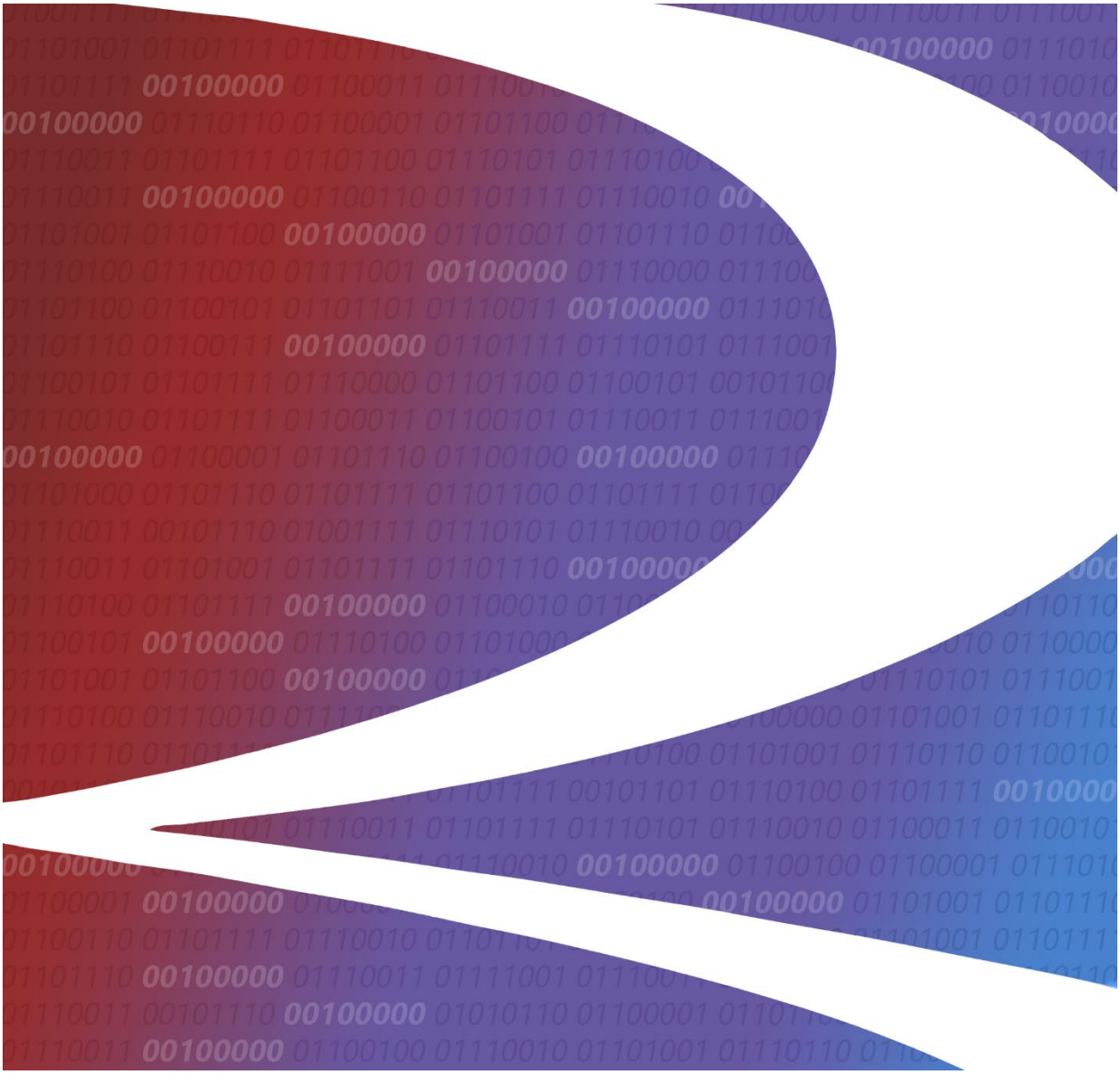


Rail Industry GIS
Routing + Mileage User Guide

Last Updated: November 2025

Table of Contents

List of Exhibits

Learning about RIGIS Routing + Mileage

Overview

RIGIS Routing + Mileage includes both a User Interface and Application Programming Interface (UI/API) and is built by authoritative data from railroads, with data updates quarterly (at a minimum).

Key features of the application include:

- Data spanning the entirety of North America
- Ability to search an origin/destination pair
- Displays viable routes, carriers involved, and breaks down miles traveled in each state
- Ability to enter preferred carriers to increase the accuracy of the route
- Ability to build your own route by selecting multiple routing locations
- Option to include required junctions at interchange locations, creating a more intelligent route

The details are covered in this user guide. For detailed instructions about using the Railinc interface elements such as menus, calendar tools, and drop-down text boxes, refer to the *Railinc UI Dictionary*.

All of the functionality in the UI is accessible through the API, including the ability to return the route geometry, which is covered in the *RIGIS Routing + Mileage API User Guide*.

System Requirements

For information about the system requirements of Railinc web applications and for information about downloading compatible web browsers and file viewers, refer to the *Railinc UI Dictionary*.

Accessing the Railinc Customer Success Center

The Railinc Customer Success Center (CSC) provides reliable, timely, and high-level support for Railinc customers. Representatives are available to answer calls and respond to emails from 7:00 a.m. to 7:00 p.m. Eastern time, Monday through Friday, and provide on-call support via pager for all other hours to ensure support 24 hours a day, 7 days a week. Contact us toll-free by phone at 877-RAILINC (1-877-724-5462) or send an email directly to csc@railinc.com.

Getting Started with RIGIS Routing + Mileage

Access RIGIS Routing + Mileage by using Railinc Single Sign-On (SSO), a web application that provides convenient access to a variety of Railinc products.

Registering to Use Railinc SSO

Each RIGIS Routing + Mileage user must register to use Railinc Single Sign-On (SSO). If you do not already have a Railinc SSO user ID and password, refer to the *Single Sign-On and Launch Pad User Guide*. Once you have access to Railinc SSO, you must request access to the RIGIS Routing + Mileage application within SSO.

Requesting RIGIS Routing + Mileage Access

After you receive authorization to use Railinc SSO, you must request access to the RIGIS Routing + Mileage as described in the *Single Sign-On and Launch Pad User Guide*.

When you complete the permission request process, your application access request is submitted for evaluation. You will receive an email indicating the approval status of your request.

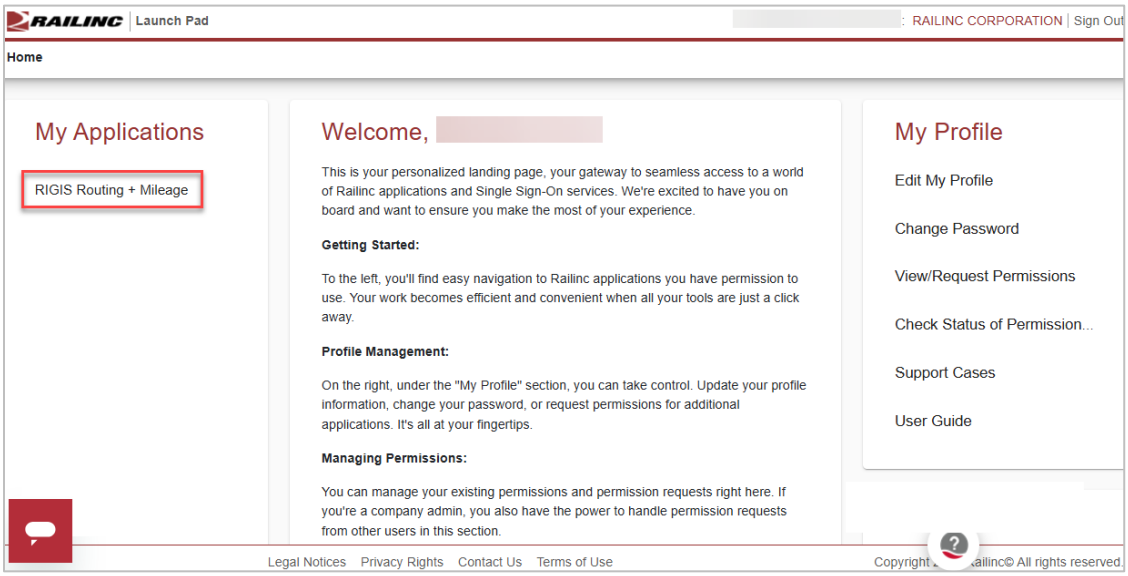
Once you receive email notification of approved access to the RIGIS Routing + Mileage, you can log in and begin using the application. Refer to Logging In.

Logging In

To log in to RIGIS Routing + Mileage:

1. Open your internet browser.
2. Go to the Railinc web portal at https://www.railinc.com.
3. Log into SSO by selecting the **Customer Login** link in the upper right. Enter your **User ID** and **Password** and select **Sign In**. Your Railinc Launch Pad showing authorized Railinc applications is displayed (Exhibit 1).

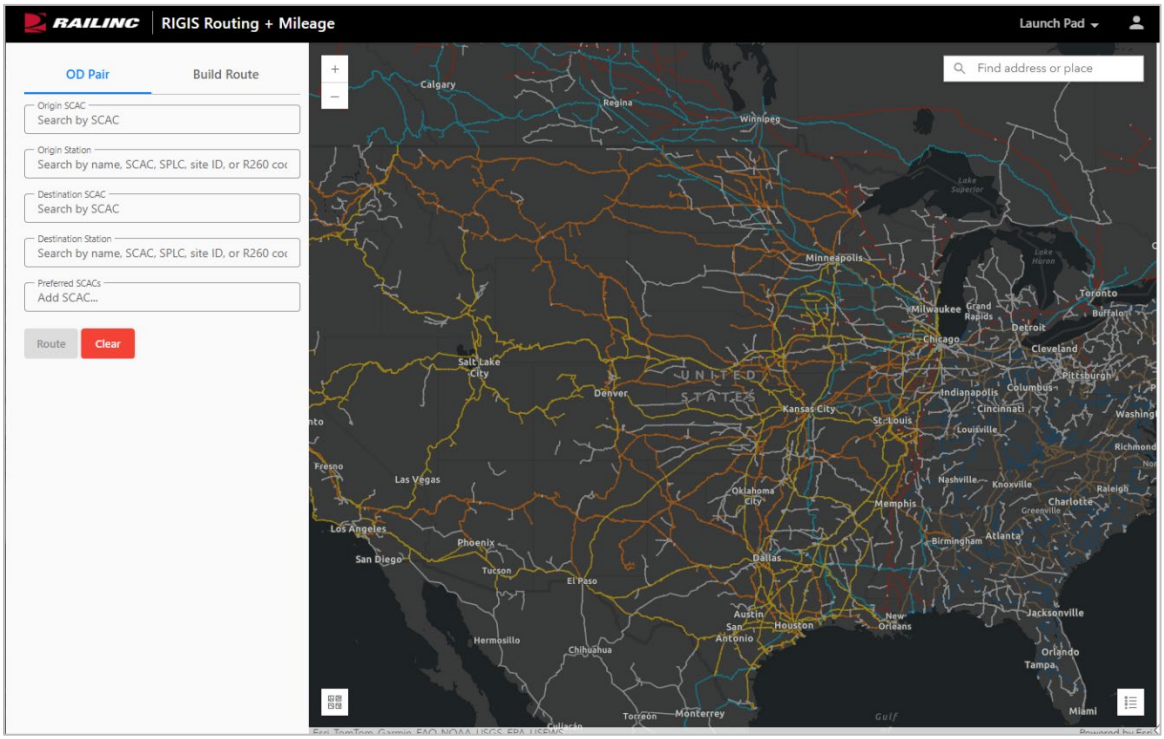
Exhibit 1. Launch Pad - RIGIS Routing + Mileage as an Authorized Application



Note: For more information about the Launch Pad, refer to the *Single Sign-On and Launch Pad User Guide*.

4. Select RIGIS Routing + Mileage in the My Applications section. The RIGIS Routing application is displayed.

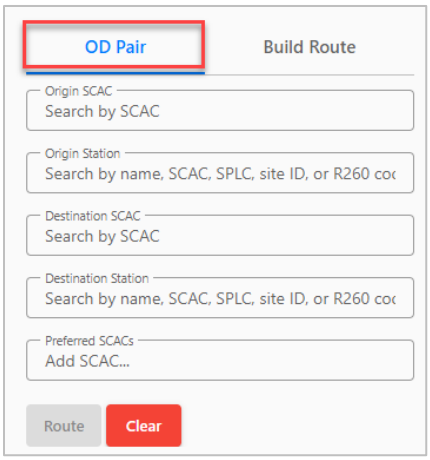
Exhibit 2. RIGIS Routing + Mileage Home Page



Building Routes with the OD Pair Tab

OD (Origin/Destination) Pair is one of two tabs in the top left and is selected by default when you open the application from the Launch Pad. This tab helps you search for an origin and a destination for your route, offering two types of origin and destination searches.

Exhibit 3. OD Pair Tab



By default, SCACs (Standard Carrier Alpha Codes) that are entered in **Origin SCAC** and **Destination SCAC** fields are the preferred carriers, and their tracks will be used for the entire route as long as the **Preferred SCACs** field is blank. Leaving the **Preferred SCACs** field blank will provide the shortest route from origin to destination.

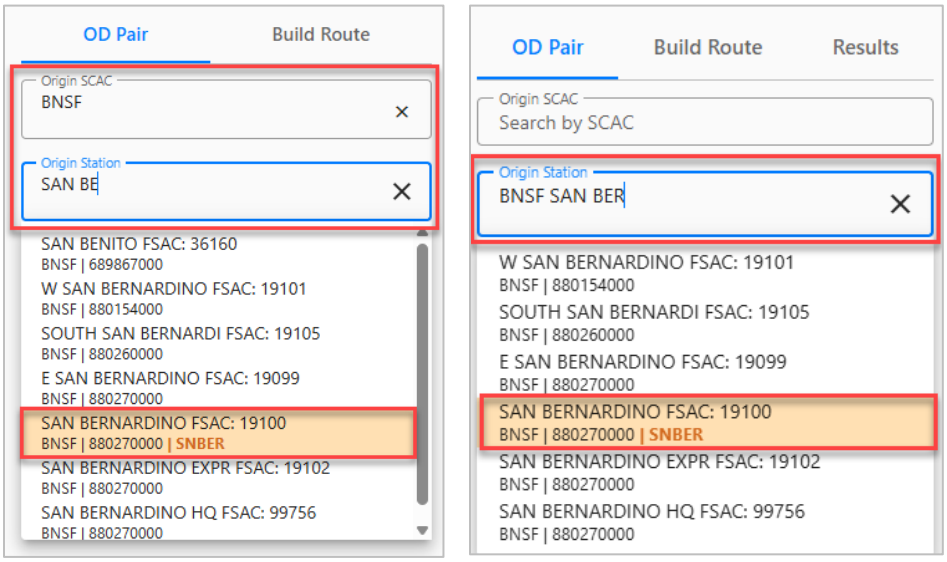
If you want a route to use tracks that are different than the entered origin/destination, enter one or more SCACs for the carriers of the tracks you want to use in the **Preferred SCACs** field. For example, with an Origin SCAC as BNSF and Destination SCAC as NS, entering **CSXT** in the **Preferred SCACs** field will provide a route where CSX tracks are used as much as possible.

The fields on this tab are “begins with” searches (except when entering a site name), so that as you enter search criteria, you will see a list of choices below the field that begin with your entry, and you may need to enter a little more before you see what you want to select from the list as shown in Exhibit 4. When entering a site name, the list of choices displayed will “contain” the site name.

Use the following procedure to build a route using OD Pair:

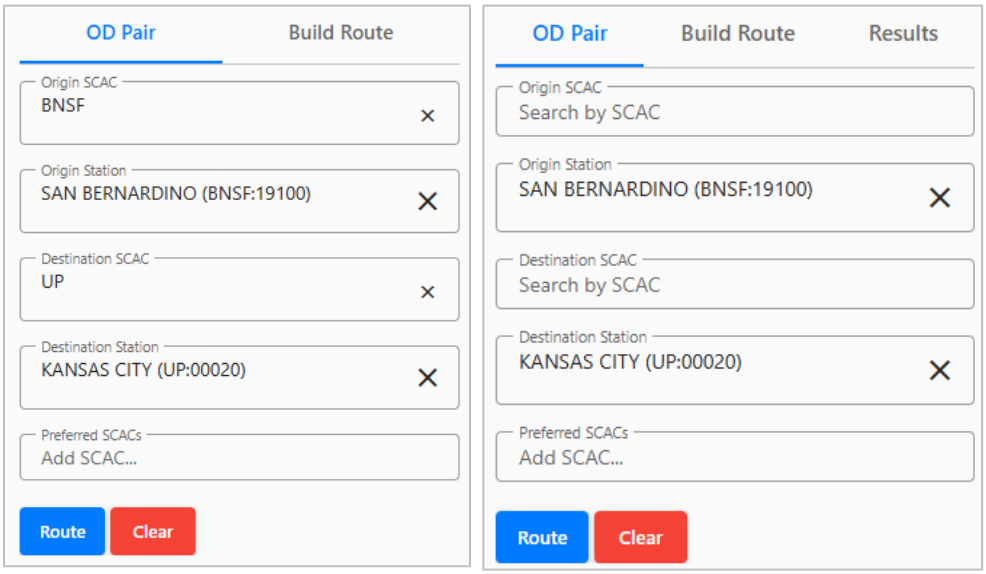
1. Enter the **Origin SCAC** and **Destination SCAC**. The SCAC is a two to four-letter railroad code like BNSF and NS. You can only enter one SCAC in each of these fields. You have the option to skip these fields and enter the SCAC first with a space delimiter in the **Origin Station** and **Destination Station** fields - example shown in the second image of Exhibit 4.

Exhibit 4. Origin Station Searches Showing a Junction



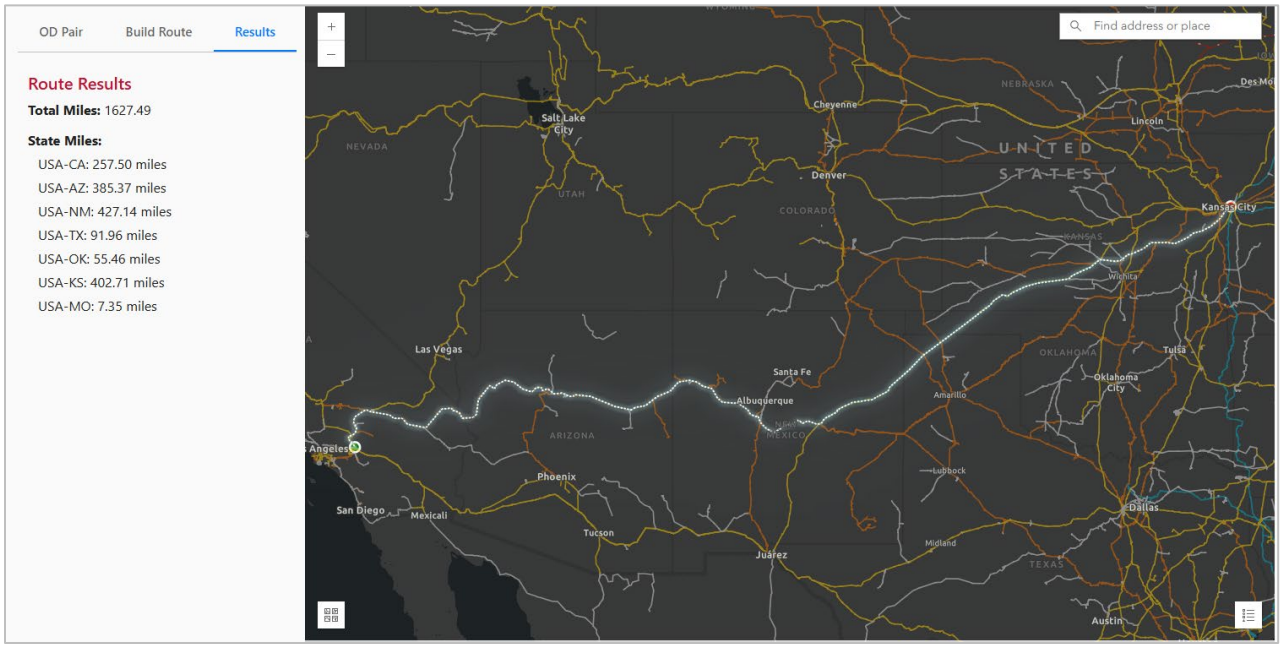
2. To search by **Origin Station** and **Destination Station**, begin entering a site name or site ID for FSAC, SCAC, SPLC, and/or R260 Junction code, delimited by space and select one from the list. When searching stations, the highlighted choices are junctions as shown above.
   - FSAC is the five-digit Freight Station Accounting Code assigned to the station by the road mark.
   - SCAC is a two to four-letter Standard Carrier Alpha Code like BNSF and NS.
   - SPLC is a six to nine-digit Standard Point Location Code assigned to all stations registered by rail carriers.
   - R260 code, or Rule 260 Junction Code, is a unique five-character alpha code used to identify a specific location where two or more railroads officially interchange traffic.
3. When the Origin/Destination SCACs and/or Origin/Destination Stations have been entered, the **Route** button becomes available. Select **Route**.

Exhibit 5. OD Pair Entered – Route Ready



4. The route is displayed on the map, and the **Results** tab is added to provide the **Total Miles** and **State Miles** for your route in order from origin to destination (Exhibit 6). To remove this tab and the route on the map, select the **OD Pair** tab and select the **Clear** button (Exhibit 5).

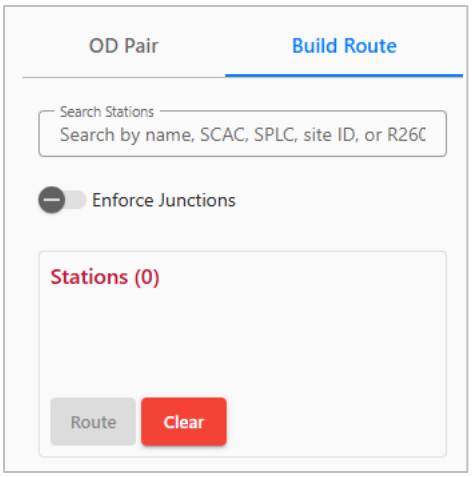
Exhibit 6. OD Pair Results Tab and Route Mapped



Building Routes with the Build Route Tab

Build Route is one of two tabs in the top left. This tab helps you search for an origin and a destination for your route using one field to add multiple stations, with the option to prompt you to add required junctions.

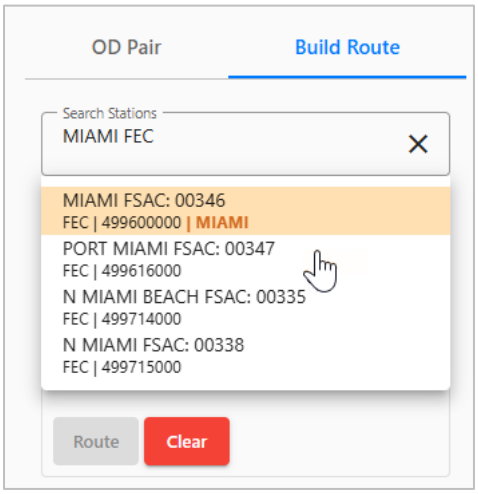
Exhibit 7. Build Route Tab



Use the following procedure to build a route from the Build Route tab:

1. In the **Search Stations** field, begin entering a site name or site ID for FSAC, SCAC, SPLC, and/or R260 Junction code, delimited by space and select one from the list. When searching stations, the highlighted choices are junctions as shown in Exhibit 8.
   - FSAC is the five-digit Freight Station Accounting Code assigned to the station by the road mark.
   - SCAC is a two to four-letter Standard Carrier Alpha Code like BNSF and NS.
   - SPLC is a six to nine-digit Standard Point Location Code assigned to all stations registered by rail carriers.
   - R260 code, or Rule 260 Junction Code, is a unique five-character alpha code used to identify a specific location where two or more railroads officially interchange traffic.
2. For the example below, we entered the station name and the SCAC and selected a station from the list.

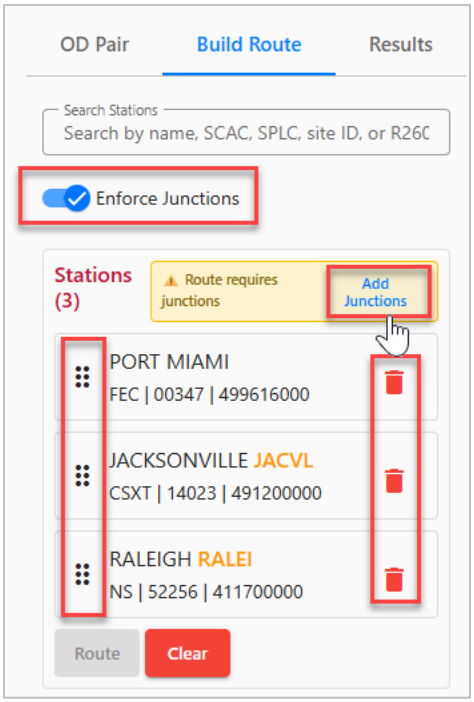
Exhibit 8. Search Stations



3. Add stations as needed for your route. Add stations using the **Search Stations** field or select stations from the map and select **Add to route** (Exhibit 18). You can change the route order by selecting the grip dots next to the item you want to move and drag it to the appropriate position.

4. Select the toggle to turn on **Enforce Junctions** so that the system will prompt you when a junction is required. You will only be allowed to select the **Route** button if the **Enforce Junctions** toggle is off, or the route contains one SCAC, or you have added the appropriate junctions to your route. When using more than one SCAC in the route, a junction location is needed for interchange.

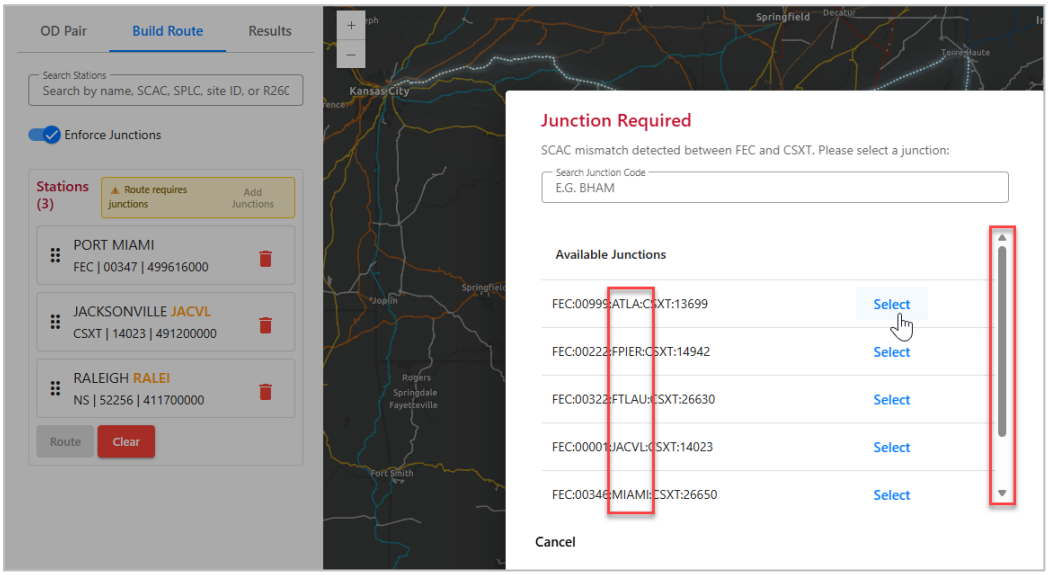
Exhibit 9. Enforced Junctions



5. Remove a station by selecting the trash icon to the right of the station you want to remove.

6. With junctions enforced, you will be prompted with a yellow message above the stations to select one or more junctions when they are required. You have the option to check locations on the map before selecting a junction. To choose a junction, select the **Add Junctions** link next to the message. Available junctions are sorted alphabetically by the junction code in the middle (shown below). Scroll through the list and select the appropriate junction for each prompt.

Exhibit 10. Select Required Junction



7. The selected junction is added to the route in blue.

8. When a direct junction between the railroads in your route does not exist, select the **Add Junctions** link to search and select multiple junctions. Available junctions are sorted alphabetically by the junction code in the middle (similar to Exhibit 10). Scroll through the list and select the appropriate junctions.

Exhibit 11. Search for Multiple Junctions

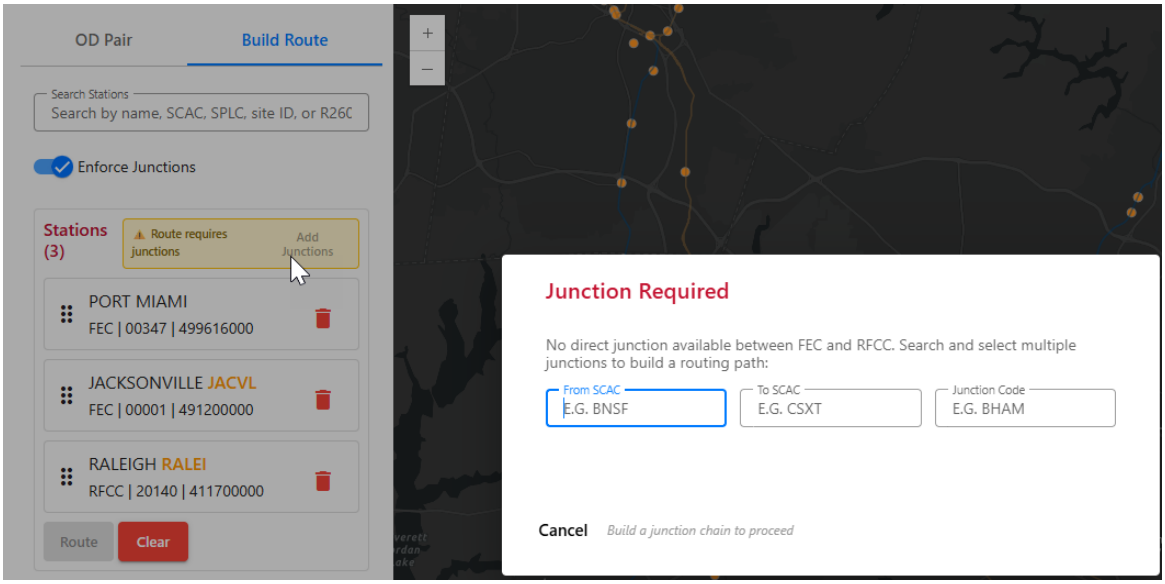
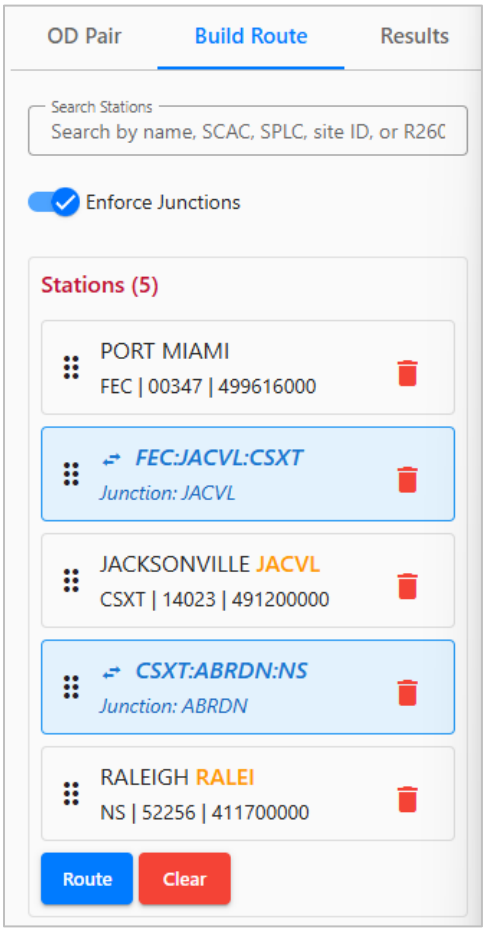


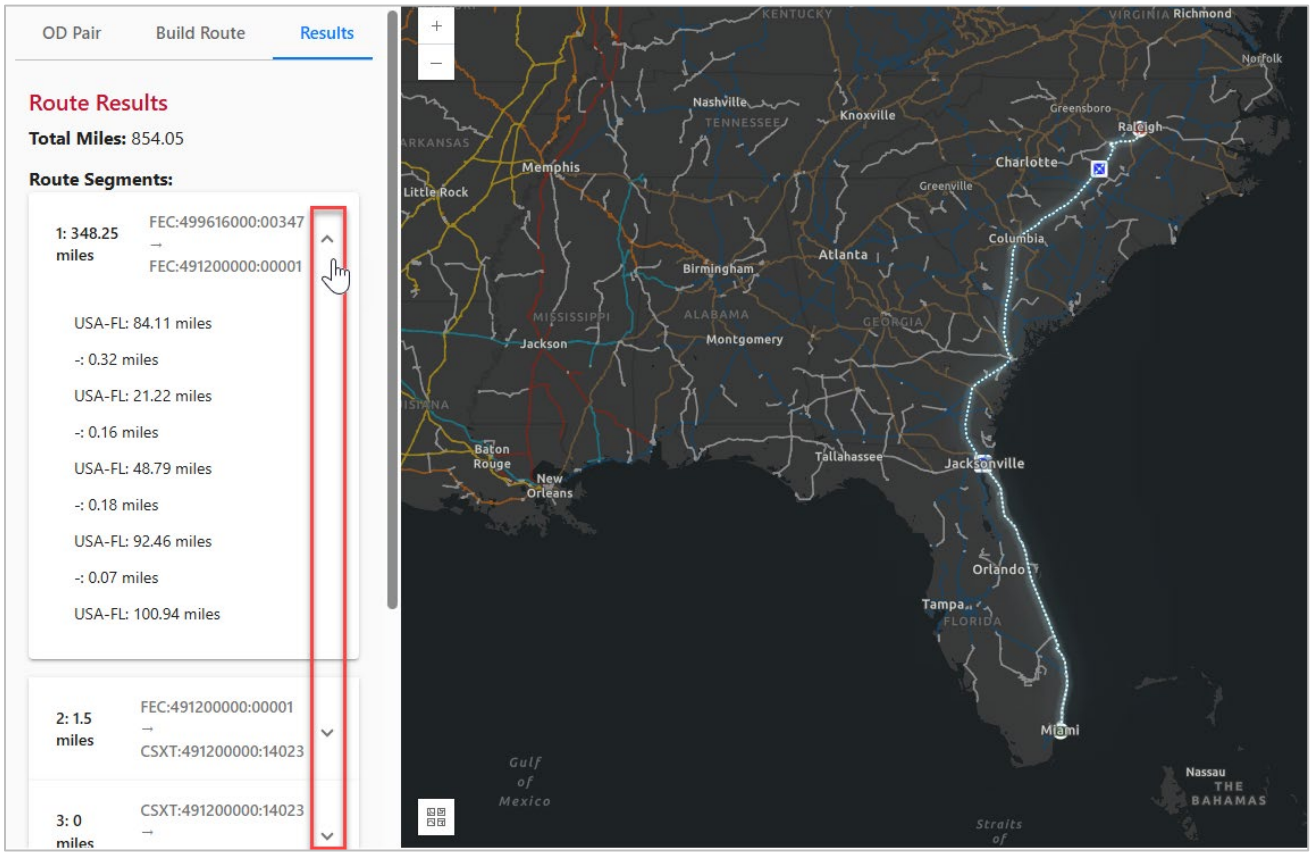
Exhibit 12. Stations and Enforced Junctions Added – Route Ready



9. When you have entered the appropriate stations and required junctions (if Enforce Junctions is toggled on), the **Route** button becomes active. Select **Route**.

10. The route is displayed on the map, and the **Results** tab provides the **Total Miles** and **Route Segments** for your route in order from origin to destination (Exhibit 13). To view miles by state, select the arrow on the right for each Route Segment. To remove this tab and the route on the map, select the **Build Route** tab and select the **Clear** button (Exhibit 12).

Exhibit 13. Build Route Results Tab and Route Mapped

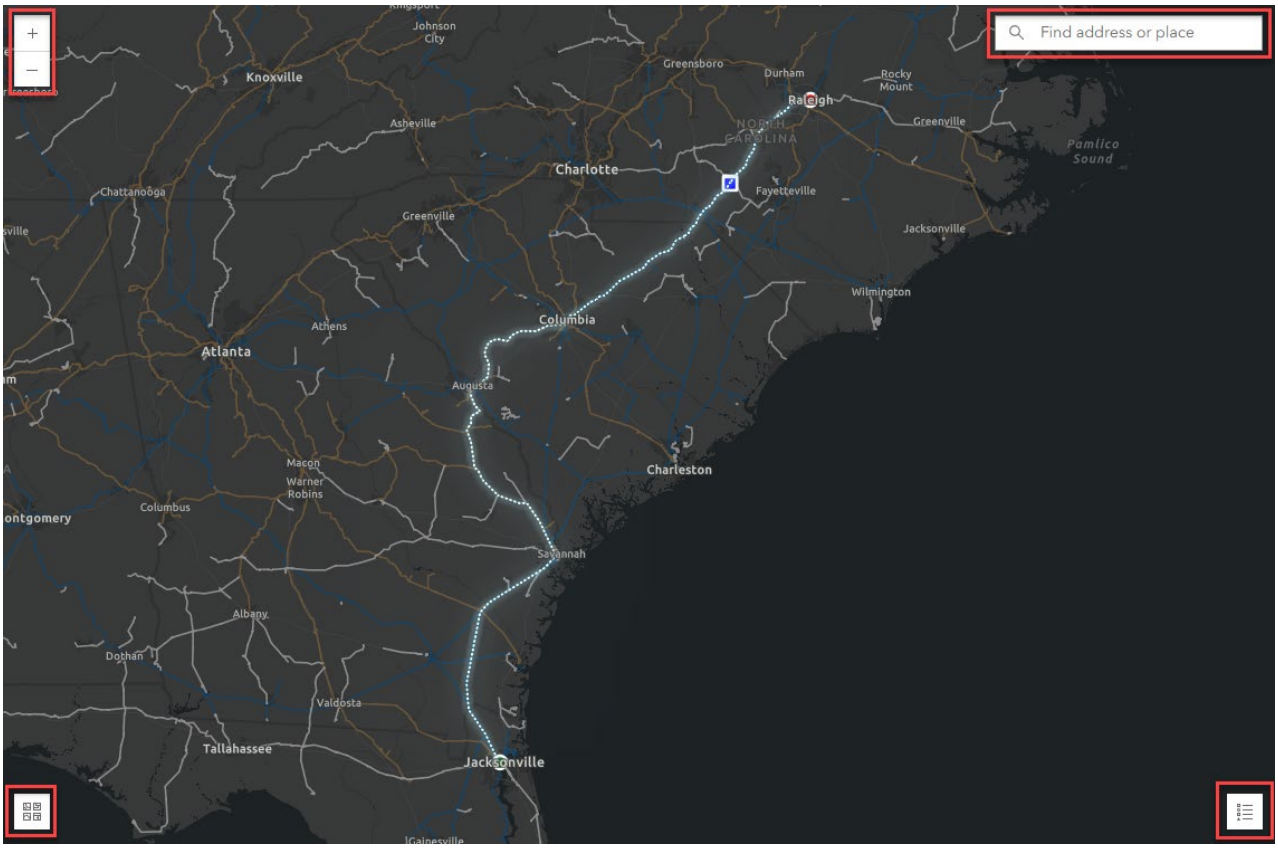


Working with Map Features

The RIGIS Routing + Mileage Map provides the following features:

- Zoom in/out buttons are located in the top left. Select the plus sign (+) to zoom in and select the minus sign (–) to zoom out.

Exhibit 14. Map Features

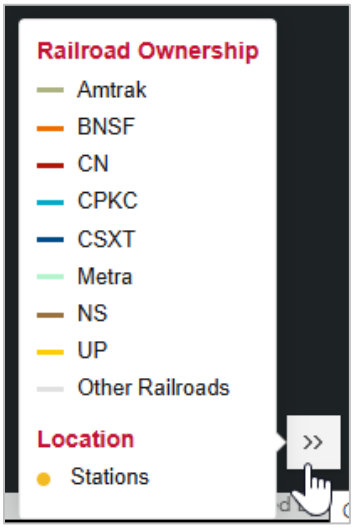


- The Search box is located in the upper right. Enter station names, addresses and zip codes to find a location on the map.

Exhibit 15. Search Address Feature

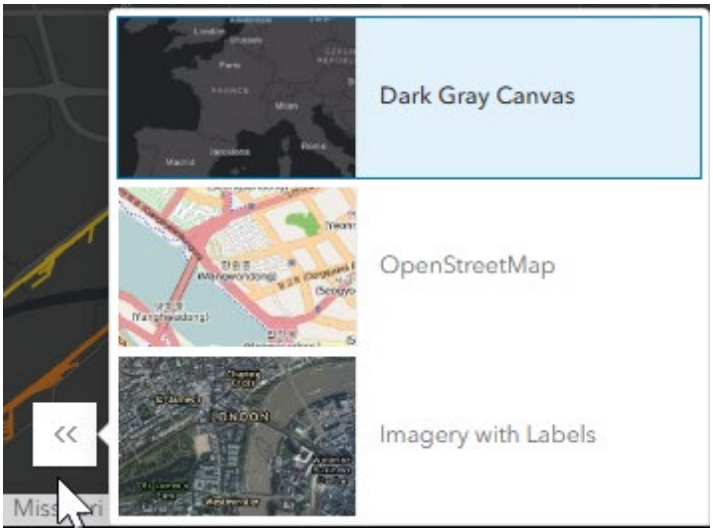
- A Legend of track ownership and stations is located in the bottom right. Select the icon to open and select it again to hide.

Exhibit 16. Legend Feature



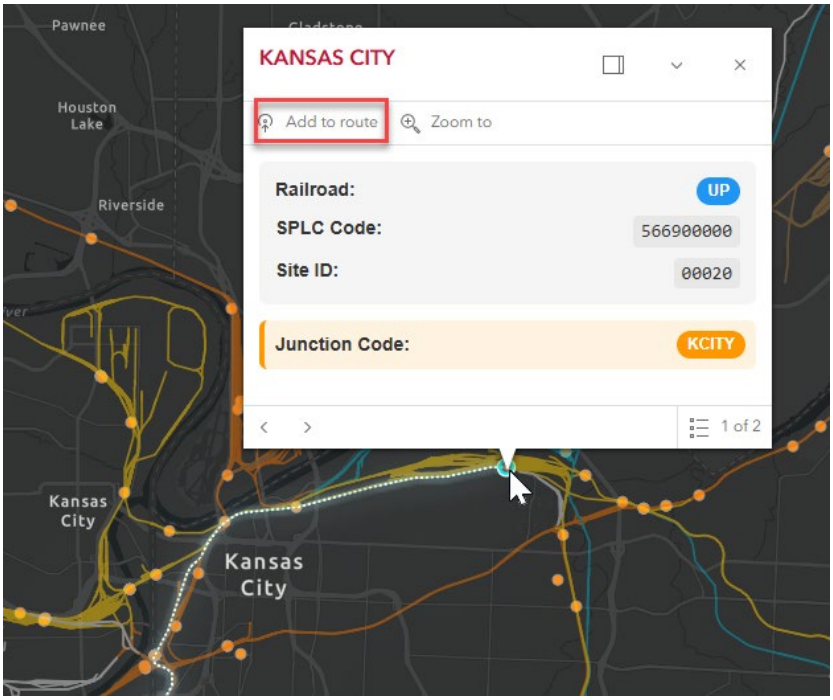
- Select your choice of map. Dark Gray Canvas is the default, but you can choose from other available options. Select the icon to open and select it again to hide.

Exhibit 17. Map Options Feature



- Yellow dots represent stations and junctions. Selecting one on the map opens a pop-up of station/junction information. When selected, the yellow dot is outlined in blue. Select **Add to route** to add the station to the route in Build Route. Select the x in top right to close the pop-up.

Exhibit 18. Add Stations to Route



- Selecting a track on the map will show the owner of the track.
- Pop-ups can be docked in the upper right by selecting the docking icon. Select the undock icon to undock. Select the x in top right to close the pop-up.

Exhibit 19. Railroad Track Owners and Docking Features