus is in San José. Trains leave San Francisco and San José about hourly on weekdays, or more frequently during commuter hours and for special events such as sporting events.

Originally built in 1863 as the San Francisco and San José Rail Road the line was purchased by Southern Pacific in 1870.

Southern Pacific double-tracked the line in 1904 and rerouted it via Bayshore. After 1945, ridership declined with the rise of the motor car which came to a head in the late 1970s where the line faced closure.

To continue operating, in 1980 the California Department of Transportation contracted with Southern Pacific and began to subsidize the line, purchasing new locomotives and rolling stock, replacing Southern Pacific equipment in 1985. Stations were also upgraded and the operation was dubbed "Caltrain".



## Focus Time Period

The DLC product recreates the Peninsula Corridor as it operates today.

# **GETTING STARTED**

#### **Recommended Minimum Hardware Specification**

The Peninsula Corridor route is highly detailed, feature rich and incorporates detailed night lighting. Therefore, it will benefit from a higher PC specification.

- Windows 7 / Windows 8.1
- Processor: 2.8 GHz Core 2 Duo (3.2 GHz Core 2 Duo recommended), AMD Athlon MP
- RAM 4.0GB
- GFX 512 MB 1GB with Pixel Shader 3.0 (AGP PCIe only)

SFX - Direct X 9.0c compatible

# **ROLLING STOCK**

GP38-2



The GP38-2 is an upgraded version of General Motors GP38, differing in only minor details. Its 16-cylinder engine generates 2,000 horse power and the class remain in service to this day due to their reliability and ease of maintenance.

#### MP36PH-3C



Currently ten different railroads operate MP36PH-3C locomotives, Caltrain being the first customer at launch in 2003, initially ordering 6 units. When production ceased 110 examples had been built.

The locomotive features the 3,600hp EMD 645F3B prime mover and also implements a separate head-end power generator allowing the full power output of the prime mover to be used for traction.

# **DRIVING THE MP36PH-3C**

## **Cab Controls**





- 1 Reverser
- 2 Train Brake
- 3 Power Controller
- 4 Locomotive Brake
- 5 Horn

- 6 Bell
- 7 Sander
- 8 Headlights
- 9 Wipers

#### TMS and PCS

When driving the M36PH, one important system to take into account is the TMS (Train Management System) which is an in-cab safety system. If not reset in a specific amount of time, the TMS will force the loco into emergency application. That amount of time depends on the current speed of the loco itself. Below is a table indicating the speeds and corresponding alarm timers:

SPEED (MPH)	TIMING (SEC)
0.5-1.9	240
2	162
10	135
20	105
30	90
40	77
50	68
60+	60

There are many ways to reset the TMS timer:

Any movement to the Throttle. Applying the Horn Moving the reverser to either Forward or Reverse Loco Brake application Train Brake application of greater than 5 PSI Alerter Acknowledge button Bell Headlight Switch

If the timer runs out without any driver intervention then an Alarm Output sequence will begin. The first Alarm State lasts **5** seconds and causes the TMS lights in the cab (panel above sun visors) will begin to flash diagonally. The second Alarm State lasts another **5** seconds and causes an audible alarm to sound, and the TMS cab lights to continue flashing. The third Alarm State lasts another **3** seconds and will continue the effects from the last Alarm State. After this the loco will go into Penalty Initiation, causing the TMS lights to stop flashing – show constantly – and the alarm to stop sounding while the loco goes into emergency application.

Once the train has come to a complete halt, you will be able to reset the PCS. You can do this by setting the Throttle to -100%, then Reverser to **Neutral** and the Train Brake to 100%. Once this is done, you pull the brake back down to 0%. Once these actions have been carried out, you'll see a message box appear in the top right corner of the screen telling you that the PCS has been reset.

# **DRIVING THE GP38-2**

## **Cab Controls**



#### Train Simulator - Peninsula Corridor



- 1 Reverser
- 2 Throttle
- 3 Train Brake
- 4 Loco Brake
- 5 Dynamic Brake
- 6 Headlights
- 7 Wipers

- 8 Sander
- 9 Bell
- 10 Horn
- 11 Gauge Lights
- 12 Ditch Lights
- 13 Engine Start
- 14 Engine Stop
- 15 Step Lights

## **SCENARIOS**

#### \*\*For driving tutorials, please visit the Academy from the main TS2017 menu screen\*\*

#### [MP36PH] 01. 360 - Fast Run to San José

Caltrain's "Baby Bullet" trains operate on express schedules with limited stops and among the fastest runs is the afternoon San Francisco-San José Train 360, which is scheduled over the route, with four intermediate stops, in less than an hour. As engineer of Train 360, you have the standard consist of an MPI MP36PH-3C locomotive and six bi-level Bombardier cars for the fast southbound run.

Duration:55 MinutesDifficulty:Medium

#### [MP36PH] 02. 312 - Reverse Commuter

Caltrain "Baby Bullet" Train 312 is a reverse commuter schedule that departs San Francisco at 6:56am and makes six intermediate stops en route to San José. On a morning when the weather is far from ideal, you are the engineer of Train 312 ready to make your run southbound down the Peninsula.

Duration: 65 Minutes Difficulty: Hard

#### [MP36PH] 03. 305 - Morning Bullet

Caltrain Train 305 is the first northbound "Baby Bullet" of the weekday, carded to depart San José at 5:45am for the early morning run north to San Francisco. You'll have four intermediate stops en route and with the train in "push mode", you will be operating from a Bombardier cab car.

Duration: 60 Minutes Difficulty: Hard

#### [MP36PH] 04. 370 - Time to Pack Up

Caltrain's "Baby Bullet" Train 370 is an express schedule with two stops and you'll be commencing this service half way on its journey. As engineer of Train 370, starting at Palo Alto, you'll take this train as far as San José, before reversing SEMOG depot, where this "Baby Bullet" will undergo maintenance.

Duration:35 MinutesDifficulty:Hard

## [GP38-2] 05. UP South City Switcher

Union Pacific's "South City Switcher" is called at South San Francisco in the early morning hours and works north to San Francisco's industrial and Pier 96 areas. You are the engineer of the South City Switcher and you'll be pulling together your local consist at South San Francisco Yard, then heading north with a Union Pacific EMD GP38-2 as motive power. In this scenario you begin with 1,000 points and deductions will be made for any operating errors.

Duration: 35 Minutes Difficulty: Medium

#### [GP38-2] 06. UP Broadway Local

Union Pacific's "Broadway Local" is based from South San Francisco Yard and handles local traffic between South San Francisco and San José. You are the engineer of the Broadway Local, making your return northbound evening run to South San Francisco and, as the scenario begins, you have taken the siding to make a pick up at Lawrence. Your power is a duo of Union Pacific EMD GP38-2s.

Duration:60 MinutesDifficulty:Medium

#### [GP38-2] 07. UP Mission Bay Hauler

Union Pacific's line-haul train on the Peninsula is the "Mission Bay Hauler", which carries tonnage collected by the locals operating out of South San Francisco and forwards the tonnage to UP's connecting lines near Santa Clara. You are the engineer of the Mission Bay Hauler, calling at South San Francisco Yard at 6:30pm. You will be assembling your train, then making the run southbound with a pair of UP GP38-2s as power.

Duration:70 MinutesDifficulty:Hard

# **RAILFAN MODE SCENARIOS**

Railfan Mode provides a unique chance to observe and enjoy the operations of trains without the pressure and involvement of driving them. Railfan Mode scenarios are positioned at various key points along the route and provide camera functionality to sit back and watch the action unfold.

These scenarios are located on the **Drive** screen under the **Career** tab.

## [RailfanMode] San José Diridon

**Duration:** 10 Minutes

## [RailfanMode] San Francisco

**Duration:** 10 Minutes

#### [RailfanMode] South San Francisco

Duration: 30 Minutes

# LINE SPEEDS

#### **Speed Signs**

Speeds over switches, crossovers and sidings are controlled by fixed signals, described in the signalling section. At other locations between these points, speed reductions and increases are denoted by wayside signs.

#### **Permanent Speed Signs**



Where the speed on the main line decreases, a sign is placed 2640 feet (1/2 mile) ahead of the reduction.

The passenger and freight traffic speeds are indicated.



Where the main line speed increases, a sign is placed at the location. The passenger and freight traffic speeds are indicated.

## **Unsigned Line Speeds**

All speed changes are shown on the player HUD but speeds into sidings and loops will ordinarily be indicated by a signal aspect described in the signalling section.

## Signalling Speed Limits

Speed Band	Passenger Trains	Freight Trains
Normal	79 mph	50 mph
Limited	50 mph	40 mph
Medium	35 mph	25 mph
Slow	20 mph	15 mph
Reduced Slow	15 mph	5 mph
Restricted	20 mph	20 mph

# SIGNALLING

The route between San Jose and San Francisco features two distinct types of signal system – Route signalling and Speed signalling.

#### **Route Signalling**



The route of a train by controlled by displaying a light sequence giving advance warning of a change of line. These indications also determine the maximum speed a train can traverse the junction(s).

This type of signalling applies heading south upon passing signal 432-1 or 432-2.

Aspect	Name	Indication
	Clear	Proceed at line speed
	Approach Diverging	Proceed prepared to advance on diverging route at next signal at prescribed speed through the turnout
	Advance Approach	Proceed prepared to stop at the second signal. Freight trains must immediately reduce speed to <b>40 mph</b> at this signal, passenger trains must reduce to <b>45 mph</b> before the next signal
	Approach Restricting	Proceed prepared to pass the next signal at reduced speed but not exceeding <b>15 mph</b>
	Approach	Proceed prepared to stop at the next signal. Freight trains must immediately reduce speed to below <b>30 mph</b> at this signal, passenger trains immediately to below <b>45</b> <b>mph</b> .
	Diverging Clear	Proceed on diverging route not exceeding the prescribed speed through the turnout
	Diverging Advance Approach	Proceed on diverging route not exceeding the prescribed speed through the turnout, prepare to stop at the second signal. Trains must reduce to <b>40 mph</b> at this signal
	Diverging Approach	Proceed on diverging route not exceeding the prescribed speed through the turnout, prepare to stop at the next signal. Freight trains must immediately reduce speed to below <b>30 mph</b> , passenger trains immediately to below <b>45 mph</b>
	Restricting	Proceed at restricted speed not exceeding prescribed speed through turnout(s)
	Stop	STOP

## **Speed Signalling**



A train's route is controlled by displaying a downgrading sequence of approach aspects to reach the required speed across a switch or crossover.

This type of signalling applies heading north upon passing signal 433-1 or 433-2.

Aspect	Name	Indication
	Clear	Proceed at line speed
	Advance Approach	Proceed prepared to stop at the second signal. Trains must begin reduction to LIMITED on passing this signal
	Approach	Proceed prepared to stop at the next signal. Trains must being reduction to <b>MEDIUM</b> on passing this signal
	Approach Limited	Proceed prepared to pass the next signal at <b>LIMITED</b> speed
	Approach Medium	Proceed prepared to pass the next signal at <b>MEDIUM</b> speed
	Approach Slow	Proceed prepared to pass the next signal at <b>SLOW</b> speed
	Limited Clear	Proceed at <b>LIMITED</b> until the entire train clears all switches then proceed at line speed
	Medium Clear	Proceed at <b>MEDIUM</b> until the entire train clears all switches then proceed at line speed
	Slow Clear	Proceed at <b>SLOW</b> until the entire train clears all switches then proceed at line speed
	Limited Advance Approach	Proceed at <b>LIMITED</b> prepared to stop at the second signal
	Medium Approach	Proceed at <b>MEDIUM</b> speed prepared to stop at the next signal. Reduce speed to <b>MEDIUM</b> immediately
	Medium Approach Medium	Proceed at <b>MEDIUM</b> until the entire train clears all switches then proceed past the next signal at <b>MEDIUM</b> . Reduce speed to <b>MEDIUM</b> immediately
	Medium Approach Slow	Proceed at <b>MEDIUM</b> until the entire train clears all switches then proceed past the next signal at <b>SLOW</b> . Reduce speed to <b>MEDIUM</b> immediately

Slow Advance Approach	Proceed prepared to stop at the second signal. Proceed at <b>SLOW</b> until entire train clears all switches then proceed at <b>LIMITED</b>
Slow Approach	Proceed prepared to stop at the next signal. <b>SLOW</b> until entire train clears all switches then proceed at <b>MEDIUM</b>
Restricting	Proceed at <b>RESTRICTED</b>
Stop	STOP

At San Francisco Station the following signals must be observed in the Reduced Slow speed station area.

Aspect	Name	Indication
	Reduced Slow Clear	Proceed at <b>REDUCED SLOW</b> until the entire train clears all switches then proceed at line speed
	Reduced Slow Advance Approach	Proceed prepared to stop at the second signal. <b>REDUCED SLOW</b> applies until the entire train clears all switches then <b>LIMITED</b>
	Reduced Slow Approach	Proceed prepared to stop at the next signal. <b>REDUCED SLOW</b> applies until the entire train clears all switches then <b>MEDIUM</b>

# **OTHER LINESIDE SIGNAGE**

#### **Crossing Whistle Boards**



Whistle boards are placed 1320 feet ( $^{1}/_{4}$  mile) from any road crossing, pedestrian crossing or other obstruction.

Where multiple crossings occur within 1320 feet (1/4 mile) apart, a board will be sited before the first crossing, with a number board underneath indicating how many crossings will be encountered.

These boards will show on the driver HUD as a horn icon. Drivers should sound their train's horn within 50 meters of the sign.

The prototypical sequence at these locations is two long blasts followed by a short blast and another long blast (- - o -). This sequence should start from the sign and be prolonged or repeated until the front of the train occupies the crossing.

#### **Station Approach Board**

Indication of a station 5280 feet (1 mile) ahead.



# CREDITS

Dovetail Games would like to thank the following additional contributors for their input in the creation of the Peninsula Corridor route:

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